MOODY'S
INVESTORS SERVICE

Testimony of Raymond W. McDaniel
Chairman and Chief Executive Officer of
Moody's Corporation

And

Yuri Yoshizawa
Senior Managing Director
Moody's Investors Service

before the
United States Senate
Permanent Subcommittee on Investigation

April 23, 2010

INTRODUCTION

Good morning Mr. Chairman, Senator Coburn and members of the Subcommittee. My name is Ray McDaniel, and I am Chairman and Chief Executive Officer of Moody's Corporation ("**MCO**"), the parent of the credit rating agency, Moody's Investors Service ("**Moody's**"). I am joined by my colleague Yuri Yoshizawa, Senior Managing Director of Moody's Derivatives Group. On behalf of Moody's, we welcome the opportunity to contribute our views regarding the role of credit rating agencies ("**CRAs**").

The U.S. subprime mortgage crisis and subsequent global credit market liquidity problems have invited frequent comment about the role, function and performance of numerous market participants. With respect to CRAs, some market observers have expressed concerns that credit ratings did not better predict the deteriorating conditions in the U.S. subprime mortgage market and the impact on the credit quality of residential mortgage-backed securities ("**RMBS**") and related structured finance securities that relied on such RMBS as collateral, such as collateralized debt obligations ("**CDOs**").

Moody's is certainly not satisfied with the performance of our ratings during the unprecedented market downturn of the past two years. We, like many others, did not anticipate the unprecedented confluence of forces that drove the unusually poor performance of subprime mortgages in the past several years, including:

- the steep nationwide decline in home prices,
- the sharp contraction in credit available for refinancing, and
- the now apparent extent of fraud in the mortgage application process.

As I will describe in more detail, Moody's did observe a trend of loosening mortgage underwriting processes and escalating housing prices, and we repeatedly highlighted that trend in our reports and incorporated it into our analysis of the securities. As conditions in the U.S. housing market began to deteriorate beyond our expectations, we took the rating actions that at the time we believed were appropriate. However, neither we – nor most other market participants, observers, or regulators – fully anticipated the severity or speed of deterioration that occurred in the U.S. housing market or the rapidity of credit tightening that followed and exacerbated the situation. The following is a summary of the trend Moody's did see and the actions we took in response.

1) **We identified and began commenting about the loosening of underwriting standards starting in 2003.** We commented on a trend of loosening origination standards and escalating housing prices. We began publishing on these issues in 2003 and continued in 2004, 2005 and 2006.[1] In January 2007, we published a special report, Early Defaults Rise in Mortgage Securitization,[2] highlighting the rising

[1] See e.g., "2003 Review and 2004 Outlook, Home Equity ABS," January 20, 2004; "The Importance of Representations and Warranties in RMBS Transactions," January 14, 2005; "An Update to Moody's Analysis of Payment Shock Risk in Sub-Prime Hybrid ARM Products," May 16, 2005; "The Blurring Lines Between Traditional Alternative-A and Traditional Subprime US Residential Mortgage Markets," October 31, 2006.

[2] "Moody's Special Report: Early Defaults Rise in Mortgage Securitization," January 18, 2007.

defaults on the 2006 vintage subprime mortgages. We continued to publish on a regular basis throughout 2007 on the increasingly poor performance of the 2006 vintage.

2) **We tightened our ratings criteria in response.** Between 2003 and 2006, we steadily increased our loss expectations on pools of subprime loans and the levels of credit protection required for a given rating level. As a result, RMBS issued in 2006 backed by subprime mortgages and rated by Moody's had more credit protection than bonds issued in earlier years. In practical terms, this meant that for the 2006 vintage RMBS rated by Moody's, more than half of the mortgages in a pool would have to default and recover only half the appraised value of the home before a Moody's Aaa rated bond would suffer its first dollar of loss.

3) **We continued to aggressively monitor the market, for example by conducting surveys of servicer loan modification practices.** Moody's aggressively monitored market conditions as the crisis continued to unfold to assess the impact of how the various market participants (including the borrowers, the mortgage servicers, the mortgage originators and the Federal government) might respond to the extremely fast-changing conditions. For example, at the time one of the concerns was the effect of the interest rate resets and expected resulting defaults. It was unknown how the borrowers, the servicers and the banks would respond to this challenge and how their behavior would impact the performance of individual loans and in turn the performance of specific RMBS. In an effort to gauge the potential impact that loan modifications might have on reducing losses on defaulted loans, especially in light of interest rate resets when monthly payments increased, Moody's began conducting surveys of the modification practices of subprime mortgage servicers.

4) **We took rating actions as soon as loan performance data warranted it.** Moody's monitors the actual performance of the mortgages in the RMBS that we rate throughout the life of the security. And this was the case for the 2006 vintage. Subprime loans are expected to perform materially worse than prime loans, so higher delinquencies were already anticipated and reflected in our ratings. Indeed, for the first several months, the loans in these securities performed in line with our expectations. Importantly, the early performance of these mortgage loans was similar to the performance of similar subprime loans during the 2000 and 2001 U.S. recessions. As noted above, the 2006 Moody's Aaa-rated RMBS had sufficient credit protection to easily withstand such performance had macro-economic conditions not deteriorated in such an unprecedented and unanticipated way. Not until performance data from the second quarter of 2007 became available was it clear that performance of the 2006 vintage was likely to worsen and that it might deteriorate below that observed in the 2000-2001 recession.

   Moody's first took rating actions (downgrades and reviews for downgrades) on the 2006 subprime RMBS vintage in November of that same year. Further rating actions occurred in December 2006 and a comprehensive set of rating actions (on second lien mortgage transactions) took place in April 2007, with a second set of actions (on first lien mortgage transactions) in July 2007. The timing of rating actions on CDOs backed by subprime RMBS necessarily followed actions on RMBS.

In short, Moody's did see the escalating housing prices and the loosening of standards in subprime lending practices, we published on these observations, and we incorporated our more unfavorable views into the way we assigned ratings. However, as I said earlier, neither we – nor most other market participants, observers, or regulators – fully anticipated the severity or speed of deterioration that occurred in the U.S. housing market or the rapidity of credit tightening that followed and exacerbated the situation.

The unprecedented events of the last few years demonstrate how rapidly and dramatically markets can change and offer important lessons to all market participants. We believe that the opportunity to improve market practices, including credit analysis and credit-ratings processes, must be pursued vigorously and transparently if confidence in, and the healthy operation of, credit markets are to be restored.

For our part, Moody's has reached out to market participants and policymakers globally for feedback regarding the utility of our ratings and ratings system. Based on the feedback we have received and our own deliberations, Moody's has adopted a wide range of measures to further enhance our ratings processes and performance. We believe that all market participants should similarly be taking stock to determine how to improve their existing practices. We are eager to work with the Congress, regulators and other market participants to this end.

In my statement I will provide a brief overview of the following topics:

- The role of credit rating agencies in the market.
- The securitization process.
- Moody's rating and monitoring process for structured finance securities, including residential mortgage backed securities ("RMBS") and collateralized debt obligations ("CDOs").
- The various measures Moody's took in response to the deteriorating U.S. housing market.
- Changes we have made at Moody's.

I note at the outset that the observations and information contained herein are largely based on data and experience related to the subprime mortgage securitizations that Moody's rated, and not on the broader subprime mortgage market, some of which was securitized and rated by other rating agencies, some of which was securitized but not rated, and some of which was not securitized.

I. THE ROLE OF CREDIT RATING AGENCIES IN FINANCIAL MARKETS

The credit rating business has its roots in the American tradition of the marketplace of ideas. In 1909, American entrepreneur John Moody published a manual, Analyses of Railroad Instruments, which introduced a system of opinions about the creditworthiness of railroad bonds. Since then, the industry has grown considerably. Today, ten firms are registered with the SEC as NRSROs, and the SEC estimated that approximately another 20 credit rating agencies will become registered as NRSROs in the

future.[3]

Rating agencies occupy an important but narrow niche in the information industry. Our role is to disseminate opinions about the relative creditworthiness of, among other things, bonds issued by corporations, banks and governmental entities, as well as pools of assets collected in securitized or "structured finance" obligations. By making these opinions broadly and publicly available, rating agencies help to reduce information asymmetry between borrowers (debt issuers) and lenders (debt investors). We sift through the vast amount of available information, analyze the relative credit risks associated with debt securities and/or debt issuers and offer our opinion.

A. Credit Ratings Are Opinions About Future Outcomes

Moody's ratings provide predictive opinions on one characteristic of an entity – its likelihood to repay debt in a timely manner. Our ratings of corporate issuers (including financial institutions) are based primarily on analysis of financial statements, as well as assessments of management strategies, industry positions and other relevant information. Our ratings of structured finance bonds[4] are based primarily on analysis of the transaction's legal structure, the cash flows associated with the assets on which the deal is based and other risks that may affect the bonds' cash flows. In both corporate and structured analysis, we also take into consideration publicly available factors that may be relevant to the credit, such as: market dynamics, pricing information on the securities and other prevailing or contradictory views. Our analysis necessarily depends on the quality, completeness and veracity of information available to us, whether such information is disclosed publicly or provided confidentially to Moody's analysts.

The heart of our service is expressing opinions on the relative credit risk of long-term, fixed-income debt instruments, expressed on a 21-category rating scale, ranging from Aaa to C.[5] In the most basic sense, all bonds perform in a binary manner: they either pay on time, or they default. If the future could be known with certainty, we would need only two ratings for bonds: "***Default***" or "***Won't Default***". However, because the future cannot be known, credit analysis necessarily resides in the realm of opinion. Therefore, rather than being simple "default/won't default" statements, our ratings are opinions about the risk of outcomes in the future with degrees of uncertainty. Moreover, our opinions are about the relative credit risk of one Moody's-rated bond versus other Moody's-rated bonds. In other words, Moody's ratings provide a perspective on the relative rank ordering of credit risk, with the likelihood of loss increasing with each downward step on the rating scale. The lowest expected loss is at the Aaa level, with higher expected losses at the Aa level, yet higher expected losses at the single-A level, and so on.

---

[3] SEC, "Final Rules: Oversight of Credit Rating Agencies Registered as Nationally Recognized Statistical Rating Organizations," Release No. 34-55857 at 33607.

[4] In using the term "bonds", I am referring to bonds and other types of debt instruments that are rated by Moody's.

[5] Moody's also assigns short-term ratings – primarily to issuers of commercial paper – on a different rating scale that ranks obligations Prime-1, Prime-2, Prime-3 or Not Prime.

We believe it is essential for investors and others to understand the role of rating agencies and what credit ratings can and cannot measure. Moody's has always been clear that our ratings should be used primarily as a gauge of relative default probabilities and expected credit loss. We discourage people from using our ratings as indicators of price, as measures of liquidity, or as recommendations to buy or sell securities – all of which are regularly influenced by factors unrelated to credit. Moody's ratings are not designed to address any risk other than credit risk and should not be assigned any other purpose.

B. Ratings Performance

The predictive value of Moody's ratings is demonstrated in our annual default studies and periodic ratings performance reports, which we post on our website, www.moodys.com. These default studies, which we have been publishing since the 1980s, show that both our corporate and our structured finance ratings have been reliable predictors of default over many years and across many economic cycles. Prior to the recent crisis, investment-grade structured finance securities had somewhat lower credit losses on average than investment-grade corporate securities. This strong overall performance of structured securities led many market participants to increasingly perceive the sector to be "safer" than the corporate sector.

Nonetheless, there will always be unanticipated developments in the markets that affect the credit risk of securities – and we have seen this starkly over the past several years. Indeed, because of events that occur at different times in different sectors, which will never be perfectly predictable, default rates by rating category vary widely from year to year across regions and industries within the corporate sector, as well as within various structured finance sectors. Moody's success depends on our reputation for issuing objective and accurate ratings – and the strong performance of our ratings is demonstrated over many credit cycles on the hundreds of thousands of securities we have rated.

C. Issuer-Pays v. Investor-Pays Business Model

For more than three decades, Moody's has been paid primarily by issuers of the securities we rate. Moody's also provides a subscription-based service of research and data products through an operationally and legally separate company, and we continue to invest significant resources in developing and maintaining these products and analytical tools.

Some observers argue that an investor-pays business model would have fewer potential conflicts than an issuer-pays model. We believe this approach ignores the sources and drivers of potential conflicts of interest in the ratings business as well as the significant public policy benefit associated with the issuer-pays model.

1. The term "investor" can describe a variety of parties with different financial incentives to influence ratings. Investors can include entities holding either long or short positions (or both), including institutional bond investors, equity investors and hedge funds. Each of these entities will be motivated to influence ratings: just as an issuer has an interest in the rating to improve the marketability of its bonds, investors seeking to improve their existing portfolio values or to establish

new portfolio positions on more favorable terms have an interest in the rating of a bond. They may benefit financially from a rating on a given bond being higher or lower, depending on the positions they hold or seek to build in their portfolio. Put simply, investors of all varieties are interested parties to rating actions just as issuers are.

2. Entities (either investors or issuers) seeking to influence rating actions can and have attempted to do so by challenging rating agencies through commercial mechanisms unrelated to fees, for example, through litigation.
3. In addition, many investors are also issuers, such as banks, insurance companies and governments. In such instances, investor-pays versus issuer-pays is not a meaningful distinction.

If Moody's rates a given company and is paid by that company, then we must protect against the company's influence on and interference in rating actions, just as we would do if paid by investors. If investors rather than issuers paid for ratings, the conflict would not be eliminated – it would only be shifted. In short, potential conflicts exist regardless of who pays. The key is how well the rating agencies manage the potential conflicts. We believe that Moody's manages the potential conflicts in our business model to a global best practice standard, and we have implemented a series of changes over the past year to further strengthen these standards.

Given that potential conflicts are embedded in all feasible business models, we believe that offsetting public policy benefits need to be considered. The principal benefit in the issuer-pays model is that it allows all rating actions to be released to the entire public simultaneously and at no cost. Larger, wealthier parties have no advantage over their smaller rivals. The investor-pays model, by contrast, does not allow for public and broad disclosure of ratings; rather the model involves selective disclosure of information via subscription. The basis of the model is to charge fees in return for selective access to information for those who can afford the subscription fees.

D. Approach to Managing Potential Conflicts of Interest[6]

The issuer-pays model of the rating business serves the public policy objective of broad, contemporaneous dissemination of credit rating opinions to the public without charge. However, we recognize that this business model entails potential conflicts of interest that could impact the independence and objectivity of our rating process, such as those that exist with financial news publications that receive advertising revenues from companies about which they report. We also recognize that potential conflicts of interest arising from other sources, such as securities ownership and business and personal relationships, could similarly impact our rating process. To maintain our objectivity and independence, and to protect the integrity of our credit ratings and rating process, we

[6] For a detailed discussion of the various policies and mechanisms we have in place that manage and mitigate the potential conflicts in our business model please see the 2006, 2007 and 2008 updates to the "Moody's Investors Service Report on the Code of Professional Conduct," ("Moody's Report"), available at moodys.com.

have adopted wide-ranging policies and procedures. Some of our policies and procedures to manage conflicts include:

- Determining rating opinions through a "rating committee" process; they are not the decision of any individual analyst. (Please see Section III for a more detailed discussion of the rating process.)
- Prohibiting all analysts from holding fee discussions with or owning securities in the institutions in whose rating process they participate.[7] In fact, Moody's has established a new commercial unit that is solely responsible for commercial interactions with issuers, and analysts continue to be completely excluded from such conversations.
- Not evaluating or compensating analysts on the basis of the revenue associated with the entities in whose rating process they participate.
- Providing that credit ratings will not be affected by the existence of, or potential for, a business relationship between Moody's (or any of its affiliates) and the issuer (or its affiliates) or any other party, or the non-existence of such a relationship. Rather, credit ratings are to be determined solely on the basis of factors relevant to the credit assessment. Ratings committees are not to refrain from taking rating actions based on the potential effect of the action on Moody's, an issuer, an investor or any other market participant.
- Not creating investment products or providing buy / sell / hold recommendations.

The SEC is also continuing its rule-making activities with regard to NRSROs. Some of the new rules address potential conflicts of interests, and we are adopting whatever additional policies and procedures may be necessary to implement these rules as they are finalized.

II. THE PROCESS OF SECURITIZING SUBPRIME MORTGAGES

The use of securitization as a financing tool has grown rapidly both in the U.S. and abroad since its inception approximately 30 years ago. It has been an important source of funding for financial institutions and corporations. Securitization is essentially the packaging of a collection of assets into a fixed income "security" that can then be sold to investors. The underlying group of assets is also called the "pool" or "collateral." A securitization does not simply transform a loan pool into a single security: it typically leads to the creation of a capital structure with two or more bonds (or classes of securities or "tranches"). The bond or bonds at the top end of the structure have less credit risk than those at the lower end of the structure. This is because the payments generated by the underlying pool are allocated to make required payments to the investors in the top tranche before making funds available to the holders of the lower tranches. Residential mortgage-backed securities are bonds whose principal and interest payments are made from the mortgage payments received on thousands of mortgage loans.

[7] Except through holdings in diversified mutual funds.

Before discussing in greater detail the process of securitizing subprime mortgages, it is important to understand the role played by the various market participants:

- Subprime borrowers – borrowers who have weaker credit histories (typically including some delinquencies, but can also include more serious derogatory events, such as defaults, foreclosures and bankruptcies).
- Mortgage originators, or lenders – entities that make the loans, such as banks or mortgage finance companies.
- Underwriters / investment banks – generally banks or investment banks that structure the securitizations and sell the bonds that are issued to the investors.
- Trustees – entities that are responsible for administering the securitizations.
- Servicers – entities that collect payments on the subprime mortgage loans from the borrowers and pursue delinquencies and defaults.
- Investors – entities that purchase the bonds which are backed by the assets and their related cash flows. In the securitization market, the investors are typically sophisticated institutional investors who generally make their investment decisions based on their own analysis, with credit ratings being one of many factors that they may consider.

In securitizing subprime mortgages, the following steps are generally taken. First, a large number of subprime residential mortgage loans (typically thousands) are identified for securitization by the mortgage originator. With the help of the underwriter / investment banker (who designs the structure of a securitization) the originator creates a new corporation, limited liability company or trust,[8] which is the securitization issuer. The originator then sells all of its legal rights, including that of receiving monthly payments on the subprime mortgages, to the trust. The structure of the transaction is designed by the investment banker / underwriter. The trust is now the "owner" or "holder" of the loans. Finally, the trust issues bonds that the underwriter sells to investors. The bonds obligate the trust to pay monthly distributions to the investors of money the trust receives on the loans. The trust makes payments to the bond investors from and to the extent of the monthly loan payments it receives.

Securitizations, including those of subprime mortgage loans, use various features to protect each bondholder from losses. The more loss protection (also referred to as "credit enhancement") a bond has, the higher the likelihood that the investors holding that bond will receive the interest and principal promised to them. Some common types of loss protection are:

- a guarantee from a creditworthy entity that all or a certain portion of the losses above a certain level will be covered;
- "overcollateralization," which is the amount by which the aggregate mortgage balance exceeds the aggregate bond balance;

[8] For ease of reference, we will refer to these types of new entities as the "trust".

- "subordination," which means that instead of all bonds in the securitization sharing losses equally, losses are borne by bonds sequentially in reverse order of seniority; and
- "excess spread," which refers to the application of any excess amount of interest collected on the loans over the amount of interest payable on (and fees and expenses payable with respect to) the bonds to cover loan losses.

Registered securities have named underwriters who are expected to perform the due diligence function on the security to be issued. Moreover, every structured product that securitizes underlying loans has a primary lender or seller who performs a loan underwriting function. A common practice is for a securitization's underwriter to hire a due diligence firm (or to have an internal team) to investigate whether the underlying loans are in compliance with the originator's stated underwriting criteria;[9] the originator is generally required to buy back loans that are subsequently revealed to be in violation of its stated criteria. Accounting firms are charged with verifying that the summary information of the loan pools in the prospectus matches the underlying characteristics of the pool. In addition, in RMBS the issuer (generally referred to as the "sponsor," who may also be the original lender or "originator" of the loans) provides representations and warranties to the securitization trust that each underlying mortgage loan meets the requirements of applicable laws.

III. Moody's Rating and Monitoring Process

In considering the role of rating agencies in this market, it is important to recognize that we are one of many players with historically well-defined roles in the market.[10] Moody's comes into the residential mortgage securitization process well after a mortgage loan has been made to a homeowner by a lender and has been identified to be sold and pooled into a residential mortgage-backed security by an originator and / or an investment bank. We do not participate in the origination of the loan; we do not receive or review individual loan files; we do not conduct due diligence; we do not structure the security; and we do not sell or in any way participate in the sales of a security. Rather, we provide a public opinion (based on both qualitative and quantitative information) that speaks to one aspect of the securitization, specifically the credit risk associated with the securities that are issued by securitization structures.

Consequently, our role in the structured finance market is fundamentally the same role that Moody's has played over the last hundred years in the corporate bond market. As discussed in greater detail below, the rating processes are, in fact, very similar in the two sectors. Ratings are assigned by committees when securities are first issued and then monitored over the life of those securities. Upward or downward rating adjustments result from deviations in performance from the expectations held at the time of the initial rating – expectations regarding the performance of the underlying asset pool in the case

[9] Due diligence also typically checks for proper valuations (appraisals) and for compliance with legal documentation and lending law requirements.

[10] See earlier discussion on various participants in the market.

of securitizations and expectations regarding the realized business or financial plan in the case of corporations. Moody's ratings performance reports – posted on our website, www.moodys.com – indicate a high degree of consistency between the performance of structured finance ratings and that of corporate ratings.[11]

A. Moody's Rating Process

One common misperception is that Moody's credit ratings are derived solely from application of a mathematical process, or a "model." This is not the case. Models are tools sometimes used in the process of assigning ratings. But the credit rating process always involves much more, including the exercise of independent judgment by the rating committee. The process for all ratings begins with rigorous analysis by an assigned analyst of the issuer or obligation to be rated, followed by the convening of a rating committee meeting where the committee members discuss, debate and finally vote on the rating. The majority vote decides the outcome, and once the rating committee reaches its conclusion the rating is published and subsequently monitored on an ongoing basis. Importantly, the rating reflects the opinion of a rating committee, and not the opinion of an individual analyst, as to the relative creditworthiness of the issuer or obligation. Although rating criteria may differ from one sector (e.g., corporate) to another (e.g., structured finance), we use essentially the same rating process in all sectors. Now I would like to summarize the key steps in that process and explain how these steps promote the quality and integrity of our ratings.

- **Gathering Information**: The analyst or analysts assigned to a particular issuer or obligation ("**Assigned Analyst**") begin the credit analysis by assembling the relevant information. This information may be obtained from the issuer in meetings or through other communications with the Assigned Analyst, as well as from public sources. It may be supplemented with information generated by Moody's, including macro-economic and sector-specific data. Under the laws of the United States, and most foreign countries, issuers are able, but not obligated, to provide non-public information to credit rating agencies, such as projections, legal documents, and data about priority of claims and collateral characteristics.
- **Credit Analysis**: Once information has been gathered, the Assigned Analyst analyzes the issuer or obligation and formulates his or her view for the rating committee to consider. In doing so, the Assigned Analyst will apply relevant Moody's methodologies, which likely will include consideration of both quantitative and qualitative factors. For example, in our Corporate Finance group, quantitative factors might include profitability, capitalization and liquidity ratios while qualitative factors might include business strategy, competitive position and management quality. In our Structured Finance group, quantitative factors may

[11] These publications include a wide variety of metrics, including a measure of the accuracy of ratings as predictors of the relative risk of credit losses. See, for example, the follow Moody's *Special Comments*, "Default and Recovery Rates of Corporate Bond Issuers, 1920-2005" (January 2007), "The Performance of Moody's Corporate Bond Ratings: March 2007 Quarterly Update" (April 2007), "Default & Loss Rates of Structured Finance Securities: 1993-2006" (April 2007), and "The Performance of Structured Finance Ratings: Full-Year 2006 Report" (May 2007).

include the degree of credit enhancement provided by the transaction's structure, the historical performance of similar assets created by the originator and macro-economic trends. Qualitative factors could include an assessment of the bankruptcy remoteness of the entity holding the assets, the integrity of the legal structure, and management and servicing quality.

- **Role of Models**: Some in the market mistakenly view model outputs as ratings. This view is entirely inaccurate. Model results are but one factor that may be considered by a rating committee. To presume, however, that model outputs are the "right" ratings and that any other opinion is "wrong" ignores the judgment provided by our analysts. Indeed, Moody's analysts are encouraged to layer qualitative factors[12] in their assessment of credit risk.

  While we sometimes use quantitative models to assist our analysis and enhance consistency in our decision-making, our ratings take into account qualitative as well as quantitative factors and are intended to reflect the exercise of judgment about the expected creditworthiness of an obligation or entity. Moreover, each rating committee member is expected to apply his or her own independent judgment in the decision-making process. Ultimately, ratings are subjective opinions that reflect the majority view of the rating committee's members.

- **The Rating Committee**: Moody's credit rating opinions are determined by a majority vote of the members of a rating committee, and not by an individual analyst. Once the Assigned Analyst has arrived at a view, he or she presents it to a rating committee. The rating committee is a critical mechanism in promoting the quality, consistency and integrity of our rating process. Rating committee composition varies based on the structure and the industries or sectors that are relevant to the credit rating being assigned. Members are also selected based on expertise and diversity of opinion, and are encouraged to express dissenting or controversial views and discuss differences openly. The committee includes: the Chair, who acts as the moderator of the committee; the Assigned Analyst, who presents his or her views and the analysis supporting them; and other participants, who may include support analysts, other specialists (such as accounting or risk management specialists) and/or senior-level personnel with analytical responsibilities. Once a full discussion has taken place, the members then vote, with the most senior members voting last so as not to influence the votes of the junior members. Each member's vote carries equal weight, and decisions are based on a simple majority of votes.

- **Dissemination of Credit Rating Announcements**: Once a rating committee has formed its opinion, we typically contact the issuer or its agent to inform them of the rating. The rating opinion is not communicated to any other external party before it is published. Where feasible and appropriate, Moody's may also give

[12] There are many other factors, such as macro-economic considerations, the regulatory environment and management quality that cannot be reduced to inputs for a quantitative model but that can have a significant impact on the relative creditworthiness of an issuer or obligation.

the issuer or its agent an opportunity to review a draft of the rating announcement to verify that it does not contain any inaccurate or non-public information. The issuer may agree or disagree with the rating outcome. If the rating opinion relates to an existing published credit rating, we will publish our new opinion promptly unless the issuer or its agent provides us with new credit information that reasonably may change the assumptions underlying our analysis and therefore our conclusion. In such circumstances, a Moody's rating committee would consider the new information, determine the appropriate rating in light of that information and publish our opinion.

- **Monitoring**: Once a credit rating is published, we monitor the rating on an ongoing basis and will modify it as appropriate to respond to changes in our view of the relative creditworthiness of the issuer or obligation. As part of this monitoring process, analysts may review public information as well as non-public information provided by the issuer or its agent. Analysts also use a range of tools to monitor and track rated issuers and obligations. These include comparisons of Moody's ratings with other measures of credit risk, including measures derived from the market prices of bonds and credit default swaps, accounting ratio-implied ratings based on default prediction and rating prediction models (for corporate and sovereign issuers). We also use institutional monitoring processes overseen by Moody's Credit Officers. For example, in our Financial Institutions group, we conduct periodic portfolio reviews to compare the quality and consistency of ratings within a peer group. In these portfolio reviews, senior analysts from inside and outside the group assess the quality of all Moody's-rated issuers in an industry or industry sub-sector. A rating committee is convened if it appears that the rating of one issuer may be inconsistent with the ratings of its peers.

1. Discussions with issuers and investment bankers

In rating any structured security (or, for that matter, any corporate security[13]) we may hold analytical discussions with issuers or their advisors. These discussions serve the dual purpose of: (a) helping us better understand the particular facts of the transaction as proposed by the issuer; and (b) clarifying for the issuer the rating implications of our methodologies for that transaction. (It should be emphasized that Moody's analysts also meet with investors to ensure that they understand our analytical methodologies and ratings rationale.)

In circumstances where there is considerable performance history for the particular asset being securitized and where the structure has been used previously, our published methodologies may provide sufficient transparency on our analytical approach to obviate the need for detailed discussions. In contrast, we have more general conversations about the application of methodology with issuers who are securitizing

[13] Similar discussions frequently take place with corporations contemplating changes in financial structures and business strategies (e.g., the potential rating implication of a share buy-back program on a corporate issuer's senior unsecured debt obligations), or with new corporate issuers to whom Moody's has not previously assigned a rating.

new asset classes or utilizing novel structures that are different from those we have discussed in our published methodologies. As part of this dialogue, an investment bank underwriting a mortgage-backed security, for example, provides the composition of a pool of mortgages and the details of a particular structure and asks for the rating implications in light of our existing, published methodologies. What the investment bank does in response to our feedback – whether they decide to seek a rating of the structure presented, modify the structure as they see fit, or not seek a Moody's rating at all – is determined entirely by the investment bank and the originator. We believe that these discussions help enhance overall market transparency and stability in that both issuers and investors have a better understanding of our analytical thinking and our resulting ratings.

Moody's does not structure, create, design or market securitization products. We do not have the expertise to recommend one proposed structure over another, and we do not do so. Investment bankers structure specific securities and tranches to fit the needs of particular issuers and investors. We are not privy to many of the discussions that consider the features of a securitization (many of which are non-credit related), we do not know who the ultimate investors in the transaction will be, and we are not involved in the process of selling securities.

B. Moody's Approach in RMBS

Our analytical methodologies, which are published and freely available on our website, consider both quantitative and qualitative factors. Specifically, in rating a mortgage-backed securitization, Moody's estimates the amount of cumulative losses that the underlying pool of mortgage loans is expected to incur over the lifetime of the loans (that is, until all the loans in the pool are either are paid off, including via refinancing, or default). Because each pool of loans is different, Moody's cumulative loss estimate, or "expected loss," will differ from pool to pool.

In arriving at the cumulative loss estimate, Moody's considers both quantitative and qualitative factors. For example, the quantitative data we analyze includes, among other characteristics on a loan-by-loan basis:

- credit bureau scores, which provide information about borrowers' loan repayment histories;
- the amount of equity that borrowers have (or do not have) in their homes;
- how fully borrowers' income and assets were documented;
- whether the borrower intends to occupy or rent out the property; and
- whether the loan is for the purchase of a home or for refinancing an existing mortgage loan.

We also consider the more qualitative factors of the asset pool, past performance of similar loans made by that lender and how effective the servicer has been at loan collection, billing, record-keeping and dealing with delinquent loans. We then analyze the structure of the transaction and the level of loss protection allocated to each "tranche" (or class of bonds) issued by the structure. Finally, based on all of this information, a

Moody's rating committee determines the credit rating of each tranche. However, the quality of our opinions is directly tied to the quality of the information we receive from the originators and the investment banks.

1. Representations and warranties

In the course of rating a transaction, we do not see individual loan files or information identifying borrowers or specific properties. Rather, we receive from the originator or investment bank credit characteristics for each loan on an anonymous basis. The originators of the loans also make representations and warranties to the trust for the benefit of investors in every transaction. While these representations and warranties can vary somewhat from transaction to transaction, they typically stipulate that, prior to the closing date, all requirements of federal, state or local laws regarding the origination of the loans have been satisfied, including those requirements relating to: usury, truth in lending, real estate settlement procedures, predatory and abusive lending, consumer credit protection, equal credit opportunity, and fair housing or disclosure. The accuracy of information disclosed by originators and underwriters in connection with each transaction is subject to the federal securities laws and regulations requiring accurate disclosure. Underwriters, as well as legal advisers and accountants who participate in that disclosure, may be subject to civil and criminal penalties in the event of misrepresentations. As a result, Moody's historically has relied on these representations and warranties.

2. The surveillance process

In most of Moody's U.S. Structured Finance groups, monitoring is performed by dedicated surveillance analysts.[14] In general terms, the surveillance analyst receives and processes data from regular servicer and/or trustee reports. The surveillance analyst then assesses the data and, if necessary (e.g., because the performance data is not in line with expected parameters), conducts a rating analysis. Finally, where necessary, the surveillance analyst (or his or her manager) convenes a rating committee to vote on and authorize the publication of a new rating action.

With respect to RMBS, Moody's monitors its ratings on all securitization tranches on a monthly basis, and, as appropriate, considers the need for a ratings change. Monitoring is generally performed by a separate team of surveillance analysts who are not involved in the original rating of the securities. We generally receive updated loan performance statistics on a monthly basis for every collateral pool for each transaction we have rated. We assess this information using quantitative models and flag potential rating "outliers" – securities whose underlying collateral performance indicates that the outstanding rating may require review to ensure that it is consistent with the current estimated risk of loss on the security. Once a specific rating is flagged, a Moody's surveillance analyst will further investigate and discuss the status of the transaction with senior members of the team who together determine whether a rating change should be considered.

---

[14] Approximately two years ago, Moody's brought all structured finance surveillance analysts under the leadership and oversight of our Structured Finance Global Surveillance head.

Moody's does not take wholesale rating actions based on market speculation. Rather, our analysts carefully and deliberately consider the data that we receive on a transaction-by-transaction basis, and we conduct the monitoring process judiciously to make sure that such relevant information is appropriately considered.

C. Moody's Approach to Structured Finance Collateralized Debt Obligations

CDOs cover a wide range of instruments and can have in the collateral pool various types of assets, including securities issued by financial institutions, corporations and other structured finance issuers. Initially, most CDOs backed by structured finance assets invested in a range of asset-backed securities, though some were oriented toward commercial real-estate-backed securities or tranches of other CDOs. In more recent years, at least until mid-2007, structured finance CDOs tended to invest in RMBS.

There are three main types of CDO structures backed by structured finance assets: cash-flow, synthetic and hybrid.

- In *cash-flow transactions*, the CDO holds a portfolio of physical cash-flow structured finance assets or tranches (e.g., RMBS, CMBS bonds).
- In *purely synthetic transactions*, the CDO invests in structured finance assets via credit default swaps ("CDS"), which reference structured finance assets.
- *Hybrid CDOs* may incorporate both cash and synthetic assets and funded and unfunded liabilities.[15]

CDOs may be either static or managed transactions. In static transactions, the collateral pool typically remains constant and is not subject to change. In managed CDOs, the Collateral Manager can buy and sell assets governed and constrained by a set of covenants spelled out in the CDO indenture. For this reason, Moody's analysis of managed cash-flow CDOs is generally based on assumptions derived from the transaction covenants and constraints, rather than the CDO's current portfolio.

When analyzing a CDO, in addition to assessing the credit risk associated with the collateral backing the CDO and its structure, Moody's typically evaluates a number of qualitative factors, some of which include:

- **Governing Documents:** Moody's overall assessment of the legal structure of the CDO would typically include a review of various documents including, but not limited to: indenture, Collateral Management Agreement, Trust Deed, documents that govern the mechanics of the swap agreement and a number of legal opinions regarding the various aspect of the transactions (e.g., security interest opinion or tax opinion).
- **The Collateral Manager:** Moody's assesses the potential impact of the Collateral Manager on CDO performance by evaluating the performance of the Manger's previously rated CDOs and by considering the documents that

[15] Even cash-flow CDOs typically include a bucket for synthetic assets. Most generally uses the term "hybrid" to refer to transactions with a synthetic bucket that exceeds 50%.

define the Manger's role for the proposed CDO. The focus of our analysis generally is on the Manager's adherence to the management agreements that governed earlier transactions.

- **The Trustee/Collateral Administrator:** Moody's analysis looks to whether or not the Trustee/Collateral Administrator (the "Trustee") is capable of carrying out its responsibilities with respect to the CDO. The answer will depend, in part, on the experience of the Trustee in handling assets of the type to be held by the CDO and its experience in performing the same role in other CDOs. The Trustee should be able to independently make its own judgments in determining whether or not an action is materially prejudicial to noteholders. One of the most important responsibilities of the Trustee is to report on compliance of the CDO with the many requirements of the CDO indenture.

The relevance of these and other factors will vary depending on individual transactions.

IV. MOODY'S OBSERVATION OF AND RESPONSES TO THE WEAKENING U.S. SUBPRIME HOUSING MARKET

Subprime mortgages have been part of the broader residential mortgage market for many years and, as a group, have performed differently at various stages of the credit cycle. The poor performance of 2006 subprime loans initially followed a pattern that is not uncommon in a residential housing credit cycle. However, a number of extraordinary factors made the current turn in the cycle much more dramatic than in past slowdowns.

A. Weakening Housing Conditions

During periods of growth in the housing and mortgage markets, increased borrowing demand allows existing mortgage lenders to expand their business and new lenders to enter the market. Eventually, these trends create overcapacity in the mortgage lending market as borrowing demand slows or falls. As the lending market cools (e.g., when interest rates rise, home price increases abate, or the economy slows), competition among lenders for the reduced pool of borrowers heats up and lenders may lower credit standards (i.e., make riskier loans) in order to maintain origination volume. The riskier loans are more likely to become delinquent and potentially default.

Lending behavior in the subprime mortgage market over the past few years and until recently had followed this pattern. Through 2005 and 2006, in an effort to maintain or increase loan volume, some lenders introduced alternative mortgage products that made it easier for borrowers to obtain a loan. Such loans included:

- Loans made for the full (or close to the full) purchase price of the home, resulting in the borrower having little or no equity in the home;
- Loans with less rigorous documentation, such as those allowing borrowers to state their income and asset information without providing documented proof;
- Loans that exposed borrowers to sudden payment increases; and

- Longer-tenure loans, which have lower monthly payments that are spread out over a longer period of time (40 years and longer).

Often the loans made had a combination of these features. In situations commonly referred to as "risk layering," for example, a borrower could get a low initial payment, without documenting income or assets, and put no money down.[16] Moody's observed this trend and published repeatedly on it.

However, the trend toward riskier loan origination standards was exacerbated by an unprecedented confluence of circumstances that played into the unusually poor performance of subprime mortgages originated in 2006. With 20:20 hindsight, we now know the following three factors were especially relevant:

- **The rapid and drastic decline in home prices on a national basis** was the most important factor in the deterioration in subprime mortgage loan performance. Both the magnitude and the speed of the decline have been unprecedented, which in turn have reduced borrowers' equity in their homes and constrained their refinancing opportunities. The borrowers most affected by the housing downturn have been those who, because of the timing of their purchases, did not benefit from the price appreciation that had occurred in prior years.
- **A rapid reversal in mortgage lending standards**, in which those standards moved from very loose to very restrictive. This quickly stranded overstretched borrowers needing to refinance in the future.
- **Fraud:** Governmental investigations now reveal that fraud – such as misrepresentations made by mortgage brokers, appraisers and the borrowers themselves – also played a significant role in exacerbating the problem. Numerous sources have indicated that information such as home values and borrowers' incomes was overstated, and that the intended use of the home was often misrepresented (i.e., as a primary residence rather than an investment property).

B. Moody's Response to the Deteriorating Subprime Market

As mentioned earlier, during the period from 2002 – 2006, Moody's observed an increase in the risk profile of subprime mortgage portfolios that we were asked to review

[16] Although the $640 billion of subprime mortgages originated in 2006 still comprised a relatively small portion of the nearly $3 trillion of residential mortgages originated during that same year, the subprime sector was steadily becoming a larger proportion of the overall mortgage origination by dollar volume (see ***Figure 1***).

Figure 1

	Total Mortgage origination ($billions)	Total Subprime origination ($billions)	Percent of Subprime Orgination of Total Orignation
2002	3,038	421	14%
2003	4,370	539	12%
2004	3,046	560	18%
2005	3,201	625	20%
2006	2,886	640	22%

prior to assigning ratings. Although we tightened our ratings criteria accordingly, as previously noted, we did not fully anticipate the unprecedented confluence of factors that subsequently drove even poorer than expected performance by subprime mortgages. Our response to the increased risks we observed can be categorized into three broad sets of actions:

1) **<u>We identified and began commenting about the loosening of underwriting standards starting in 2003</u>**

We published reports on these issues starting in July 2003 and throughout 2004, 2005 and 2006. Examples include:

2003: *"The credit performance of second lien mortgage-backed securities has been strong over the past five years; however, as price appreciation slows down and interest rates rise Moody's believes that there could be more volatility in the credit performance of this product and will maintain credit enhancement levels accordingly."*[17]

2004: *"Moody's expects relatively high defaults and losses for these mortgage types and has set credit enhancement levels to offset the risks."*[18]

2005: *"Because these loans are generally underwritten based on lower initial monthly payments, many subprime borrowers may not be able to withstand the payment shock once their loans reset into their fully indexed/amortizing schedule. The resulting higher default probability, which may be exacerbated with slowing home price appreciation, could have a very negative effect on home equity performance in the future."*

"Moody's increases credit enhancement on such loans to account for the lower borrower equity and the higher borrower leverage."[19]

2006: *"Full documentation levels fell by almost 10 percent on average per transaction from the beginning of 2004 to the end of 2005. Therefore, in 2005 not only did we see a proliferation of riskier "affordability" products, but also a gradual weakening of underwriting standards."*

"Moody's loss expectations on the interest-only mortgages are about 15%-25% higher than that of fully amortizing mortgages."[20]

In January 2007, we published a special report highlighting the rising defaults on the 2006 vintage subprime mortgages.[21] That report was the first in a series of publications in 2007 that discussed the deteriorating condition of the U.S. subprime and housing market. Our publications expressed concerns about expected loan deterioration while we collected performance data on specific pools to validate our assessment of overall market conditions and differentiate performance among individual mortgage pools.

---

17 Second Lien Mortgages - Issuance Volume Set for Another Record-Breaking Year in 2003, July 3, 2003

18 2003 Review and 2004 Outlook: Home Equity ABS, January 20, 2004.

19 2004 Review & 2005 Outlook: Home Equity ABS, January 18, 2005

20 2005 Review & 2006 Outlook: Home Equity ABS, January 24, 2006

21 Early Defaults Rise in Mortgage Securitization, Moody's Special Report, January 18, 2007.

In our March 2007 report, "Challenging Times for the US Subprime Mortgage Market,"[22] Moody's said that: *"In response to the increase in the riskiness of loans made during the last few years and the changing economic environment, Moody's has steadily increased its loss expectations on pools of subprime loans."* However, Moody's also identified a number of factors that we believed would be critical in determining the ultimate performance of these loans. In relevant part, the report said:

> ***"It is generally too early to predict ultimate performance for the subprime mortgage loans originated in 2006 and the bonds secured by such loans. A number of factors will determine the ultimate losses. Home price appreciation and refinancing opportunities available in the next few years are expected to have the biggest impact. Economic factors, such as interest rates and unemployment, will also play a significant role as will loss mitigation techniques employed by loan services." (emphasis added)***

While we identified the factors that we believed would determine the ultimate losses on the 2006 subprime mortgages and the bonds secured by them, we did not anticipate the magnitude or severity of these factors.

2) <u>We tightened our ratings criteria</u>

Between 2003 and 2006, Moody's had steadily increased our loss expectations on pools of subprime loans and the levels of credit protection required for a given rating level. As a result, bonds issued in 2006 and rated by Moody's had more credit protection than bonds issued in earlier years. In practical terms, this meant that for the 2006 vintage RMBS rated by Moody's more than half of the mortgages in a pool would have to default and recover only half the appraised value of the home before a Moody's Aaa rated bond would suffer its first dollar of loss.

3) <u>We continued to monitor the market, for example by conducting surveys of servicer loan modification practices</u>

Moody's aggressively monitored market conditions as the crisis continued to unfold to assess the impact of how the various market participants (including the borrowers, the mortgage servicers, the mortgage originators and the Federal government) might respond to the extremely fast- changing conditions. For example, in an effort to gauge the potential impact that loan modifications might have in reducing losses on defaulted loans, Moody's conducted a survey of the modification practices of 16 subprime mortgage servicers (who together constitute roughly 80% of the total subprime servicing market). The survey results, which were published in September 2007,[23] suggested that, on average, subprime servicers were not focused on modifying loans and most servicers had only modified approximately 1% of their serviced loans that experienced a reset in the months of January, April and July 2007. Based on this data, it appeared that the number of modifications that would be performed by subprime servicers on loans facing reset would be much lower than anticipated by many, and

---

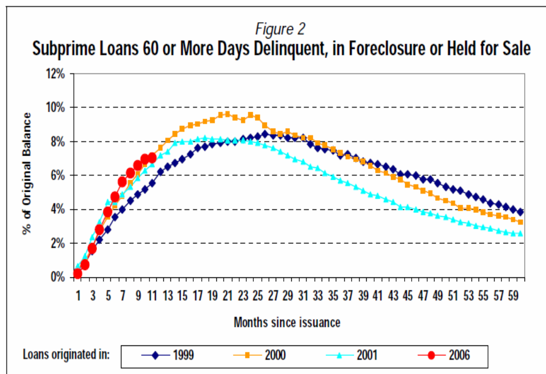
[22] March 7, 2007.
[23] "Moody's Subprime Mortgage Servicer Survey on Loan Modifications," September 21, 2007, Moody's Special Report.

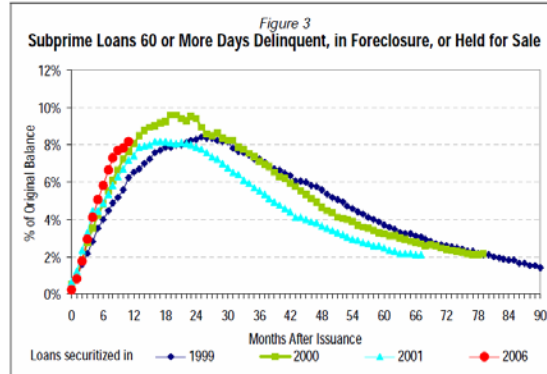
therefore unlikely to meaningfully mitigate the losses in subprime pools backing rated securitizations. We published follow-up surveys in December 2007 and July 2008.[24]

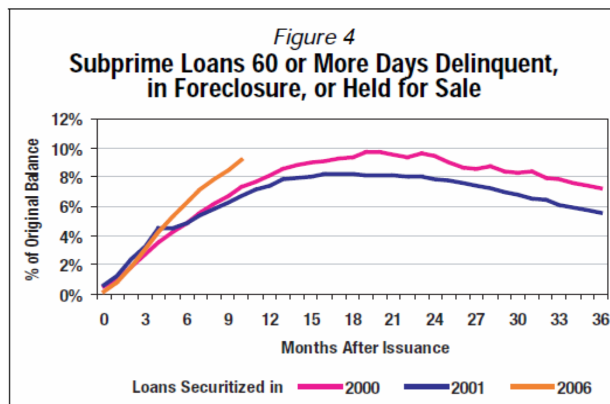
4) <u>We took rating actions as soon as warranted by actual performance data</u>

Moody's first rating actions (downgrades and reviews for downgrades) on securities backed by 2006 vintage subprime loans took place in November 2006 and further rating actions occurred in December. However, at that time, we did not believe that the then-available information warranted a more aggressive rating action for the entire vintage.

As Moody's monitored the actual performance of the 2006 subprime RMBS, it appeared that the earliest loan delinquency data for the 2006 mortgage loan vintage was largely in line with the performance observed during the recession of 2000 and 2001. This performance in turn was consistent with the higher loss expectations that we had already anticipated for the vintage. See **Figures 2** and **3** below, published respectively in our March 2007 and April 2007 publications, showing that the loan performance closely tracked that of the earlier 2000 and 2001 vintages. **Figure 4**, published in our July Update 2007, shows the significantly higher loan delinquencies in the 2006 vintage than that of the 2000 and 2001 vintages.







[24] "Special Report: US Subprime Market Update: November 2007," December 17, 2007 and "Special Report: Moody's Subprime ARM Loan Modification Update," July 14, 2008.

Our first comprehensive set of rating actions (on second lien mortgage transactions) took place in April 2007, with a second set of actions (on first lien mortgage transactions) in July 2007. We did not take these rating actions sooner because there was insufficient actual performance information to judge the persistence of the early trends. Consistent with our approach to assigning and monitoring ratings, we based our actions on actual performance information rather than negative sentiment. In so doing, we opted to employ a more careful and deliberative approach that closely monitored market developments and took rating actions as and when sufficient information became available to warrant such action.

In sum, Moody's undertook efforts to watch, to publicly comment, and to react. We know that many think we should have done more or acted sooner. With the clarity of hindsight, we recognize that we, like others in the market, did not fully anticipate the magnitude of the housing downturn and the changes in the macro-economic environment.

V. MOODY'S EFFORTS TO ADVANCE THE QUALITY, TRANSPARENCY AND INDEPENDENCE OF CREDIT RATINGS

The current economic downturn has exposed vulnerabilities in the infrastructure of the global financial system, and important lessons for market participants have emerged from the rapid and dramatic market changes. For Moody's part, over the past two years we have responded to concerns expressed by both the private and public sectors by undertaking initiatives to improve the credibility of our ratings and strengthen their quality, transparency and independence. In line with our continuing effort to be as transparent as possible with the market, we have published a list of measures we have adopted.[25]

While we believe that we have made good progress in improving the analytical quality and transparency of our ratings, we also recognize that our practices must evolve along with changes in market dynamics. We expect to continue developing and modifying our approach in step with market needs, as well as with regulatory expectations.

In this regard, Moody's has adopted a wide range of measures, including the following:

1) **Strengthening the analytical quality of our ratings,** including creating permanent, internal methodology review and model verification and validation processes; continuing the separation of personnel involved in initial rating assignments and surveillance; reinforcing the independence of the Credit Policy function; implementing methodological modifications; enhancing our existing professional training program; and formalizing model error discovery and correction procedures.

[25] "Strengthening Analytical Quality and Transparency," August 2008. See also, updates of the document published in December 2008 and, November 2009.

2) **Enhancing consistency across rating groups,** including incorporating common macro-economic scenarios in rating committees; broadening cross-disciplinary rating committee participation; and improving surveillance coordination across rating groups.
3) **Reinforcing measures to avoid conflicts of interest,** including codifying the existing prohibition against analysts providing recommendations or advice on structuring securities; prohibiting fee discussions by ratings managers as well as analysts (who were already subject to such a prohibition); reinforcing rating committee composition to enhance independence and objectivity; conducting "look-back" reviews when analysts leave to join organizations with potential conflicts; revising our Securities Trading Policy; reviewing and (when appropriate) responding to complaints about analysts made by third parties; reinforcing independence and objectivity through analyst compensation policies; and adopting a stricter prohibition on Moody's analysts receiving gifts (to supplement our existing Moody's Corporation policy on this matter).
4) **Improving the transparency of ratings and the ratings process,** including enhancing disclosures on incremental changes to methodologies; publishing detailed summaries of our methodologies for rating U.S. RMBS and CDOs; enhancing the review of loan originators in U.S. RMBS transactions and asking issuers for stronger representations and warranties relating to those transactions; providing additional information on structured finance ratings (V Scores, Parameter Sensitivity analysis, loss expectation and cash flow analysis, and key statistics and assumptions); enhancing disclosures regarding attributes and limitations of credit ratings in each rating announcement; pursuing efforts to discourage rating shopping; beginning to publish key statistics and default assumptions for all new structured finance ratings and for surveillance rating actions in major asset classes (including information relating to underlying pool losses); and creating a structured finance "Quick Check" Report which seeks to inform the market of our latest opinions, summaries of rating activities, methodology changes and ratings transition summaries and other key information.
5) **Increasing resources in key areas,** including strengthening the global leadership of the rating surveillance function; increasing the number of rating surveillance analysts; increasing the staff of the Credit Policy group; conducting a comprehensive review of our staffing model; and continuing to build out our Compliance function.

We believe that we have made good progress with respect to augmenting the analytical framework and credibility of our ratings; nevertheless, we are committed to enhancing our policies and procedures even further.

VI. CONCLUSION

Moody's has always believed that critical examination of the credit rating agency industry and its role in the broader market is a healthy process that can encourage best practices, support the integrity of our products and services, and allow our industry to

adapt to the evolving expectations of market participants. Many necessary actions can and have been taken by Moody's and at the industry level, and policymakers at the domestic and international levels have proposed a host of reform measures for our industry and credit markets generally. Moody's wholeheartedly supports constructive reform measures and we are firmly committed to meeting the highest standards of integrity in our rating practices, quality in our rating methodologies and analysis, and transparency in our rating actions and rating performance metrics.

I am happy to respond to any questions.