

# Morgan Stanley

February 23, 2012

Jennifer J. Johnson  
Secretary  
Board of Governors of the Federal Reserve System  
20th Street and Constitution Avenue, NW  
Washington, DC 20551  
**Docket No. R-1401**  
**RIN 7100-AD61**

Office of the Comptroller of the  
Currency  
250 E Street, SW  
Mail Stop 2-3  
Washington, DC 20219  
**Docket No. OCC-2010-0003**  
**RIN 1557-AC99**

Robert E. Feldman  
Executive Secretary  
Federal Deposit Insurance Corporation  
550 17th Street, NW  
Washington, DC 20429  
Attention: Comments/Legal ESS  
**RIN 3064-AD70**

**Re: Risk-Based Capital Guidelines: Market Risk; Alternatives to Credit Ratings for Debt and Securitization Positions**

Dear Sir or Madam:

This letter will serve as an addendum to Morgan Stanley's initial comments (attached) with regard to the amendment to the market risk NPR originally published January 11, 2011 that proposes alternatives to Credit Ratings for Debt and Securitization positions. Morgan Stanley would like to offer some additional data on the historic performance of senior securitizations, especially those with adverse performance.

Specifically, we demonstrate that senior securitization tranches have historically recovered significant amounts of principal, even when those same tranches have experienced losses or other negative performance metrics.

As a starting point, we use the same example from our previous comment letter. We previously pointed out that as proposed, the NPR often results in a risk-insensitive capital floor that does not distinguish between senior and junior tranches. However, with our modifications, the junior tranches now properly require more risk relative to the senior tranches.

## **Exhibit 1: Capital structure of SASC 2006-BC6 (Non/Agency/Subprime)**

Tranche	Original Rating	Current Rating	Orig Balance (\$MM)	Current Balance (\$MM)	Attach	Detach	Carrying Value
A1	Aaa	Caa3	481	208	26	100	53
A2	Aaa	Aaa	306	17	95	100	98
A3	Aaa	Baa2	52	52	76	95	91
A4	Aaa	Ca	104	104	36	76	33
A5	Aaa	C	28	28	26	36	15
M1	Aa1	C	98	98	8	26	2
M2	Aa2	C	54	45	0	8	1
M3-B			136	0			

**Exhibit 2: Potential Capital under three regimes: Basel 2.5, NPR, and MS proposal**

Tranche	Current NPR	Current NPR 6 months Forward	Without carrying cost		With carrying cost		Basel 2.5
			MS with Alpha 1	MS with Alpha 2	MS with Alpha 1	MS with Alpha 2	
A1	52%	100%	1.60%	11.92%	1.60%	1.60%	100%
A2	52%	100%	1.60%	1.60%	1.60%	1.60%	1%
A3	52%	100%	1.60%	1.60%	1.60%	1.60%	6%
A4	52%	100%	1.60%	8.81%	1.60%	1.90%	100%
A5	52%	100%	3.68%	50.50%	1.50%	33.25%	100%
M1	52%	100%	48.07%	97.93%	8.23%	77.96%	100%
M2	100%	100%	100.00%	100.00%	100.00%	100.00%	100%
M3-B							

We previously pointed out that the A2 tranche is very well protected and the MS revisions recognize this fact and call for the lowest possible capital of 1.6% capital as a result. The ratings based approach of Basel 2.5 also recognizes the strength of this position, again assigning the lowest possible capital value. In contrast, the current NPR requires 52% capital, and will shortly treat this as a deduction asset. We look forward to any modifications to the proposed NPR that would also assign the lowest possible capital to this tranche.

Focusing now on the A1 tranche, our proposed revisions result in the lowest possible capital, assuming that the carrying cost is incorporated. We do realize that this would be significantly less capital than both the proposed NPR, as well as Basel 2.5. We have already commented that the cumulative loss floor of the NPR causes risk insensitivity that we have addressed with the MS revisions. However, we would also like to address the fact that capital would be lower under our proposed revisions than Basel 2.5.

We believe that many of the capital deduction rules associated with the ratings based system of Basel 2.5 were written prior to the most recent downturn, and were not targeted to the senior-most position in a securitization structure. Ratings largely focus on the probability of incurring the first dollar of loss, as rating agencies will assign a CCC rating to any tranche expected to take one dollar of loss, and a D rating to any positions that have taken one dollar of loss. These ratings are independent of the overall performance of the tranche, ignoring that recoveries could range from as low as 1% to as high as 99%. It is the probability of incurring a single dollar of loss that drives the assignment of ratings.

Most likely, the decision to make lower rated securitizations a deduction was because most lower rated securitizations were very thin tranches at the bottom of the structure. The distressed environment, however, has changed that dynamic. Now there are thousands of senior-most tranches with some expected losses and CCC ratings as consequence. This dynamic is just one among many reasons that supports the initiative to transition from the ratings based approach of Basel 2.5. The risk sensitivity of any proposed approach would benefit by not replicating the outcomes associated with a first dollar of loss approach.

Consequently, we think it is important to show that many senior securitizations that encounter a loss, still return the majority of the principal. It is a relatively straightforward premise, as a senior securitization would require 100% default with a 100% severity in order to lose 100% of the investment and warrant a capital deduction. This is extremely unlikely and not consistent with historical patterns.

Looking at the securitization data we have from 1987-2007, we look at all of the senior tranches which have incurred a loss (either actual or implied writedown), and calculated a loss as a

percentage of the original balance. In aggregate, the losses on this portfolio were only 9% of the original balance. This means that the other 91% was paid to the borrower.

**Exhibit 3: Percentage of Writedowns on Senior Tranches With Losses**

Universe Defined As	Cusips	Original Balance	Writedown Balance	Writedown Percentage
Paid Off	279	21,716,957,555	1,949,465,276	9%
<=10% Factor	493	61,654,947,655	3,510,632,009	6%
<=20% Factor	693	106,296,955,141	6,900,864,665	6%

For those looking for a larger sampler size, we can look at tranches that have mostly paid off, but not completely. For example, we can examine all senior tranches that have incurred a loss with less than a 20% factor, which increases our universe above \$100 billion. These tranches have already received the vast majority of principal, more than 80% on average, and the writedown percentage is only 6%. No matter which universe we examine, we find that the loss on senior securities has been relatively limited.

We should note that these data do not have any known selection bias as it includes all securitization types available in our data set, including resecuritizations and various collateral types. Also, these data are from the worst performing senior tranches in securitization, since they by definition took losses. We ignore the tens of thousands of tranches and trillions of dollars in issuance paid off without incurring any loss. If those tranches were included, losses on senior securitizations would be measured in basis points.

An alternative way of looking at the same issue is that both NPR and Basel 2.5 require lots of capital once a negative event occurs. In the case of Basel 2.5, the negative event is a ratings downgrade. In the case of NPR, it is after cumulative losses exceed a threshold. We believe that even after these events occur, senior securities will often perform very well.

We examine AFC 1999-2 2A with cusip 00105HEA0 as a representative case study. This tranche is a poorly performing subprime transaction issued in 1999, where cumulative collateral losses have ultimately exceeded 18%. Investors that purchased the tranche at origination have received over 96% of their principal back, but there has also been an implied writedown of 0.32%, as there is now less collateral than the bond balance. A small amount remains, that continues to pay down and accounts for the remainder.

**Exhibit 4: AFC 1999-2 2A Performance Following Specific Dates**

Date	Post Date Performance					Event
	Current Balance	Principal Received (\$)	Tranche Writedowns (\$)	Principal Received (%)	Tranche Writedowns (%)	
Jun 1999	325,000,000	312,507,850	1,042,549	96.16%	0.32%	Origination
Apr 2003	89,245,550	76,753,400	1,042,549	86.00%	1.17%	8% Collat Cum Loss
Jul 2004	62,321,805	49,829,655	1,042,549	79.96%	1.67%	12% Collat Cum Loss

\*The collateral backing this bond experienced a loss of 19% to date and 96% of the tranche has been paid off to date

Even more importantly, we examine the performance after the negative events occurred. For example, an investor who purchased the security in April 2003, would have been investing in a current balance of roughly \$89 million. If they owned the security from that date until today, they would have received \$76 million dollars, or 86% of their investment. There would have been writedowns amounting to 1.17% of the original investment, and the remaining 13% is still outstanding.

Therefore, even after cumulative losses reached 8%, the senior security received the vast majority of outstanding principal. If the proposed NPR had been in effect in 2003, any bank owning the security (regardless of purchase time) would have had to hold 52% capital going forward because of the cumulative loss threshold.

A bank holding the security in July 2004, would have had to hold 100% capital as cumulative losses had now reached north of 12%. Similar to the previous example, the investor would have received nearly 80% of the principal back already, and losses would have amounted to less than 2%. Looking back with perfect hindsight, we know that had the floor been in place historically, the amount of capital required would have been excessive even for this very poorly performing transaction.

This security is just one more example of a tranche that can take losses, but still return the majority of principal. The strong performance is not limited to the beginning of the transaction, but also after cumulative losses reach relatively high levels. There are many other similar examples, including four distinct deals during 1999 from the same issuer.

In the previous example, we used a cumulative loss definition based on collateral performance. We continue to reiterate our belief that the cumulative loss definition should be based on tranche performance not collateral performance. Cumulative losses based on securities balance better incorporates structural enhancement, and is considerably easier to implement. There are many outstanding questions as to how to properly calculate collateral losses for many transactions, and it will greatly exacerbate the difficulty of implementing this system.

We believe that we have demonstrated that senior tranches recover the majority of principal, even when collateral losses are high, or the tranches themselves incur writedowns. Historically, we found over \$400 billion of senior tranches paid off without losing any principal, in spite of cumulative losses on the deal exceeding 8%. Currently, about 90 percent of senior tranches taking writedowns are also receiving principal at the same time. Consequently, we encourage the regulators to consider the various proposals, including our own, which look to avoid capital deductions on senior securities..

#### *Carrying Cost*

In the earlier comment letter (attached), we emphasized the importance of incorporating carrying value into the attachment point. We are not advocating for carrying value to directly determine capital levels, we simply believe that it is a crucial part of determining the attachment point, and therefore risk of a securitization.

A1 from Exhibits 1 and 2 could be used to illustrate this point. For example, we could think of the A1 as two distinct exposures. Instead of an attach-detach of 26-100, we could have the 26-61 and 61-100. If the A1 trades at 53, then the economic equivalent would be to mark the 61-100 at par and the 26-61 at zero. The A1 and the two-piece equivalent have the exact same economic risk, but the one piece would require significantly more capital. To further illustrate risk insensitivity, a bank holding a tranche with an attach-detach of 40-100 marked at par has considerably more likelihood of incurring losses than a bank with the 26-100 marked at 53. It is our view that risk sensitive capital calculations should reflect the mitigation that a discounted carrying value provides against potential losses.

$$A_{\text{modified}} = A + (D - A) * (1 - C)$$

$$C = \frac{\text{Carrying value of security}}{\text{Par value of security}}$$

We also would note that for the purpose of our proposed formula, C should be capped at one. A carrying value above par does not imply that the security is expected to receive more than 100% of principal, it simply implies an excess return from the coupon.

*Alternatives to MS Proposed Formulas*

In our initial letter, we proposed to revise  $K_G$  upward to account for negative performance. Specifically, we recommended the following formula:

$$K_G = \text{Max}(\text{initial } K_G, \text{alpha} * \text{cumulative losses on transaction structure})$$

After additional conversations, we could also propose the following alternative:

$$K_G = \text{initial } K_G + \text{alpha} * \text{max}(\text{cumulative losses on transaction structure minus (initial } K_G / \text{beta)}, 0)$$

Initial  $K_G / \text{beta}$  represent expected losses at origination, and as we exceed those expectations, the  $K_G$  component will rise. Similar to the previous formula, we look to offer the regulators options that are risk sensitive, but still allow them to determine the absolute amount of capital since regulators will set alpha and beta. The formula is very similar but allows for some slightly different relationships as losses rise.

Finally, we can propose one more alternative to increasing  $K_G$  with cumulative losses and using alpha and beta to calibrate. Instead of the stepped floors proposed in Table 15, we would consider using stepped multipliers. Our main issue with floors is that it results in risk insensitivity to structure. To maintain risk sensitivity, regulators could consider the concept of a multiplier.

For example, if the  $K_{ssfa}$  formula results in capital of 5%, but cumulative losses have exceeded a threshold, then the capital could be doubled to 10% in this case. This methodology would preserve a relationship of lower capital requirements for senior tranches, while still increasing capital for underperforming transactions. In the circumstance that capital for a particular tranche was already very high, the doubling effect should be capped at 100%.

Thank you for considering the data and information provided in this supplemental letter. We appreciate the opportunity to share our views with the Agencies and would be pleased to provide any further clarification or granularity regarding the data reported herein. If you have any questions, please contact Candice Koederitz, Managing Director of Morgan Stanley, at (212) 761-4219 (e-mail: [Candice.Koederitz@morganstanley.com](mailto:Candice.Koederitz@morganstanley.com)).

Respectfully submitted,

A handwritten signature in cursive script that reads "Candice Koederitz".

Candice Koederitz,  
Managing Director, Morgan Stanley