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**September 10, 2009**

**Mr. Michael Moriarty**  
Chair – Valuation of Securities Task Force  
National Association of Insurance  
Commissioners  
c/o State of New York Insurance  
Department  
25 Beaver Street  
New York, New York 10004

**Mr. Lou Felice**  
Chair – Capital Adequacy Task Force  
National Association of Insurance  
Commissioners  
c/o State of New York Insurance  
Department  
25 Beaver Street  
New York, New York 10004

**Re: Revised ACLI Proposal - RBC for Residential Mortgage Backed Securities (RMBS)**

**Dear Messrs. Moriarty and Felice:**

**Thank you for considering the previous version of our proposal to modify current NAIC ratings for RMBS (submitted on August 10, 2009), and for considering the revised and expanded proposal (see attached).<sup>1</sup>**

**For structured securities like RMBS, current NAIC ratings are based on nationally recognized statistical rating organization (NRSRO) ratings, which are in turn focused primarily on the likelihood of the first dollar of loss. The resulting NAIC RBC C-1 factor does not completely reflect the potential severity of the loss.**

**To overcome this rating deficiency we recommend a rating proposal that recognizes both the likelihood of loss and the severity of loss. Life companies will appropriately hold more RBC than before the recent RMBS downgrades, but will not be subjected to volatile RBC requirements primarily based on the first dollar of loss ratings methodology.**

**The American Council of Life Insurers (ACLI) would like to request that the NAIC consider the attached revised proposal to modify current NAIC ratings for RMBS. As stated previously, we ask that you consider enacting these changes for 2009 RBC calculations. This would greatly relieve the unwarranted impact on RBC being experienced by the industry.**

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<sup>1</sup> The ACLI represents three hundred forty (340) member companies operating in the United States, of which three hundred thirty two (332) are legal reserve life insurance companies, and eight (8) are fraternal benefit societies. These 340 member companies account for 93 percent of total assets, 93 percent of the life insurance premiums, and 94 percent of annuity considerations in the United States.

Thank you for considering our proposal and for working with us on this issue.

Sincerely,



John Bruins  
Senior Actuary



Andrew Melnyk  
Managing Director, Research

CC: Mr. Matti Peltonen  
Mr. Dan Swanson  
Mr. Richard Newman  
Mr. Chris Evangel

## **Proposal to modify current NAIC ratings for RMBS**

### **Background**

The current economic climate has created numerous issues for investors. A major issue for the insurance industry is the potential for multi-billion dollar RBC impact created by rating agency downgrades of residential mortgage backed securities (RMBS). The problem is that the ratings do not distinguish between securities that are projected to experience a total loss and securities that are projected to experience minor losses. The industry recommends a change to the C-1 RBC determination process for RMBS to better reflect the risk to insurers of holding the securities.

The RMBS market has been especially hard hit by rating actions taken by the various nationally recognized statistical rating organizations (NRSROs) or “rating agencies”. The downgrades are driven by current stress in the US housing market and the rising probability of an expected loss. The rating agency models require a downgrade to single B or below if any loss is projected to occur at any time during the life of the security, regardless of the severity of the loss. The consequence of the downgrades for the insurance industry has been a significant increase in the risk based capital (RBC) C-1 factor applicable to the downgraded RMBS.

Based on a Bank of America Merrill Lynch June 2009 report<sup>1</sup>, in excess of 64% of all AAA rated non-agency RMBS securities have been downgraded to below investment grade by at least one rating agency. The following chart is the percent of downgrades that have occurred in RMBS based on collateral type and vintage year. All the downgrades listed were from once AAA rated securities to below investment grade. All percents are based on June 30, 2009 balances.

	Prime Fixed	Prime ARM	Alt-A Fixed	Alt-A ARM	Subprime
2000	0.0%	0.0%	0.0%	0.0%	44.8%
2001	0.0%	2.2%	0.0%	0.0%	58.0%
2002	0.0%	1.0%	0.0%	0.0%	24.6%
2003	0.0%	0.0%	0.5%	0.4%	8.4%
2004	0.0%	0.3%	0.8%	6.1%	7.1%
2005	24.6%	22.8%	55.1%	62.7%	31.0%
2006	66.8%	63.2%	92.5%	92.2%	81.1%
2007	76.9%	83.6%	91.8%	92.1%	87.4%
Total	41.8%	40.6%	68.2%	76.4%	70.8%

<sup>1</sup> *The Mortgage Credit Round-Up, June Update, July 21, 2009, Bank of America Merrill Lynch*

The life insurance industry has heavily invested in RMBS. The non-agency RMBS holdings of the life and health industry based on a study of statutory filings as of December 31, 2008 were over \$145 billion with associated C-1 capital of approximately \$2.0 billion.

The statutory filing data was augmented with information from Bloomberg to include current ratings, collateral and tranche type. The change in C-1 capital from December 31, 2008 to June 30, 2009 due to the downgrades was an estimated increase of 440% to \$11.0 billion. The largest

(measured by admitted assets) 20 life and health companies represent approximately 53% of the total admitted assets in the life and health industry. That group saw their C-1 capital for RMBS increase by 482%, from \$0.9 to \$5.6 billion. The top twenty companies would hold 51% of the estimated June 30, 2009 total C-1 capital attributable to RMBS, the remaining 49% or \$5.4 billion is widespread throughout the industry.

The recent RMBS downgrade actions by the rating agencies has significantly increased the RBC that must be carried for RMBS, and insurers currently have no option available to appeal to the SVO for a rating review. Industry C-1 capital will be increased by subsequent downgrades.

With this background, the industry recommends a change to the amount of risk based capital held for RMBS to better reflect the risk to insurers of holding the securities.

### **Details**

The approaches taken by the rating agencies vary slightly, but in essence, each agency projects cash flows of the security's underlying collateral pool based on their assumptions of prepayments, defaults, loss severity on liquidated loans, and others. Then a coverage ratio is calculated as follows:

$$\text{Coverage Ratio} = \text{Current credit support of the tranche} \div \text{Estimated cumulative loss of the collateral pool}$$

New RMBS ratings are determined based on this ratio and on the type of collateral in the pool (Prime/Alt-A/Subprime). For example, if the ratio is < 1, the new rating assigned most likely would be B (NAIC 4), or below, regardless of the severity of the expected losses to the tranche.

In rating RMBS, rating agencies take a similar approach to that utilized in rating corporate bonds and try to determine the level or probability of the first dollar of loss. With a typical corporate bond, a single dollar of loss leads to an event of default, which could then cascade into a series of negative events outlined in the bond indenture, usually including cessation of coupon payments and eventual recovery of some amount of principal through the bankruptcy process. This default event for corporate bonds is in stark contrast to RMBS, where the security structure allows the security to continue receiving remaining principal and interest without an acceleration event that would terminate the security. In the case of senior RMBS tranches, the ability to receive several years of coupon payments alone dramatically improves expected economic recoveries relative to a typical corporate bond.

Current ratings do not distinguish between securities that are projected to experience a total loss and tranches that are projected to experience minor losses. To quote Fitch Ratings in an April, 2009 release, "Two (RMBS) bonds rated 'B' have the same likelihood of a first dollar of loss, but they may have vastly different total losses and recoveries." Thus the current RMBS rating is determined by an evaluation of the likelihood of the first dollar of principal loss, whereas required insurer capital should reflect both the likelihood of loss and the expected severity of loss.

A more logical approach for RBC purposes, and an approach more consistent with the goals of the RBC calculations, would be to determine an estimated or modeled loss from a base set of consistent assumptions applied to the individual characteristics of each security. The estimated

loss relative to par can be translated into expected loss for each holder of the security given their purchase price, write-downs and any other individual factors impacting their holdings.

**Proposed Solution**

Based on the fact that ratings for RMBS do not properly reflect the expected total loss from the securities, in discussion with regulators we propose the Securities Valuation Office (SVO) engage an independent third party firm to model losses of RMBS securities held by the insurance industry.

The modeling should be conducted on a security level basis and should use assumptions generally accepted by market participants for prepayments, home price levels, expected defaults, severities of loss, and performance of loans in good standing, along with other assumptions including interest rates. The result of the modeling should be a modeled loss value. The modeled loss is the probability weighted difference in current par value less the present value of principal and interest cash flows generated under multiple interest rate and credit scenarios discounted at the weighted average coupon rate of the underlying pool and represented as a percent of par value.

The modeled loss figure will be communicated in a manner to be determined later. Each insurance company will then calculate an Expected Loss from the following formula:

$$\text{Expected Loss} = \text{Maximum} (cv / \text{par} - (1 - ml), 0) / (cv / \text{par})$$

where:

- cv = Book/Adjusted Carrying Value (as reported on Schedule D – Part 1, column 11)
- par = Par Value (as reported on Schedule D – Part 1, column 10)
- ml = Present value of modeled loss as % of current par derived from independent modeler

The Expected Loss is then applied to the following matrix to arrive at the appropriate NAIC rating level for C-1 capital.

<b>C-1 Rating Category</b>	<b>Expected Loss</b>
NAIC 1	<=.50%
NAIC 2	.51% to 1.00%
NAIC 3	1.01% to 6.00%
NAIC 4	6.01% to 15.00%
NAIC 5	15.01% to 27.00%
NAIC 6	>27%

The estimated loss levels were derived from *Corporate Default and Recovery Rates, 1920-2008, February 2009* by Moody’s Investors Service. The loss levels are the average cumulative loss rates for each NAIC rating category based on average default rates and recoveries for senior unsecured bonds.

For any security that cannot or has not been modeled by the independent modeler and assigned a C-1 rating based on the above matrix, one of two alternative approaches may be used to develop the expected loss.

The first alternative is the use of an internal or outsourced model at the direction of the individual insurance company. Such model's output should be the same as described above utilized by the SVO for modeled loss. Such internal or outsourced model should have an attestation from an officer responsible for modeling as to the validity of the results and methodology used to determine the modeled loss.

The second alternative is to use an expected loss metrics methodology that takes into account existing delinquencies on a pool by pool basis, estimated severities and losses. The metrics methodology is based on a 4 step approach; the following steps are used for purposes of determining RBC C-1 risk factor:

1. Determine the level of delinquencies on a per pool basis. Delinquencies will include any loan 60+ days delinquent, foreclosures, bankruptcy, and REO.
2. Multiply the level of delinquencies by the appropriate factor within the following severity matrix to determine an estimated level of loss. The severity matrix was derived from *U.S. RMBS Surveillance Methodology, April 2009* by DBRS and verified by comparison to Andrew Davidson & Co. In three instances where the severities differed by more than 10%, an average rounded to the nearest 5% was used. This matrix should be updated annually.

Vintage	Prime	Alt A	Subprime
2008	45%	50%	55%
2007	45%	55%	60%
2006	50%	50%	60%
2005	45%	45%	55%
2004	30%	45%	50%
2003 and earlier	25%	40%	45%

3. Subtract the current credit support for each tranche from the estimated loss level in step 2 above to determine the estimated tranche loss.
4. Apply the estimated loss determined in step 3 to the Expected Loss formula above to determine the Expected Loss. Apply the Expected Loss to the C-1 NAIC matrix above to determine the appropriate level of capital.

If the SVO cannot or has not modeled the RMBS security, it is at the discretion of the insurance company as to which alternative they use to develop the appropriate RBC C-1 factor.

Methodologies in this proposal are dynamic and will immediately reflect the securities expected future performance. Over time, this will ensure the capital applied to a given security remains appropriate, based current modeling assumptions or the actual losses, remaining subordination, and delinquencies experienced by the trust. It is also worth noting that capital will be assessed every quarter while the expected loss determined for each security by the rating agency methodology is for the life of the security.

This proposal applies a consistent approach. Rating agencies have divergent opinions in regards to future outcomes. By looking to a consistent modeling approach, the proposal is directly observing the securities actual and expected future performance as the basis for capital.

The proposal accomplishes a balance between:

- Recognition that certain RMBS securities are less creditworthy now than when they were originally rated, given the deterioration of the housing market and the weakening economy; and
- The difference of the securities loss expectations for each insurance company given different purchase prices, write-downs and other individual factors impacting the statutory carrying value.

This approach is more conservative than what can be accomplished currently in the capital markets. Via a Re-REMIC structure, a downgraded RMBS security can be re-tranched into subordinated and senior securities. A Re-REMIC approach would usually result in less C-1 capital than would be prescribed under this notching proposal.

This proposed solution should be developed in concert with the NAIC and the SVO. The solution can be refined over time as the SVO can be continually improve and update the modeling capabilities of the independent outside consultant.

### **Conclusion**

We recommend the proposal set forth above. For structured securities like RMBS, current NAIC ratings are based on the NRSROs' ratings, which are in turn focused primarily on the likelihood of the first dollar of loss. The resulting NAIC RBC C-1 factor does not completely reflect the potential severity of the loss.

To overcome this rating deficiency we recommend a rating proposal that recognizes both the likelihood of loss and the severity of loss. Life companies will appropriately hold more RBC than before the recent RMBS downgrades, but will not be subjected to volatile RBC requirements primarily based on the first dollar of loss ratings methodology.

## Statutory Filing Study Methodology

Information supplied in this proposal used data collected from the ACLI and Bloomberg. The ACLI provided life and health insurance industry holdings of RMBS as of 12/31/08. They used the 12/31/08 statutory filings and extracted from Schedule D Part 1, every bond classified in lines:

4000001-4099998- Industrial & Misc. - Single Class Mortgage Backed/Asset Backed  
4100001-4199998- Industrial & Misc. - Defined Multi-Class Residential Mortgage Backed  
4200001-4299998- Industrial & Misc. - Other Multi-Class Residential Mortgage Backed  
4300001-4399998- Industrial & Misc. - Defined Multi-Class Commercial Mortgage Backed  
4400001-4499998- Industrial & Misc. - Other Multi-Class Commercial Mortgage Backed

Other information pulled for each security was CUSIP, company code, company name, group name, description, NAIC designation, and carrying value. That data was run against Bloomberg and tranche type, collateral type and current ratings from S&P, Moody's and Fitch were added. Using the collateral type all non-residential securities were eliminated from the study. From the ratings the current NAIC designation was determined. If Bloomberg did not contain any rating from S&P, Moody's and Fitch, the 12/31/08 NAIC designation was selected for the current NAIC designation. The tranche type was used to determine if the tranche was in a senior position.

From the collected information, the RBC as of 12/31/08 and 8/7/09 were calculated. The carrying value from 12/31/08 was used to calculate the RBC as of 12/31/08 and 8/7/09, as 6/30/09 holdings and carrying values are not available.

The RBC as a result of the ratings downgrades increased from \$2.0 billion to \$11.0 billion, a 440% increase. Top twenty company information was collected as a sub-set of both the \$2.0 billion and the \$11.0 billion C-1 capital.