ANNEX 1: STATEMENT OF FACTS

I. OVERVIEW

- 1. Between January 2004 and May 2010 (herein "the relevant time period"), Moody's Investors Service, Inc., a wholly-owned subsidiary of Moody's Corporation (herein collectively "Moody's"), was a Nationally Recognized Statistical Rating Organization ("NRSRO").
- 2. For a fee, Moody's issued alphanumeric credit ratings of structured finance instruments, including Residential Mortgage-Backed Securities ("RMBS") and Collateralized Debt Obligations ("CDOs"). Moody's also issued credit ratings of corporate bonds and other types of structured finance instruments, financial and non-financial entities, and governments, among other things.
- 3. Moody's made statements, including in publicly available documents, regarding the policies, procedures, and methodologies for its RMBS and CDO credit ratings, among other topics.
- 4. During the relevant time period, it was generally understood in the structured finance market that the investment practices of many investors, including banks, were governed by law, regulation, and/or internal investment policies, which often used credit ratings to set minimum credit quality thresholds.

II. MOODY'S PUBLICATIONS REGARDING THE OBJECTIVITY AND INDEPENDENCE OF ITS CREDIT RATINGS

- 5. In June 2005, Moody's published, and thereafter consistently maintained on its public website (www.moodys.com), a Code of Professional Conduct ("Moody's 2005 Code"). Moody's 2005 Code was a set of principles voluntarily adopted based on the International Organization of Securities Commissions Code of Conduct Fundamentals for Credit Rating Agencies, by which all Moody's Investors Service, Inc. employees were expected to abide.
- 6. Moody's 2005 Code set forth its general policies to promote Moody's stated objectives of integrity, objectivity, and transparency of the credit rating process. Section III(2)(A) of Moody's 2005 Code, titled "Independence and Management of Conflicts of Interest," stated:
 - 2.2 Moody's and its Analysts will use care and professional judgment to maintain both the substance and appearance of independence and objectivity.
 - 2.3 The determination of a Credit Rating will be influenced only by factors relevant to the credit assessment.
 - 2.4 The Credit Rating Moody's assigns to an Issuer, debt or debtlike obligation will not be affected by the existence of, or potential for, a business relationship between Moody's (or its affiliates) and

- the Issuer (or its affiliates) or any other party, or the non-existence of any such relationship.
- 7. Moody's 2005 Code also contained a section captioned the "Quality of the Rating Process," which stated:
 - 1.4 . . . Credit ratings will reflect consideration of all information known, and believed to be relevant, by the applicable Moody's Analyst and rating committee, in a manner generally consistent with Moody's published methodologies. . . .
 - 1.6 Moody's and its Analysts will take steps to avoid issuing any credit analyses, ratings or reports that knowingly contain misrepresentations or are otherwise misleading as to the general creditworthiness of an Issuer or obligation.
- 8. Moody's 2005 Code also included Section III(1)(C), titled "Integrity of the Rating Process," which stated:
 - 1.12 Moody's and its Employees will deal fairly and honestly with Issuers, investors, other market participants, and the public.
- 9. Moody's 2005 Code also contained a section captioned "Transparency and Timeliness of Ratings Disclosure," which stated:
 - 3.13 Moody's will publicly disclose via press release and posting on moodys.com any material modifications to its rating methodologies and related significant practices, procedures, and processes. Where feasible and appropriate, disclosure of such material modifications will be made subject to a "request for comment" from market participants prior to their implementation.
- 10. In October 2007, Moody's reissued its Code of Conduct, which included the same statements of policy quoted above that were included in Moody's 2005 Code.
- 11. During the relevant time period it was generally understood that potential conflicts of interest existed in Moody's business model. Moody's acknowledged this in public statements, including for example, in a July 28, 2003 letter to the United States Securities and Exchange Commission, in which Moody's stated that "the rating agency model which has developed is an 'issuer fee-based' model. This model has two intrinsic conflicts of interest which must be effectively managed: a) issuers pay rating agencies for their credit opinions; and, b) issuers are one source of input in a rating agency's formation of its opinion. . . ." Moody's further stated in a July 12, 2004 letter to the Securities and Exchange Commission: "Because ratings have become an important means of conveying information in the ABS market, the independence of rating agencies and the objectivity of rating opinions are important. Yet, it is the issuing entities that pay the majority of credit rating agency fees, exposing the industry to latent conflicts of interest."

12. This tension, in many cases, was passed on to the managing directors, who were given both market share and ratings quality targets and asked to manage any tension. One managing director, reflecting on his experience with rating corporate bonds, wrote in October 2007 that "on the one hand, we need to win business and maintain market share, or we cease to be relevant. On the other hand, our reputation depends on maintaining ratings quality. . . . For the most part, we hand the dilemma off to the team [managing directors] to solve."

III. MOODY'S PUBLICATIONS AND STATEMENTS ABOUT ITS MODELS, METHODOLOGIES, AND EXPECTED LOSS APPROACH FOR RATING RMBS AND CDOS

- 13. Moody's published its RMBS and CDO credit rating models and methodologies to the public and represented that it applied them when determining the credit ratings of RMBS and CDOs.
- 14. Moody's consistently stated, in both written publications and Congressional testimony, that its RMBS and CDO credit ratings "primarily address the expected credit loss an investor might incur," which included an assessment of both the "probability of default" and "loss given default" of rated tranches. This approach was distinct from the approach used by Moody's competitors, including Standard & Poor's and Fitch.
- 15. Moody's publicly stated in its August 2004 Rating Symbols and Definitions publication that:

It should be noted that Moody's long-term ratings are intended to be measures of expected loss, and therefore incorporate elements of both probability of default and severity of loss in the event of default.

Consequently there will be trade-offs between these two elements, such that defaulted obligations with low expected severity of loss may be assigned ratings in the upper speculative grade ranges.

Moody's long-term obligation ratings are opinions of the relative credit risk of fixed-income obligations with an original maturity of one year or more. They address the possibility that a financial obligation will not be honored as promised. Such ratings reflect both the likelihood of default and any financial loss suffered in the event of default.

16. Moody's publicly stated in its March 2007 Rating Symbols and Definitions publication that:

Moody's maintains two separate bond rating systems, or scales. One mapping – Moody's Global Scale – applies to ratings assigned to nonfinancial and financial institutions, sovereigns and subsovereign issuers outside the United States, and structured finance obligations.² [Footnote 2: Moody's structured finance

ratings are engineered to replicate the expected loss content of Moody's Global Scale. The trade-off between probability of default and severity of loss given default may vary within the structured finance sector depending on asset type.] The Global Scale is a mapping between rating categories and relative expected loss rates across multiple horizons. Expected loss comprises an assessment of probability of default as well as expectation of loss in the event of default. It is Moody's intention that the expected loss rate associated with a given rating symbol and time horizon be the same across obligations and issuers rated on the Global Scale. Moody's rating methodologies, rating practices and performance monitoring systems are each designed to ensure a consistency of meaning.

Moody's ratings on long-term structured finance obligations primarily address the expected credit loss an investor might incur on or before the legal final maturity of such obligations vis-à-vis a defined promise. As such, these ratings incorporate Moody's assessment of the default probability and loss severity of the obligations. They are calibrated to Moody's Global Scale.

17. One way in which Moody's sought to attain consistency for certain structured finance products, including CDOs, was through the application of its published "Idealized Expected Loss" ("IEL") table (attached hereto as Attachment 1), which was developed in 1989. Another way Moody's sought to maintain consistency for certain structured finance products, including RMBS, was through the application of its Internal Rate of Return Reduction Table ("IRR Reduction Table"), which was derived from the 10-year IEL targets. Moody's also sought to maintain consistency through observation and monitoring of the historical performance of its ratings.

IV. MOODY'S RMBS CREDIT RATINGS

A. Moody's Expected Loss Credit Rating Approach and IRR Reduction Table

18. Moody's publicly stated that it rated RMBS according to its expected loss approach and that Moody's RMBS ratings, like its other structured finance ratings, were intended to be consistent in meaning with corporate bond ratings and other structured finance ratings subject to "the trade-off between" probability of default and severity of loss given default across asset types. After the internal introduction of tranching tools in 2001 as described below, in determining credit ratings for RMBS, Moody's did not calculate a specific loss given default for any RMBS tranches below Aaa, and therefore did not calculate the expected loss for RMBS tranches below Aaa. The tranching tools also did not incorporate the IRR Reduction Table. Instead, as explained below, Moody's used tranching tools that were designed to replicate the ratings achieved under an earlier, but no longer used, approach that involved a calculation of expected loss on each tranche.

- 19. In November 1996, Moody's published a comprehensive RMBS Rating Methodology describing its credit rating approach for prime, Alt-A, and subprime RMBS. Although Moody's published numerous special comments and other periodic updates regarding its RMBS rating approach, it did not publish another comprehensive RMBS Rating Methodology until December 2008.
- 20. Moody's 1996 RMBS Rating Methodology stated that "Moody's structured finance ratings address both frequency of default on the securities as well as severity of loss in the event of default."

21. The 1996 RMBS Rating Methodology further stated that:

With the lifetime pool loss distribution in hand, we can determine the expected loss of any supported tranche. We do this by calculating the change in yield due to credit risk for each tranche, a technique that appeals to the way in which investors conceptualize and price for credit risk. . . .

The expected dollar loss for the supported tranche is the sum (across all possible loss outcomes) of the product of unsupported losses times the probability of those losses occurring.

By dividing this expected dollar loss by the size of the supported tranche, we have an estimate of lifetime losses, in percent terms. We also have a basis by which we can compare loss potential across security types.

- 22. The 1996 RMBS Rating Methodology also stated that "[t]o achieve consistency with loss potential on all rated corporate bonds, we compiled a schedule of basis point changes [the IRR Reduction Table] paired with corresponding rating categories. Knowing the rating desired for the supported tranche, we can back into the credit support needed to achieve that rating." As the publication indicated, this comparison was a means to achieving Moody's stated goal, referenced in Paragraph 17 above, of consistency of meaning among Moody's structured finance and corporate bond ratings.
- 23. In 2001, Moody's began using internal "tranching tools" to rate RMBS. The tranching tools did not adjust required credit enhancement levels based on the size of RMBS tranches, nor did they calculate the loss given default or expected loss of any RMBS tranches. Instead, using the expected loss of a collateral pool and Aaa tranche required credit enhancement values provided by a Moody's rating committee as inputs, the RMBS tranching tools determined the required credit enhancement levels for proposed RMBS tranches based on a "simple arithmetic algorithm" that did not calculate the loss given default or expected loss of those tranches. The tranching tools also did not incorporate the IRR Reduction Table. The tranching tools were designed to replicate the ratings that had been assigned based on a previous model that did calculate expected loss for each tranche and incorporated the IRR Reduction Table. Moody's RMBS group also developed special internal rules that required additional credit

enhancement for thinner tranches, but those rules did not involve a calculation of expected loss for each such tranche.

- 24. Moody's RMBS tranching tools' algorithm also incorporated a fixed rule that, for every RMBS, the required credit enhancement level for a given tranche to receive a B2 rating was equal to the collateral pool's expected loss level. This assumption affected the tranching tools' outputs of required credit enhancement levels for all RMBS rating levels below Aaa. Moody's RMBS Group understood that B2 credit enhancement was not equal to collateral pool expected loss. And later concluded, as reflected in a January 2007 internal memorandum: "The Sensitivity Around B2 and EL Issue: Historically we have used B2 and EL inter-changeably. That is NOT correct. B2 represents a higher rating stress than EL. . . [S]uffice it to say that the topic is pretty sensitive and therefore avoid referring to the EL as B2."
- 25. In September 2006, Moody's RMBS group hosted an event to publicly introduce its new subprime RMBS rating model, Moody's Mortgage Metrics for Subprime ("M3 Subprime"). Moody's slide deck for this presentation stated that "Moody's Mortgage Metrics for Subprime is a Combination of Models . . . [including] A tranching tool that matches expected losses to Moody's guidelines."
- 26. Beginning in at least 2006 and continuing through 2008, Moody's Asset Finance Group ("AFG") and RMBS group leaders met regularly to discuss how to implement an RMBS expected loss rating approach that would incorporate an assessment of the expected loss of each rated RMBS tranche. An objective of this effort was to maintain approximately the same credit enhancement levels as those generated by using Moody's tranching tools. In October 2006, high-level managers in Moody's AFG and RMBS groups decided to "drill deeper into RMBS tranching" with the stated goal of "minimiz[ing] change in enhancement levels while confirming an idealized loss methodology" for all of Moody's RMBS ratings.
- 27. In October 2007, a Moody's AFG senior manager noted the following about Moody's RMBS ratings derived from its tranching tools: "I think this is the biggest issue TODAY. [A Moody's AFG Senior Vice President and research manager]'s initial pass shows that our ratings are 4 notches off." Similarly, notes from a meeting of the Structured Finance Credit Committee ("SCC") that same month state that "the [Structured Finance Group] team will have to re-address the issue of whether Home Equity RMBS ratings truly reflect expected loss, as stated by Moody's, or are actually closer to probability of default ratings."

V. MOODY'S CDO CREDIT RATINGS

A. Moody's Use of the Geometric Mean for Assigning Aaa CDO Credit Ratings

- 28. Commencing in April 2004, Moody's did not follow its published IEL targets in rating many Aaa tranches of CDOs. On March 18, 2004, an internal memorandum forwarded to Moody's Structured Finance executives stated that Moody's "may not be able to compete in synthetics [i.e., synthetic CDOs] with current Aaa standard," noting that it originally had been made more conservative compared to the "historical corporate Aaa default rates."
- 29. On April 15, 2004, Moody's SCC voted to convene a task force to research whether it should revise its IEL targets and, pending the results of that research, to authorize use

of the geometric mean, or "geomean" between the IEL targets for the Aaa and Aa1 rating levels when rating Aaa tranches of static synthetic CDOs. The minutes of this SCC meeting identified what it referred to as a "short term CDO problem": "[t]here is a huge discrepancy between Aaa idealized rates and historical [corporate default] rates." The minutes also noted the "extreme conservatism of the Aaa target," which "has become a serious business issue for synthetics." The minutes also stated that "Aaa EL targets are extraordinarily conservative vis-à-vis other rating targets and far more conservative in comparison to historical corporate default rates than any other rating level," and that the Monte Carlo simulation applicable to static synthetic CDOs allowed "a high degree of precision in calculating EL." The minutes further stated that use of the geomean was "certainly ad hoc, but appears to be justified given the very conservative Aaa target." The minutes also stated that "[n]o formal announcement [of this decision] would be Thereafter, Moody's hard-coded this geomean target into its publicly available CDOROM rating model used to rate static synthetic CDOs. Moody's publications, methodologies and press releases did not state that the more lenient geomean target was being used in CDOROM in lieu of Moody's published Aaa IEL target. Further, the use of the geomean target would not have been readily apparent to an external user of CDOROM.

- 30. By 2005, Moody's authorized use of the more lenient geomean target to determine Aaa credit ratings for cash flow CDOs. Many arrangers and issuers were aware that Moody's was now using the more lenient geomean target for cash and synthetic Aaa CDO tranches, but Moody's did not issue a publication to the general market addressing this issue.
- 31. From 2004 through 2006, a group of Moody's employees known as the Idealized Loss Project team ("ILP team"), which was established and overseen by Moody's SCC, evaluated whether the expected loss targets set forth in Moody's IEL table should be changed. In 2005, the ILP team proposed possible changes to the table. The SCC voted to conditionally accept the proposed changes to the IEL table. Upon further review, the SCC voted to reject the proposed changes, leaving the original IEL table in place.
- 32. Following its rejection of the proposed changes to the IEL table, Moody's SCC voted in May 2006 to authorize all Structured Finance rating groups to decide whether to use the IEL Aaa target or either the geomean or the arithmetic mean (an even more lenient standard) between the published IEL targets for Aaa and Aa1, "leaving it to the various business units to make their decisions based on associated risks." Despite this formal expansion of the authorization to use the geomean, or alternatively, the arithmetic mean in assigning Aaa ratings to CDO tranches, Moody's did not issue a publication about this decision.
- 33. By using the geomean rather than the IEL targets, Moody's issued Aaa ratings for some CDO tranches that did not meet its published IEL targets because the rated tranches were allowed to have higher expected loss estimates than Moody's IEL targets. Had Moody's followed its published IEL targets in rating those Aaa CDO tranches, Moody's would have required additional credit enhancement to issue a Aaa rating.
- 34. In November 2008, following the mass downgrades of many of its CDO ratings, Moody's ceased using the geomean target for assigning Aaa ratings to CDO tranches. Moody's internally changed its approach to using the published Aaa expected loss targets, but Moody's did not inform investors or the public of this change. A manager in the CDO group noted in

August 2009 that: "The difficulty will be in explaining the changes in the target that were instituted in 200[4]." In 2010, Moody's removed the hard-coding of the geomean from its CDOROM model and announced that "outputs in CDOROM have been made approximately half a notch more conservative at the Aaa level....," but did not identify the prior inclusion of the geomean in the model.

B. Moody's Use of Present-Valued Model Outputs and Non-Present-Valued IEL Targets

- 35. Moody's publicly stated that its ratings of structured finance tranches represented its opinion of the present value of the expected losses to noteholders. In a publication dated July 29, 2003 discussing Moody's use of the Binomial Expansion Technique and similar methodologies, Moody's stated: "Moody's rating on each rated note represents our opinion of the expected loss on the note, which is the difference between the present value of the expected payments on the note and the present value of the promised payments under the note, expressed as a percentage of the present value of the promise."
- 36. An internal memorandum prepared for a December 16, 2004 SCC meeting noted an inconsistency, stating: "Rating models/methodologies generally discount realized cash flows and express losses on a present value basis. The [IEL] targets ignore time value and do not discount. The level of interest rates affects the expected loss results from the rating models, but not the targets. Ratings easier to achieve in high interest rate environment." At least one Moody's analyst noted on December 8, 2004 that this inconsistent use of present-value discounts was "wrong." Another analyst stated about the impact of recalculating the IEL table on a present value basis that "over a 10 y[ear period, the] max change is one notch difference."
- 37. In 2005, at the direction of Moody's SCC, the ILP team included a present value discount in the new proposed IEL table it was preparing. Following the SCC's decision to reject the proposed IEL table, Moody's continued to use the existing, non-present valued targets, which made "[r]atings easier to achieve in high interest rate environment."
- 38. Moody's publicly available User Guide for CDOROM stated that it present-value discounted its expected loss output. Moody's did not state that the IEL table was not also present valued. Instead, a user would have to infer that the IEL targets were not present-valued based on Moody's use of a single fixed recovery rate in the table.

C. The Impact of Underlying Collateral Ratings on Moody's CDO Ratings

- 39. Moody's knew that the ratings on the underlying RMBS and CDO collateral in CDOs were important factors in its determination of the credit ratings it assigned to CDOs.
- 40. Prior to the Spring of 2007, Moody's used IEL targets as inputs to its rating model for rating CDOs squared (CDOs backed by other CDOs). In the Spring of 2007, Moody's senior CDO rating managers acknowledged internally that some CDOs squared that Moody's was asked to rate included Aaa rated tranches of CDOs that Moody's had initially rated using the geomean target rather than its more stringent published IEL target.

41. In May 2007, Moody's started applying a default probability stress as part of its rating analysis of CDOs squared backed by Aaa assets to address the higher expected loss limit of the geomean. A Moody's analyst subsequently explained that "we are applying the geo mean [sic] default probability stress because when we rate the Aaa liabilities that are getting subsequently securitized . . . we rate them to the geo mean (for Aaa rated notes) and not the hurdle" and that "when we assess the [default probability] for the assets, we need to take into account that the Aaa rating on these underlying tranches was based on the geo mean and not the hurdle."

D. Moody's Correlation Assumptions for CDO Ratings

- 42. In November 2004, Moody's published a Rating Methodology that stated that the degree to which the assets within CDOs were correlated was an important factor in its assignment of CDO ratings. If assets in a CDO have a high default correlation, they are more likely to default at the same time. Moreover, Moody's published that CDO tranches backed by highly correlated assets would typically experience a higher expected loss.
- 43. During 2004 and 2005, issuers of CDOs began increasingly structuring the securities with higher concentrations of specific asset types, thus increasing the risk of correlated default and necessitating a more precise methodology for estimating correlation. Moody's acknowledged this increased concentration of specific asset types for CDOs of RMBS assets and stated in a September 2005 publication that, "Over the past year and a half, the structured finance cash flow CDO transactions have seen an increased concentration in a single asset sector, mainly RMBS, in the collateral pools. . . . To better assess and capture this . . . effect, Moody's introduced a new modeling framework in August last year [2004], the Correlated Binomial Method"
- 44. Moody's developed new correlation assumptions for corporate bond and structured finance assets for use in its revised CDO rating models, known as CDOROM and CBET, issued in 2004 and 2005, respectively.
- 45. During the development process, Moody's correlation working group identified four CDOs (two CDOs of RMBS, one multi-sector CDO, and one CDO squared) in order to conduct impact testing of various proposed correlation assumptions. The testing on the two CDOs of RMBS showed that these CDOs had higher expected losses under the old correlations under the Binomial Expansion Technique ("BET") than under the new correlations using both its CDOROM and CBET models. For these two RMBS CDOs, the old correlations and the BET would therefore have required more credit enhancement than the new correlations and the new models to achieve the same ratings. For the multi-sector CDO Moody's tested, the old approach and new approach produced similar results; and for the CDO squared, the new approach produced higher expected losses.
- 46. Also while the development process for corporate bond correlations was underway, a Moody's analyst (who was not a member of the correlations working group) consulted individuals employed by financial institutions that issued CDOs. In an email sent in March 2004 concerning correlations for corporate bonds, the Moody's CDO rating analyst reported to senior Moody's CDO managers (including members of the correlations working

group) that "I realized that we are not going to rate any synthetic transaction by them [*i.e.*, those financial institutions] if we do not get compatible subordinations with S&P's." The analyst continued: "The correlations will be a big problem. As the correlations increase our Aaa will be even harder to achieve. . . ."

47. In a February 23, 2005 email, Moody's CDO managers recognized that, "Apparently, the change to our ABS correlations have made us more competitive; however, we still come in higher than S&P - which is amazing given the suboridnation [sic] levels for our cash flow CDOs would go down if we applied the new correlations without any other changes to our methodology."

ATTACHMENT 1

		Table 2 Moody's "Idealized" Cumulative Expected Loss Rates (%)								
Year										
Rating	1	2	3	4	5	6	7	8	9	10
Aaa	0.000028	0.00011	0.00039	0.00099	0.00160	0.00220	0.00286	0.00363	0.00451	0.00550
Aa1	0.000314	0.00165	0.00550	0.01155	0.01705	0.02310	0.02970	0.03685	0.04510	0.05500
Aa2	0.000748	0.00440	0.01430	0.02585	0.03740	0.04895	0.06105	0.07425	0.09020	0.11000
Aa3	0.001661	0.01045	0.03245	0.05555	0.07810	0.10065	0.12485	0.14960	0.17985	0.22000
A1	0.003196	0.02035	0.06435	0.10395	0.14355	0.18150	0.22330	0.26400	0.31515	0.38500
A2	0.005979	0.03850	0.12210	0.18975	0.25685	0.32065	0.39050	0.45595	0.54010	0.66000
A3	0.021368	0.08250	0.19800	0.29700	0.40150	0.50050	0.61050	0.71500	0.83600	0.99000
Baa1	0.049500	0.15400	0.30800	0.45650	0.60500	0.75350	0.91850	1.08350	1.24850	1.43000
Baa2	0.093500	0.25850	0.45650	0.66000	0.86900	1.08350	1.32550	1.56750	1.78200	1.98000
Baa3	0.231000	0.57750	0.94050	1.30900	1.67750	2.03500	2.38150	2.73350	3.06350	3.35500
Ba1	0.478500	1.11100	1.72150	2.31000	2.90400	3.43750	3.88300	4.33950	4.77950	5.17000
Ba2	0.858000	1.90850	2.84900	3.74000	4.62550	5.37350	5.88500	6.41300	6.95750	7.42500
Ba3	1.545500	3.03050	4.32850	5.38450	6.52300	7.41950	8.04100	8.64050	9.19050	9.71300
B1	2.574000	4.60900	6.36900	7.61750	8.86600	9.83950	10.52150	11.12650	11.68200	12.21000
B2	3.938000	6.41850	8.55250	9.97150	11.39050	12.45750	13.20550	13.83250	14.42100	14.96000
B3	6.391000	9.13550	11.56650	13.22200	14.87750	16.06000	17.05000	17.91900	18.57900	19.19500
Caa	14.300000	17.87500	21.45000	24.13400	26.81250	28.60000	30.38750	32.17500	33.96250	35.75000