



December 27, 2011

Office of the Comptroller of the Currency
250 E Street, SW
Mail Stop 2-3
Washington, DC 20219
Docket Number OCC-2011-0019, OCC-2011-0022
RIN 1557-AD35

RE: Alternatives to the Use of External Credit Ratings in the Regulations of the OCC
RE: Guidance on Due Diligence Requirements in Determining Whether Investment Securities Are Eligible for Investment

Ladies and Gentlemen:

Andrew Davidson & Co., Inc. welcomes the opportunity to comment on the Alternatives to the Use of External Credit Ratings in the Regulations of the OCC and the Guidance on Due Diligence Requirements in Determining Whether Investment Securities are Eligible for Investment. We are a fixed-income research, analytics and consulting firm, which specializes in MBS, ABS and structured securities. We provide prepayment, credit and valuation models, and consulting services to over 150 financial institutions. Approximately one-third of our clients are depository institutions.

The comments herein relate primarily to securitized assets, which fall under our area of expertise.

Executive Summary

Our comments are based on four principal tenets:

1. The definition of an 'Investment Grade' investment security should be consistent with the amount of risk-based capital (RBC) required to support the security.
2. For structured securities, RBC should not be determined by the default risk, but rather by evaluating the potential credit losses under stress scenarios.
3. Both the definition of 'Investment Grade' and RBC should be sensitive to holding price.
4. Regulators should validate internal analyses, third party research and analytics used to determine that an investment security is a permissible investment.

In our response we demonstrate that the NPRM's proposed definition of 'investment grade' violates tenets 1-3, and does not address tenet 4. We demonstrate that a definition based on average- and stressed estimates of credit losses is consistent with the 3 tenets, and describe our methodology for determining if a security is 'investment grade.' We also give examples of how regulators can validate models used to estimate credit losses.

Introduction

We believe that several conceptual errors have resulted in credit ratings being used for a number of incompatible applications. The first is confusion between a probability of default (PD) application (high-grade suitability) and a tail-risk application (RBC). The second is the assumption that what is correct for corporate securities will map over to structured securities.

The OCC's proposal to amend the definition of 'investment grade' by including only those securities whose "issuer has an adequate capacity to meet the financial commitments under the security for the projected life of the investment," and whose capacity to meet financial commitments is defined by "low risk of default to meet the full and timely repayment of principal and interest" makes the same conceptual errors as the previous traditional ratings-based definition. Both the old and proposed new definitions define 'investment grade' based solely on default risk, which doesn't evaluate either tail risk (for all securities) or even expected loss (for structured securities). We believe that it is much more important to tie the definition of 'investment grade' to the concept of RBC than to the full and timely repayment of principal and interest.

For corporate securities, an obligor either will or will not default. If a default occurs, severity tends to remain in comparatively narrow ranges as a function of credit rating and seniority of security. Therefore, it may make sense to tie the definition of investment grade to the probability of default for corporate securities (since severity is almost known, a given probability of default corresponds to a given loss level). However, for structured securities, an underlying pool of loans will always experience some default and loss. Because of credit tranching, losses can be channeled to produce any loss severity on particular tranches. This means that for structured securities both expected losses and tail losses often vary significantly between securities with identical probabilities of default (PD). We demonstrate this in our examples section below.

Finally, for the definition of investment grade, we also believe that it is a mistake to use any measure that is not sensitive to holding price (such as ratings). Any security that is sufficiently discounted in price provides an inherent level of RBC cushion in the price discount.

We agree with the OCC that the definition of 'investment grade' should be amended. Our view is that any amendment eliminating all references to credit ratings should also address the inherent deficiencies of letter grade ratings and adhere to the basic principles we have outlined. These deficiencies are particularly salient for structured securitizations due to intrinsic differences vis a vis corporate bonds.

AD& Co. Proposal - Overview

We propose that OCC adopt an 'investment grade' definition that is derived from base-case and stressed credit loss estimates instead of default probabilities. These credit loss estimates should be sensitive to the price at which the investor holds the security. The examples below demonstrate the importance of switching from a PD-based definition to a definition based on price-sensitive credit losses in both unexpected and expected economic scenarios.

Example 1: Loans vs. Securities

The following example illustrates the inherent shortcomings of using the probability of default to determine whether an asset should be deemed investment grade. Let's assume a bank owns a portfolio of high credit-quality residential mortgages. The bank expects 50bp of credit losses in its base-case scenario and 500bp of credit losses in its stress-case scenario. It holds 450bp of RBC to protect against unexpected losses.

The bank's managers decide to securitize the portfolio as a single tranche pass-through security. This security receives the same cashflows as the underlying pool of loans, and thus, has identical credit risk as the pool.

According to the definition of 'investment grade' proposed in the NPRM, the bank would not be allowed to invest in the pass-through security because the security's default probability is almost certainly 100%. If the mortgage pool is large enough, at least one borrower will certainly fall behind on his payments.

This example illustrates the problem with using default risk to determine whether a structured security is 'investment grade.' The loan portfolio is not an asset with large credit risk, as evidenced by base-case and stress losses and the RBC requirement. Similarly, the pass-through security should not be considered a credit-risky investment solely because 'full and timely repayment of principal and interest' is not expected. Instead, the 'investment grade' determination should be based either on stress-scenario credit losses or the amount of RBC required to support the investment.

Example 2: Which Security Has Higher Credit Risk?

Exhibit 1. Credit Profile of 2 RMBS

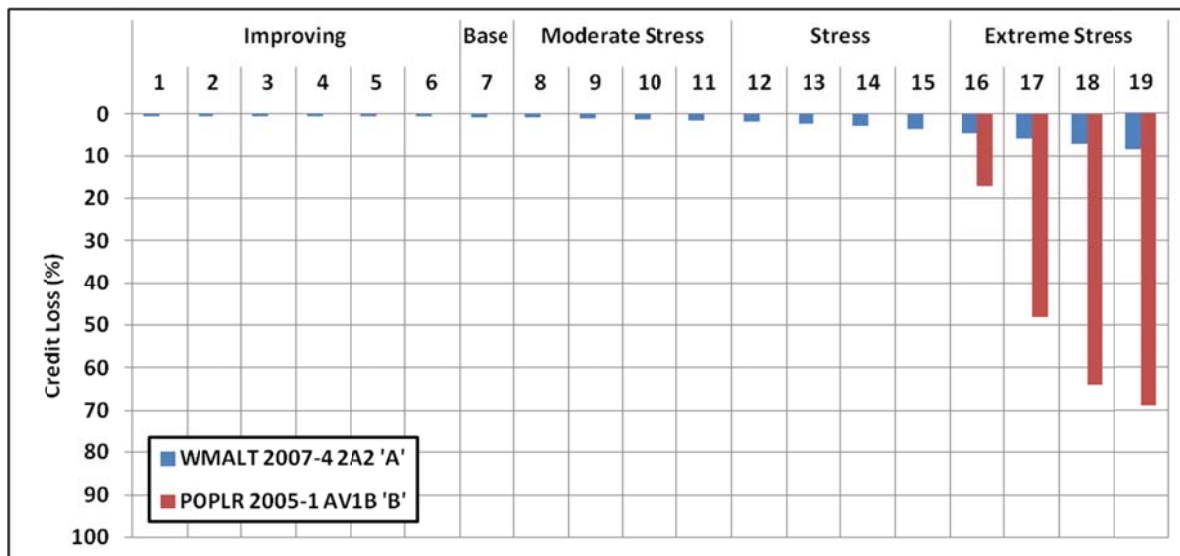


Exhibit 1 shows the estimated credit losses for two non-agency RMBS across 19 scenarios of increasing economic stress. The results are generated by using the Andrew Davidson & Co. (AD&Co.) residential mortgage credit model, LoanDynamics™, to project loan-level cash flows and losses across a variety of economic scenarios. These loan-level cashflows are fed into the deal cash flow waterfall model to project cash flows and losses for each tranche. The tranche credit losses are shown in present-value terms assuming a holding price of par.

According to the definition of ‘investment grade’ proposed in the NPRM, banks would not be allowed to invest in WMALT 2007-4 2A2 (security ‘A’) because it incurs small losses in every scenario. This is despite the fact that losses are extremely low (< 2.5%) in the most-likely scenarios, and below 8.5% in all scenarios. Its RBC requirement should be below 10%. In our opinion, security A is an investment grade security despite its high default probability.

The NPRM does not, however, explicitly prevent banks from investing in POPLR 2005-1 AV1B (security ‘B’). We estimate that security B’s default probability is about 5%, which matches Moody’s withdrawal-adjusted 10-year cumulative default rate for Baa-rated corporate securities¹. It has much higher stress-scenario losses than security A, however. Thus its RBC requirement should be higher than security A’s. In our opinion, security B is not an investment-grade security despite its low default probability.

The NPRM’s guidance does mention that structured products investors should “analyze and understand the impact of collateral deterioration on tranche performance and potential credit losses under stress scenarios.” This example demonstrates that the guidance should also:

¹ See Appendix A in [Measuring Corporate Default Rates](#), Nov. 2006, published on Moody’s website.

- Either link the definition of ‘investment grade’ to RBC requirements or set explicit limits on stress-scenario losses.
- Allow banks to invest in structured securities that have low stress-scenario losses (at the right price – see next example), even if there are small principal writedowns in all scenarios.

Example 3: Sensitivity to Holding Price

Exhibit 2. RAMC 2006-1 AV3 Credit Profile

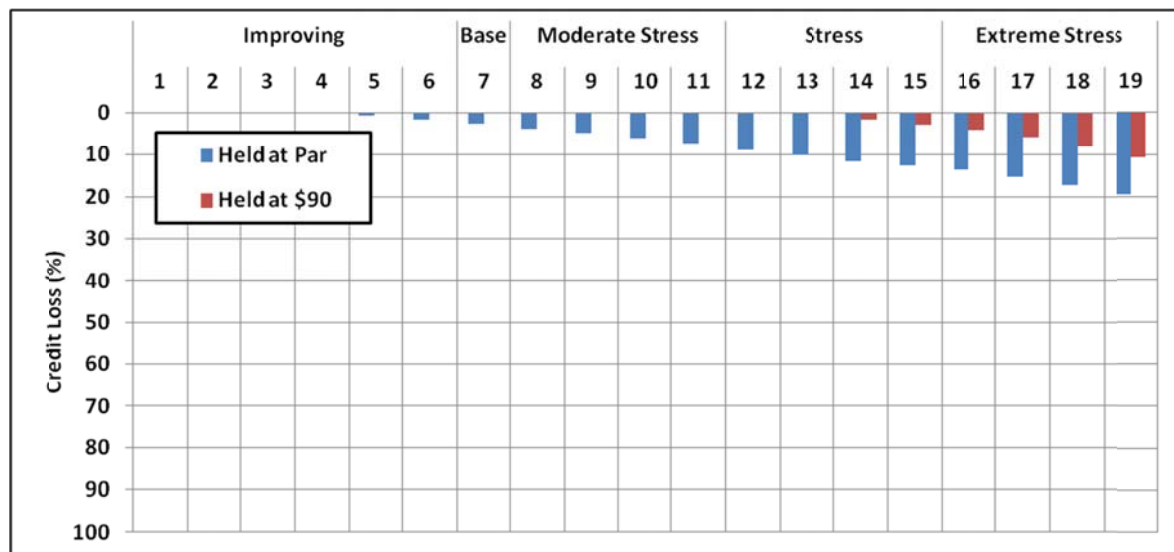


Exhibit 2 shows the estimated credit losses for RAMC 2006-1 AV3, a non-agency RMBS, across 19 scenarios of increasing economic stress. Losses are calculated in the same manner as Exhibit 1. Losses are calculated relative to 2 holding prices: 100% and 90% of par value.

When held at par, the security incurs losses in the majority of the scenarios. The average loss in the extreme stress scenarios is 16%. Losses are higher than 8% in all stress scenarios. We do not consider this an ‘investment grade’ security when held at a price of par.

If the security is marked down to \$90, however, the security’s credit risk is markedly lower. The investor would experience no credit losses in the majority of the scenarios. Extreme-stress losses average 7%, so the security should require less than 8% RBC. We do consider this an ‘investment grade’ security at a price of \$90.

A common adage of investing is “There are no bad bonds, only bad prices.” We agree. We also believe that regulators should encourage banks to recognize credit losses earlier rather than later. Allowing capital relief as banks write down the value of their investments is one way of doing so. Additionally, banks should be allowed to invest in securities bought at a discount, if management can demonstrate that credit losses will be low even in stressed scenarios.

Model Validation

Any movement from a rating agency-centric definition of investment grade to one focused on particular analytics will necessarily entail some amount of model validation on the part of regulators. We believe that the OCC should include guidance on how banks should validate the disparate sources of information that investors reference in their determination that a security is a permissible investment. Indeed, the OCC's recently issued guidance on model validation could be a sound foundation for the type of validation framework that ought to be applied to any internal analyses or third party research used as a substitute for credit ratings.

In fact, had a similar external validation been performed on the rating agencies themselves, we believe that many of the conceptual errors as well as model errors that the rating agencies committed may have been avoided. Therefore, we believe that model validation is not an additional requirement added by the movement away from sole reliance on credit rating agencies, but something that ought to have been a fundamental part of the process even prior to the financial crisis.

As part of this validation process regulators should be responsible for both validating the inputs (such as severity of the economic stresses) as well as the models used to estimate losses conditional on those stresses occurring. If regulators choose not to house such validation staff in-house, we believe that such validation could also be performed by external parties that were independent of the firms whose models were being validated, as long as the validation guidelines are clearly established.

Example 4: Model Validation

In this section we give two examples of validation reports that regulators should require banks and third-party vendors to provide to support their analytics.

Exhibit 3. Historical Model Performance Report

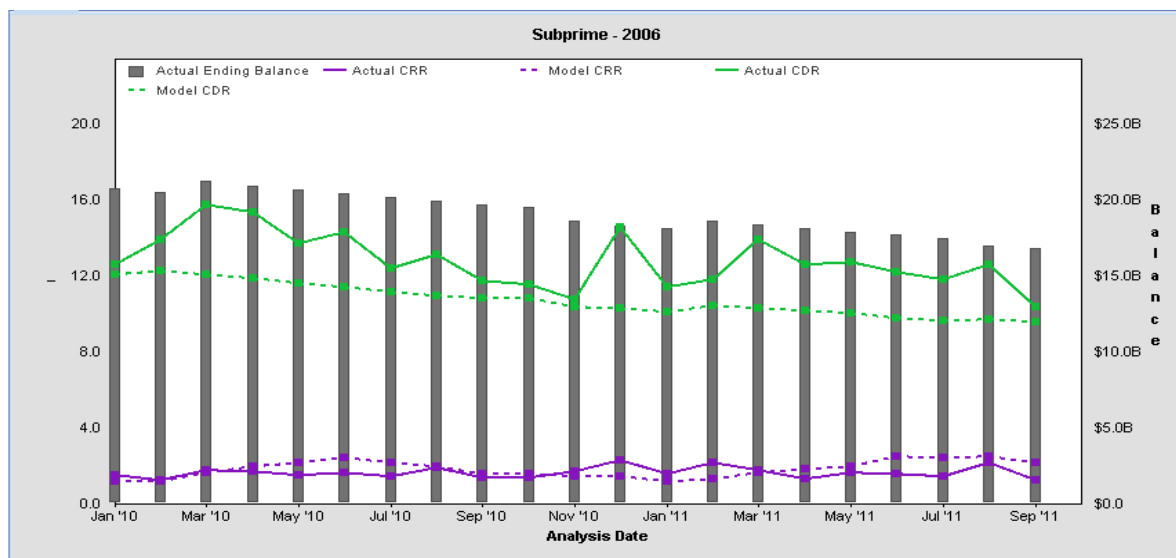


Exhibit 3 is an example of the type of historical validation report that regulators should request. It compares actual-versus-model comparisons of 2006-originated subprime voluntary prepayment (CRR) and default (CDR) rates across time. This is only one of dozens of historical performance reports that could be generated quarterly to determine the performance of empirical models. Third party analytic providers should be required to demonstrate that analytical models calibrated to historical data provide both good in- and out-of sample fits across a variety of dimensions.

Exhibit 4. Loss Projections

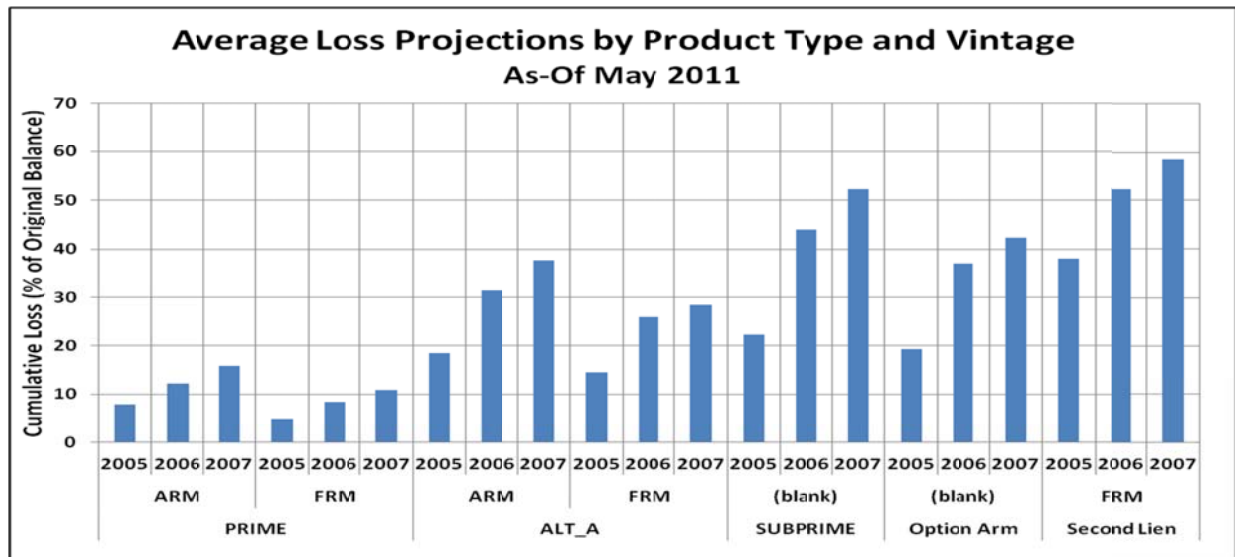


Exhibit 4 shows the AD&Co.'s average loss projections by product type and vintage. Losses are shown as percent of original balance and are as of May 2011 (based on AD&Co.'s home price (HPI) scenario).

Regulators should define a set of economic scenarios and request banks and third-party vendors to provide loss forecasts for a standard set of instruments under these scenarios. This would allow regulators to easily identify analytical sources that provide forecasts outside the range of analytical providers.

Elimination of RBC arbitrage & Consistency Across Asset Classes

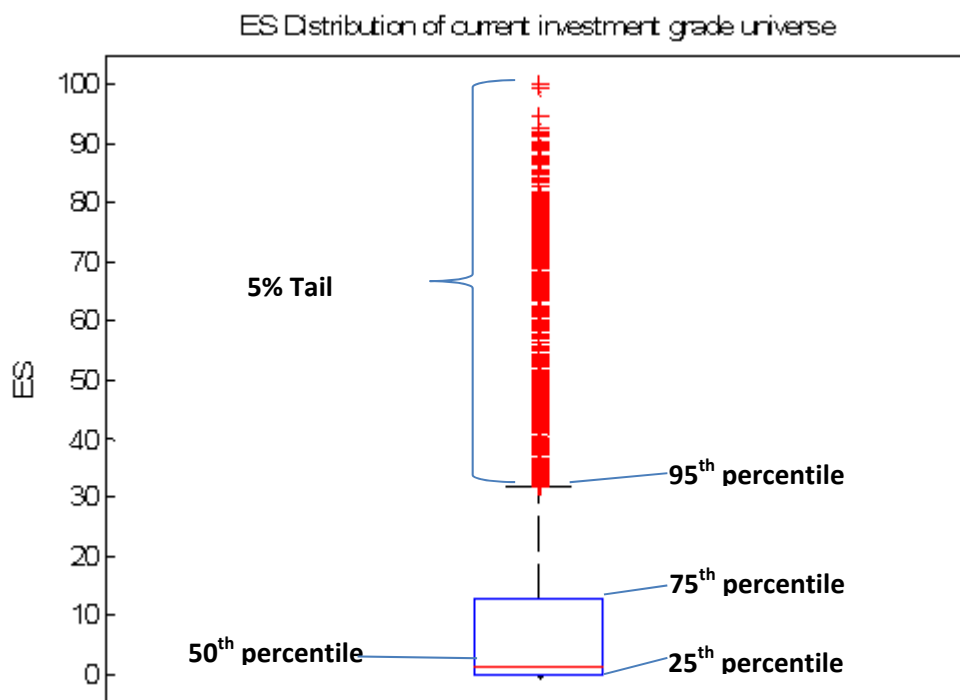
We believe that any definition of investment grade for structured securities should correct the conceptual errors we have noted and follow the central principles we have laid out. Additionally, we would like to point out that the NPRM mentions that “the impact of collateral deterioration on tranche performance and potential credit losses under stress scenarios” should also be a consideration in the definition of ‘investment grade.’ We would submit that for structured securities, it ought to be **the central consideration**.

The disconnect between default probability (PD) and stressed-scenario credit loss (ES)² for structured securities that is demonstrated in our examples is not a rare occurrence. Every month we evaluate the credit risk of approximately 30,000 non-agency RMBS using the scenario-and-cashflow based methods described in this paper. Based on these analyses we have found that:

- Assuming a holding price of par, approximately 1500 bonds have stressed losses (ES) of less than 10% despite having default probabilities (PD) > 5%. 650 of these bonds have PD > 25%.
- Assuming a holding price that reflects expected credit losses, the number of bonds increases from 1500 to over 4400, of which 3400 have PD > 25%.
- Looked at the other way around, at a price of par, 75 securities have ES > 10% despite PD < 5%.
 - We expect this number to increase as issuance picks up. Indeed 4 of the 18 non-agency RMBS issued since the crisis began have PD of approximately 5% or below and ES > 10%.

Additionally, if we examine the current universe of investment grade RMBS in Exhibit 5 below, one quarter (25%) of the universe is expected to experience stressed losses (ES) greater than 10 percent. Exhibit 5 also illustrates that five percent of the universe is likely to experience stressed losses of greater than 30 percent, which are represented by the red ticks.

Exhibit 5. Frequency Distribution of Stressed Losses for Investment Grade RMBS



² ES stands for "Expected Shortfall" and is a measure of stress losses calculated using the worst 5% of scenarios.

We believe that if the definition of investment grade were required to conform to RBC levels at most in the 8-12% range **for all securities**, mappings to PD and severity for corporate bonds could continue to conform to existing practice, while structured securities could be assessed as investment-grade or not primarily based on their RBC usage. This would result in the elimination of RBC arbitrage and produce a consistency across asset classes currently missing, while allowing the corporate bond market to function largely unchanged.

Conclusion

The OCC's proposal to amend the definition of 'investment grade' by including only those securities whose "issuer has an adequate capacity to meet the financial commitments under the security for the projected life of the investment," and whose capacity to meet financial commitments are defined by "low risk of default to meet the full and timely repayment of principal and interest" is insufficient guidance for determining what instruments qualify as 'investment grade.' The proposed definition is too vague because the concept of 'low risk' is not tied to any numeric thresholds. Furthermore, the emphasis is on default risk whereas it should be on unexpected losses in stressful scenarios (RBC).

Any new definition of 'investment grade' should explicitly address the deficiencies of the current credit rating system as mentioned in the introduction of this document. As such, the definition of 'investment grade' should be clearly defined by quantitative measures, account for multiple economic scenarios (particularly stress scenarios), reflect changes in the economic environment in a timely fashion, differentiate risk for investments in the same asset class and be verifiable by supervisory review. These principles are consistent with the OCC's stated goals of a revised definition of 'investment grade.'

Sincerely,

Andrew Davidson

President