Moody's Corporation

Testimony of Raymond W. McDaniel
Chairman and Chief Executive Officer
Moody's Corporation
before the
United States House of Representatives
Committee on Oversight and Government Reform

October 22, 2008

HEARING ON CREDIT RATING AGENCIES

INTRODUCTION

Good morning, Chairman Waxman, Congressman Davis, and members of the Committee. I am Ray McDaniel, Chairman and Chief Executive Officer of Moody's Corporation ("**MCO**"), the parent of Moody's Investors Service ("**Moody's**"). Moody's is the oldest bond rating agency in the world, having issued its first ratings in 1909. Our company was founded on the great American traditions that encourage and protect "the marketplace of ideas." Today, Moody's is one of the world's most widely used sources for credit ratings, market research and risk analysis. We have 20 offices around the world and employ almost 2,500 people worldwide, including approximately 1,500 in the United States. On behalf of all of my colleagues at Moody's, I thank the Committee for the opportunity to participate in today's hearing.

Over the past several weeks, we have witnessed events that many, including myself, would have thought unimaginable just two months ago. These events have sent shock waves around the world and undermined confidence in the U.S. capital markets. American families are directly affected by this. Many have lost jobs, homes or retirement savings and they are suffering.

I will talk today about the turmoil in the U.S. housing market that began with the loosening of underwriting standards for subprime mortgages. The problems that we are now experiencing in the world's financial markets, however, extend well beyond the housing market and have been driven by excessive leverage in an opaque but deeply interconnected global financial system.

As I will describe in more detail, Moody's observed the trend of weakening conditions in the subprime market. Beginning in July 2003, we published warnings about the increased risks we saw and took action to adjust our assumptions for the portions of the residential mortgage backed securities ("**RMBS**") market that we were asked to rate. We did not, however, anticipate the magnitude and speed of the deterioration in mortgage quality or the suddenness of the transition to restrictive lending. We were far from alone in that regard, but I believe that we should be the leading edge for predictive opinions about future credit risks, and we have learned important lessons from these fast-changing market conditions. Indeed, I believe that all market participants should now be taking stock to determine how to improve the U.S. mortgage origination and securitization process. In my testimony, I will describe some of the initiatives that Moody's is taking in this area. In addition, I will discuss the role credit rating agencies have played and can play in the global capital markets.

Beyond mortgage origination and securitizations, the recent liquidity crunch has exposed vulnerabilities in the infrastructure of the global financial system. These weaknesses include exceptional leverage and business models that relied on secondary markets for liquidity of complex instruments in periods of stress; the interaction of asset valuation and capital; insufficient risk management practices; interlinked market participants; and limited transparency. We believe it is important to consider all of these issues as new regulatory structures for the financial markets are developed.

Moody's believes that the critical examination of our industry and the broader market is a healthy process that can encourage best practices and support the integrity of the products and services our industry provides. As part of our self-examination, we have taken action to enhance the quality of our analysis and improve the reliability of our credit ratings in light of changing market dynamics. These initiatives include refining our rating methodologies, increasing the transparency of our analysis, and adopting new measures to reinforce and enhance existing processes and policies that address potential conflicts of interest. The Securities and Exchange Commission ("**SEC**") recently concluded its own extensive examination of the industry and provided us with specific tasks to enhance our services. We continue to cooperate with the SEC, our regulator, and a range of market participants to implement effective reforms and rebuild confidence in our industry.

In short, we know that there has been a loss of confidence in our industry and the entire U.S. financial system. We are committed at Moody's to working with Congress, with our regulators and with market participants to take whatever steps are necessary to restore that confidence to the system.

Let me now turn to some specifics.

1. 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 Nationally Recognized Statistical Rating Organizations ("**NRSROs**"), and the SEC estimated that approximately another 20 credit rating agencies will become registered as NRSROs in the future.[1]

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 level the playing field between borrowers (debt issuers) and lenders (debt investors). Specifically, rating agencies serve the market by reducing information asymmetry between borrowers and lenders. We sift through the vast amount of available information, analyze the relative credit risks associated with debt securities and/or debt issuers and provide our analysis to the investing public for free.

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[2] 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. Our analysis necessarily depends on the quality, completeness and

---

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

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

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.[3] 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, we would need only two ratings for bonds: "***Default***" or "***Won't Default***". 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.

We believe it is essential for investors and others to understand the role of rating agencies and what credit ratings can and cannot do. 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.

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 show that both our corporate and our structured finance ratings have been reliable predictors of default over many years and across many economic cycles.

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 year. Indeed, because of events that occur at different times in different sectors, which will never be perfectly predictable,

---

3 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.

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.

b. Moody's Credit Rating Process

One common misperception is that Moody's credit ratings are derived from application of a mathematical process. This is not the case. Models are used for some ratings, but the process involves much more, including the exercise of independent judgment by the participating analysts. 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. Once the rating committee makes a decision, the rating is published and subsequently monitored, as needed, on an ongoing basis. Importantly, the rating reflects Moody's opinion, and not an individual analyst's opinion, of 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 come 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 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.

- **The Rating Committee:** Moody's credit rating opinions are determined through rating committees, by a majority vote of the committee's members, 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 complexity of 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 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.

- **Dissemination of Credit Rating Announcements:** When a rating committee forms its opinion, we typically contact the issuer or its agent to inform them of the rating. The rating decision is not communicated to any other external party before it is published. Where feasible and appropriate, Moody's may also give 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 the new opinion in any event 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 an issuer appears as if it may be at a credit rating inconsistent with its peers.

  In most of Moody's U.S. Structured Finance groups, monitoring is performed by dedicated surveillance analysts under the leadership and oversight of our Group

Managing Director – Structured Finance Global Surveillance Coordinator. 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 rating action.

c. Issuer Pays v. Investor Pays

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.

- *First*, the term investor can describe a variety of parties with different interests. In the case of purchasers of a rating agency's services, investors can include entities holding either long or short positions (or both), including institutional bond investors, equity investors and hedge funds.[4] 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. In short, investors of all varieties are interested parties to rating actions just as issuers are.

[4] Moody's notes that, even though our ratings focus only on credit risk, our rating actions often have implications for an entity's equity valuation, and so investors who also hold equity positions may be doubly motivated to influence rating actions.

- *Second*, investors frequently are entities that are also issuers, such as banks, insurance companies and governments. In such instances, investor-pays versus issuer-pays is not a meaningful distinction.
- *Third*, entities 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.

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 future rating actions. Importantly, these steps are made plain and the market broadly understands this potential conflict. Transparency itself is a protection. If the industry adopted an alternative business model in which investors rather than issuers pay for ratings, this would not relieve the perceived conflict – it would only shift it.

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.[5]

Given that all feasible business models embed potential conflicts, we should ask whether one model provides superior, offsetting public policy benefits. 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, however, 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.

---

[5] 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 "Moody's Investors Service Report on the Code of Professional Conduct," April 2006 ("Moody's Report"), available at moodys.com.

d. How We Manage Potential Conflicts of Interest

To ensure our objectivity and independence, and to protect the integrity of our credit ratings and rating process, we have adopted structures to manage potential conflicts of interest. These measures include, among others, the following:

- Rating decisions are made by rating committees and not by any individual analyst.
- Analysts are prohibited from holding fee discussions with or owning securities in the institutions that they rate (except through holdings in diversified mutual funds).
- Moody's does not evaluate or compensate analysts on the basis of the revenue associated with the entities they rate.
- Moody's policies provide 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 determined solely on the basis of factors relevant to the credit assessment. We do not refrain from taking a rating action based on the potential effect of the action on Moody's, an issuer, an investor or any other market participant.
- Moody's does not create investment products or buy, sell or recommend securities to the users of our research.
- As the Committee may also be aware, in June this year, Moody's and certain other rating agencies entered into an agreement with the New York State Attorney General designed specifically to limit perceived conflicts of interest and curtail "rating shopping" in the rating of subprime mortgage securitizations. The agreement includes provisions requiring issuers to pay for the review of securities regardless of whether a rating ultimately is used.

The SEC is also considering revised rules to address potential conflicts of interests, and we will adopt whatever additional policies and procedures may be necessary to implement these rules once they are finalized.

2. THE HOUSING MARKET AND MOODY'S RATINGS OF RMBS

After a decade of steadily escalating home prices, delinquencies began to rise sharply for subprime mortgages created in 2006 and 2007. It is now generally accepted that the deterioration in the subprime mortgage sector was caused by an unusual confluence of three factors: (i) increasingly aggressive mortgage loan underwriting practices; (ii) declining home price appreciation; and (iii) the sudden unavailability of refinancing alternatives for mortgage-holders.

a. Subprime Mortgages and the Securitization Process[6]

The subprime mortgage market has existed for decades (albeit less pervasively than in recent years) and over its history has experienced a recognizable credit cycle.[7]

A part of this cycle has been for lenders to lower credit standards in order to maintain or increase lending volume when demand falls off. In the most recent cycle, this pattern reached new extremes as lenders introduced aggressive, new alternative mortgage products that made it easier than ever for borrowers to obtain a loan. Often, these loans had a combination of features designed to facilitate such borrowing. Such loans included: loans made for the full (or close to the full) purchase price of the home, allowing borrowers to contribute little or no equity to the home; loans with less rigorous documentation, enabling borrowers to state their income or assets without verification (or in some cases to avoid even having to include a statement about income or assets); loans that exposed borrowers to sudden payment increases; and negative amortization loans. Consequently, while the $640 billion of subprime mortgages originated in 2006 still comprised a relatively small proportion of the nearly $3 trillion of residential mortgages

---

6 For a more detailed description of the securitization process, please see Annex I.

7 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 demand for borrowing 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.

originated during that same year,[8] the subprime sector steadily was becoming a larger proportion of overall mortgage origination.

RMBS are securities whose principal and interest payments are made from the mortgage payments received on thousands of "pooled" mortgage loans. Credit rating agencies come into the residential mortgage securitization process after a mortgage loan has been made to a homeowner by a lender and identified to be sold and pooled into an RMBS by an originator and/or an investment bank. Moody's does not participate in the origination of the loan; we do not receive or review individual loan files; and we do not structure or provide advice about the structure of the transaction.

In rating any structured instrument, we may hold in-depth analytical discussions with issuers or their advisors. In these discussions, rating agencies do not act as investment bankers, consultants or advisors. Instead, 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 to the issuer the rating implications of our methodologies for that transaction.[9]

Moody's role is to provide a public opinion (based on both qualitative and quantitative information) that speaks to one aspect of the securitization, specifically the relative credit risk associated with the securities that are issued by securitization structures. Our role in the structured finance market is fundamentally the same as the role Moody's has played over the last 100 years in the corporate bond market.

Before an RMBS is brought to Moody's to be rated, information about the underlying loan pool is verified by various parties at several points in the process. First, the lender, sometimes referred to as the "originator", verifies underwriting information when it extends the mortgage loan to the borrower. Second, the investment banker arranging the structured finance vehicle conducts due diligence to verify that the loans in a particular pool meet relevant underwriting standards. It is common practice for a securitization's investment banker to hire a

---

8 See generally, Roberts, Russell, "How Government Stoked the Mania," October 3, 2008, *The Wall Street Journal.*

9 Similar discussions 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.

due diligence firm to conduct the due diligence. The originator of the loans generally is required to buy back loans that are found to be in violation with its stated criteria. Finally, accounting firms are charged with verifying that the summary information about the loan pools matches the information in the related loan files. Separately, the transaction sponsor (or the original lender) of an RMBS provides representations and warranties to the securitization trust about each of the underlying mortgage loans, including that each loan meets the requirements of applicable laws.

b. Moody's Analysis and Actions Relating to Subprime Mortgage Portfolios

Between 2003 and 2006, Moody's observed an increase in the risk profile of subprime mortgage portfolios that we were asked to review prior to assigning ratings. In response Moody's undertook several actions:

1) **We began warning the market starting in 2003:** Our commentary included warnings about the deterioration in origination standards and inflated housing prices. We began publishing warnings on these issues in July 2003 and throughout 2004, 2005 and 2006. In January 2007, we published a special report highlighting the rising defaults on the 2006 vintage subprime mortgages[10] and thereafter we continued to publish on their increasingly deteriorating performance.
2) **We tightened our ratings criteria:** We steadily increased our loss expectations on pools of subprime loans and the levels of credit protection required for a given rating level. Our loss expectations and enhancement levels rose by about 30% between 2003 and 2006. 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 more than half the loans in a pool could suffer a 50% loss without the Aaa tranches defaulting.
3) **We took rating actions as soon as the data warranted it:** The earliest loan delinquency data for the 2006 mortgage loan vintage was largely in line with the performance observed for the 2000 and 2001 vintages, during the last U.S. recession. The 2006 rated RMBS were structured with sufficient credit protection to easily withstand

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

such performance. As soon as the more significant loan performance deterioration in the 2006 vintage became evident to us, however, we took prompt and deliberate action on those transactions that showed evidence of significantly heightened risk. A first, limited set of rating actions were taken in November 2006, with broader actions beginning in April 2007.

4) **We conducted loan modification surveys:** Finally, 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, sometimes dramatically, Moody's began conducting surveys of the modification practices of sixteen subprime mortgage servicers. These servicers together constituted roughly 80% of the total subprime servicing market. The results of our first survey, published in September 2007,[11] suggested that, on average, subprime servicers were not focused on modifying loans and had only modified approximately 1% of their serviced loans that had experienced a reset in the months of January, April and July 2007. We published follow-up surveys in December 2007 and July 2008.[12]

In sum, Moody's undertook efforts to watch, to warn, and to react. We know that many think we should have done more or acted sooner. With the clarity of hindsight, we see missed opportunities, as we imagine every participant in the mortgage origination, securitization and investment process does. We are moving aggressively to enhance our practices in light of the changing credit markets. At the same time, we are working with others on initiatives necessary to restore confidence in the broader capital markets.

---

[11] "Special Report: Moody's Subprime Mortgage Servicer Survey on Loan Modifications," September 21, 2007.

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

3. EFFORTS TO RESTORE CONFIDENCE

a. Moody's Initiatives to Enhance Analytical Quality of Our Structured Finance Ratings

Events of the past year have reinforced for all participants how rapidly and dramatically markets can change. We believe that such change provides an opportunity to improve market practices, including credit analysis and credit rating processes. During the past year, Moody's has solicited input from the market and global policy makers regarding the utility of our ratings and our ratings system. Based on this dialogue, we have committed to a series of measures that seek to enhance the quality, integrity and transparency of our ratings and respond to concerns articulated by the market or the regulatory community. We have taken steps in six broad areas that seek to strengthen the credibility of our ratings and respond to concerns expressed by both the private and public sectors.

1) ***Strengthening analytical integrity of ratings*:** including improving feasibility reviews for new structured products and strengthening our internal model verification and validation processes.

2) ***Enhancing consistency across rating groups:*** including incorporating common macro-economic scenarios in rating committees and improving surveillance coordination among credit rating groups.

3) ***Improving transparency of ratings and ratings process:*** including publishing assumption volatility scores and sensitivity analysis on structured finance securities and expanding our reviews of loan originators.

4) ***Adding resources in key areas:*** including increasing the number of surveillance analysts and compliance professionals.

5) ***Bolstering measures to manage potential conflicts of interest:*** including codifying the existing prohibition on providing recommendations or advice on structuring and extending the existing prohibition on fee discussions between analysts and issuers to the analysts' rating managers as well.

6) ***Pursuing industry and market-wide initiatives:*** including rating agency industry-wide actions to promote independence and objectivity and participation in initiatives of other associations such as the American Securitization Forum's Project RESTART.

b. Further Steps Moody's Will Take to Enhance the Transparency of Ratings and Market Awareness of Their Purpose

We believe that we have made good progress with changes to improve the analytical quality and credibility of our ratings, but know there is always more to do. Outlined below are some of the more important steps that we intend to implement in the near future.

1) ***Increasing transparency of methodologies:*** Beginning in December 2008, Moody's will issue a press release on a quarterly basis that summarizes the incremental changes to procedures and methodologies in the Structured Finance Group that have not been previously published and will incorporate or link these changes into the existing published methodology.

2) ***Implementing uniform presentation of methodologies*****:** As new methodology documents are written and old methodologies are revised, we are encouraging more uniform means of presentation and greater discussion of key parameter sensitivities and model uncertainties.

3) ***Improving disclosure on limitations and attributes of ratings*****:** To help raise market awareness of what credit ratings do and do not measure, we have developed a statement explaining the attributes and limitations of our credit ratings and will include it in our rating announcements and on our Disclosure page (found on the Regulatory Affairs page on moodys.com).

Moody's recognizes that the public has an interest in the measures that we are taking to enhance the quality, integrity and transparency of our ratings. Accordingly, we recently published a report on the status of our implementation of these measures.[13] Many of our commitments will entail ongoing adjustment, and we will update the public on the status of our implementation at regular intervals.

c. Enhancements to U.S. Residential Mortgage Securitization

Some have suggested that misrepresentations made by mortgage brokers and appraisers are at the root of the subprime crisis. Others argue that the lack of oversight and licensing of mortgage brokers at a federal level created a patchwork of regulation that allowed bad actors to slip through and predatory lending practices to thrive. We do not know the extent of such "bad acts", but what is now clear is that at least some of the loan-level information we and investors received was inaccurate.

Moody's has made the following industry-level proposals to improve transparency, data integrity and accountability in U.S. residential mortgage securitizations:

- Stronger representations and warranties;
- Independent third-party pre-securitization review of underlying mortgage loans;
- Standardized post-securitization forensic review;
- Expanded loan-level data reporting of initial mortgage pool and ongoing loan performance; and
- More comprehensive originator assessments.[14]

These five proposals together will provide more standard and reliable information on RMBS transactions than is currently available. Moody's willingness to rate a particular RMBS

---

13 "Moody's Special Comment: Strengthening Analytical Quality and Transparency: An Update on Initiatives Implemented by Moody's in the Past Twelve Months," August 2008.

14 These proposals were made in a Special Report, "Moody's Proposed Enhancements to U.S. Residential Mortgage Securitizations: Call for Comments," published by Moody's in March 2008. Moody's currently is developing a set of minimum representations and warranties – which will be a threshold to obtaining a Moody's rating for subprime RMBS.

or assign a high or investment grade rating will depend in part on the degree to which issuers incorporate these enhancements.

I would note that it is difficult to assign ratings if information is not publicly available and if issuers are allowed to pick and choose to whom the information is provided. The corporate finance market has very clear rules and regulations about the type of information issuers need to make public if they are to access the capital markets. Yet comparable rules in the structured finance market are somewhat lacking. This is particularly true for privately placed, complex structured finance instruments and the secondary markets in which a large number of these instruments trade. As a result, "rating shopping" is prevalent – and has been particularly acute in the structured finance market.[15] Moreover, this lack of transparency has prevented investors from accessing the full range of information they need, about credit risk but also about other investment risks, to make investment decisions. We strongly advocate that market participants and authorities work together to enhance transparency and disclosure requirements.

15 SEC, "Proposed Rules for Nationally Recognized Statistical Rating Organizations," Release No. 34-57967, June 25, 2008 at 36218.

CONCLUSION

The events of the past 15 months have demonstrated that markets can change dramatically and rapidly. Such change brings important lessons. The opportunity to improve market practices, including credit analysis and credit rating processes, must be pursued vigorously and transparently if confidence in credit markets and their healthy operation are to be restored.

At Moody's, we are firmly committed to meeting the highest standards for integrity of our rating practices, the quality of our rating methodologies and analysis, and the transparency of our rating actions and rating performance metrics. In this regard, we look forward to continuing our dialogue with authorities and market participants to help restore confidence in financial markets.

I am happy to respond to any questions.

# # #

Annex I

The Process of Securitizing Subprime Mortgages

To understand the process of securitizing subprime mortgages, it is important to understand the roles played by the various market participants:

- **Mortgage originators, or lenders –** entities that make the loans, such as banks or mortgage finance companies. Typically lenders make a loan decision based on four key factors: a borrower's current income in relation to the size of the mortgage loan; a borrower's credit history (including their FICO score); the appraised value of the house that secures the mortgage; and the size of the down payment for the loan. Originators are one of the two parties who historically have been responsible for conducting due diligence on the loans pooled together for securitization.
- **Subprime borrowers –** borrowers who have weaker credit histories (*e.g.*, incur loan-to-value ratios of 80-100%, and have income to loan payment ratios of 45-50%).
- **Investment bankers –** generally investment banks or other banks that structure the securitizations and sell the bonds that are issued to investors. Investment banks are the second party who historically have been responsible for conducting due diligence on the loans pooled together for securitization.
- **Trustees –** entities that are responsible for administering the securitizations.
- **Servicers –** entities that collect all payments on the subprime mortgage loans from the borrowers.
- **Investors –** entities that purchase the bonds that are backed by the assets and their related cash flows. In the securitization market, these entities typically are sophisticated institutional investors who generally make their investment decisions based on their own analysis, with ratings being one of many factors they consider.

Steps to Structure Mortgage-Backed Securities

The securitization process generally begins approximately three or more months after a borrower has closed on his mortgage transaction. It is at this point in time that the lending institution decides to securitize. It is important to note that some lenders may choose to retain the loans they have made on their balance sheet or sell them into the whole loan market, and as such a certain percent of mortgages are never securitized. Once the lender decides to securitize, however, there are numerous steps involved in securitizing a mortgage-backed security from lender origination to investor purchase.

First, a large number of subprime residential mortgage loans (typically thousands) are identified for securitization by the mortgage originator. This originator relies on an arranger like a bank or investment bank to assess the risk of the loan portfolio, conduct due diligence by sampling loan files, with or without the help of a due diligence firm, and replace any loans which do not conform to the underwriting standards. The originator creates a trust, limited liability company or corporation,[16] which is the securitization issuer. The originator then sells all of its legal right to receive monthly payments on the subprime mortgages to the trust, receiving cash in return which is then used to originate new loans, thereby keeping the market liquid. The trust thereby becomes the "owner" or "holder" of the loans. Finally, the trust issues and sells bonds to investors – in separate tranches that have varying degrees of risk and payouts. The bonds oblige the trust to make monthly payments to the bond investors, which it does using the monthly loan payments it receives from borrowers on their mortgages.

Loss Protection for Mortgage-Backed Securities

Securitizations of all kinds, including those of subprime mortgage loans, use various features to protect bondholders from losses. The more loss protection (also referred to as "credit enhancement") a bond has in relation to its "expected loss", 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:

---

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

- A guarantee from a creditworthy entity, like an insurance company, or a bank that covers all or a certain portion of the losses above a certain level;
- "Overcollateralization", which is the amount by which the aggregate amount of mortgage loans exceeds the aggregate amount of bonds issued;
- "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.

An Example of How Loss Protection Works

Figure 1 represents a simple subprime securitization transaction, where four classes, or "tranches," of bonds totalling $90 are issued and are backed by loans totalling totalling $100. In this structure, losses would first be applied to reduce the "$10 net worth," or overcollateralization. Only when the losses exceed the overcollateralization amount would the bond balances be affected. Losses would be applied to the bond tranches in reverse order of seniority, such that losses are not allocated to a given tranche until the balances of all tranches that have a lower priority have been reduced, or written down, to zero.

Figure 1

Simplified Balance Sheet for a Typical Subprime Securitization

Assets (Loans)	Liabilities (Bonds) + Net Worth
	$65 Senior Bond
	$10 Mezzanine Bond #1
	$10 Mezzanine Bond #2
	$5 Subordinated Bond
$100 Mortgages	$10 Net Worth ("Overcollateralization")

For example, if the losses on the pool of mortgages were $20, as shown in ***Figure 2***, then the outstanding balance of the mortgage loan pool would fall to $80. At this point, the overcollateralization amount would be reduced, or "written down", from $10 to zero and the remaining $10 of losses would result in losses for both the $5 subordinated bond and the $10 mezzanine bond #2. The principal amount of the $5 subordinated bond would be written down to zero, and then the $10 balance of mezzanine bond #2 would be reduced by the remaining $5 of losses to a balance of $5. Losses are not allocated to a given tranche until the balances of all tranches that have a lower seniority have been written down to zero.

Figure 2

Securitization After Incurring $20 of Losses

Assets (Loans)	Liabilities (Bonds) + Net Worth
	$65 Senior Bond
	$10 Mezzanine Bond #1
	$5 Mezzanine Bond #2
	$0 Subordinated Bond
$80 Mortgages	$0 Net Worth ("Overcollateralization")

Consequently, the likelihood that an investor in a particular tranche will receive both the principal and interest due on the bond depends not only on the quality of the loans in the securitization, but also on the amount of loss protection provided. The higher the seniority of a bond issued in a securitization, the greater protection it will have against losses, making it more likely to be repaid in full – meaning it is "less risky." Conversely, the lower the seniority of a bond, the less protection it will have against losses, making it less likely to be repaid in full.

When Moody's issues credit ratings for subprime bonds like those in this example, the tranches generally receive progressively lower ratings as the seniority of the tranches gets lower. Each progressively more subordinate bond has less loss protection because each has fewer bonds that can provide a cushion to absorb losses in case of defaults on some of the loans in the pool. Furthermore, because losses on subprime loans are generally expected to be much higher than losses on "prime" loans, a greater amount of loss protection is needed in a subprime securitization for a given tranche to receive the same rating as a similar tranche of a prime securitization.