

**Meeting Between Federal Reserve Staff, Federal Deposit Insurance Corporation (FDIC)
Staff, Office of the Comptroller of the Currency (OCC) Staff, and
Representatives from the Banking Industry on Behalf of the
American Securitization Forum (ASF)
June 1, 2011**

Participants: Thomas Boemio, Dwight Smith, Chris Powell, and Benjamin McDonough (Board of Governors); Amrit Sekhon, Mark Ginsberg, and Carl Kaminski (OCC), Ryan Billingsley and Bob Bean (FDIC); Reginald Imamura (PNC Bank), William Falcon (PNC Bank), Garrett Ahitow (JP Morgan Chase), James Murray (Citibank), Eliot Rubenzahl (Citibank), Sumeet Kapur (Citibank), Tim Mohan (Chapman and Cutler, LLP), Tom Deutsch (ASF staff), and Jim Johnson (ASF staff) on behalf of the ASF.

Summary: Section 939A of the Dodd-Frank Wall Street Reform and Consumer Protection Act requires the agencies to remove references to, or reliance on, credit ratings in federal regulations and substitute alternative standards. In August 2010, the agencies published the Advanced Notice of Proposed Rulemaking Regarding Alternatives to the Use of Credit Ratings in the Risk-Based Capital Guidelines of the Federal Banking Agencies.

On June 1, 2011, representatives from the banking industry on behalf of the ASF met with staff from the federal banking agencies (agencies) to discuss alternatives to the use of credit ratings in the risk-based capital rules. The ASF representatives delivered a presentation regarding ratings alternatives to the calculation of risk-based capital for securitization exposures. The presentation has been entered into the public record.

Dodd-Frank Section 939— Alternatives to Credit Ratings

**Follow-up to 3/30/11 Meeting
Among ASF and Banking Agencies**

June 1, 2011

Executive Summary

ASF met with banking agencies on March 30, 2011 to discuss the agencies' request for alternatives to the use of credit ratings in the Advanced Notice of Proposed Rulemaking Regarding Alternatives to the Use of Credit Ratings in the Risk-Based Capital Guidelines of the Federal Banking Agencies ("ANPR"). Following up on the March 30, 2011 meeting, ASF understands that the bank regulators do not want any alternatives to credit ratings to be based on models. The securitization industry is based on models to calculate risk at inception of a deal and to recalibrate on-going risk assessments based on actual, observed performance of the securitized assets.

The ANPR proposed three measurable approaches which were analyzed by the ASF in a presentation to the banking agencies on January 31, 2011: the Supervisory Formula Approach ("SFA"), Simple Gross-up, and Modified Gross-up

Based on the analysis, the ASF found the approaches to be rigid and not risk sensitive

- ▶ **Supervisory Formula Approach** – The SFA's prescriptive, formulaic basis allows transparency and comparability in the case of asset originators of very uniform asset types; however, for investing banks, without modifications, implementation and risk sensitivity issues exist, leading to a potential reduction in credit availability.
- ▶ **ANPR Simple & Modified Gross-Up Approaches** – Although their formulaic nature makes them easy to implement and to regulate, these approaches are often inaccurate and risk-insensitive. They could lead to unsuitable levels of regulatory capital and could incentivize banks to invest in higher-risk assets.

ASF believes any alternative to external credit ratings must incorporate a quantifiable measurement of both the collateral's risk and the securitization structure in order to accurately measure risk sensitivity at inception and throughout the life of the securitization. If the industry methodology is not an acceptable standard, the next best alternative is the SFA with certain critical modifications ("Modified SFA")

Modified SFA Approach

SFA Summary

The SFA process is an approach to calculate regulatory capital where the formulas and data input requirements are dictated by regulation. The data requirements focus on underlying obligors and are based on information substantially available to originating banks. The SFA is a standardized approach to the calculation of regulatory capital that theoretically allows for consistent capital calculations among banks.

The SFA is static in that it does not account for the structure of transactions and ignores cash flows. There are, however, a number of modifications that, if made, would allow for the use of SFA across a broad spectrum of asset classes. ASF believes that depending on the information available to the bank, the bank should have the option to take advantage of these recommended modifications or use SFA in its current form. If recommended modifications are adopted, the SFA approach to assessing capital would become more broadly viable among the various asset classes while maintaining the goals of comparability, transparency, and risk sensitivity. The Modified SFA also has the advantage of conforming to the requirements of the Basel Committee's recent amendments to the Basel Accord while being reasonably simple to implement by all regulated institutions, including community banks.

SFA Recommended Modifications

Recommended Modification	Issues Addressed
<p>Allow SFA inputs based on a pool-wide basis using gross or net historical loss and recovery data</p>	<ul style="list-style-type: none"> ▶ Required segmentation information is generally not available to investors, most often because it is not generated by issuers, many of whom are not banks. The requirements are significantly different from market standards developed over the last 25 years, which are primarily based on pool-level net loss data supplemented by a more granular breakdown, when appropriate (e.g. RMBS) ▶ Detailed obligor information and segmentation is very difficult to obtain ▶ Prescribed segmentation into fine categories may not have any meaningful impact on performance analysis, especially with respect to LGD data for most asset classes
<p>Allow for the use of cash flow analysis to determine the collateral break-even level and allow for the input of this amount as credit enhancement in the SFA calculation</p>	<ul style="list-style-type: none"> ▶ Approach does not include full cash flow analysis; instead, focuses solely on the characteristics of the assets (e.g. PD, LGD) ▶ Formula does not account for structural parameters that affect the credit quality of varying securitization transactions
<p>Allow updates to PD/LGD on a quarterly basis rather than annually</p>	<ul style="list-style-type: none"> ▶ Allows for prompt adjustments in regulatory capital throughout the life of a transaction as performance and expectations change

SFA Recommended Modifications (cont.)

Recommended Modification	Issues Addressed
Recognize a range of defensible LGD based on historical pool recovery performance. If the data is not available to determine LGD on the actual financed portfolio, allow for the use of regulatory approved LGD levels for the applicable asset and underlying obligor type	Prescribed segmentation into fine categories may not have any meaningful impact on performance analysis, especially with respect to LGD data for most asset classes
Allow for the use of a “top-down” approach for commercial assets with a maturity greater than 1 year	For commercial assets with tenors greater than a year, strict requirements for PD/LGD information on all obligors is not commercial and will significantly reduce small and medium sized business lending
Allow for the carrying value of the asset to reference the bank’s exposure as opposed to par value in the calculation of RWA	Calculating RWA on the par value creates duplicative capital held against a written down asset given the bank has already reduced its capital by the difference between the par and carrying values
Allow for the use of market accepted PD and LGD proxies as inputs for asset classes that have low or no reported losses	Using actual historical losses may not be the most appropriate method for determining PD and LGD in the case of very low or no reported losses. The market believes that the downside PD and LGD is much higher than the reported historical losses



Modified SFA Approach

Execution of the Modified SFA

A principal advantage of the modified SFA is that required market based data can be accessed prior to investments from offering documents and presale reports and monthly thereafter from Trustee and Servicer Reports by all investors including community banks. In addition, when market based data requirements are enhanced (AB II), it should be universally available

- ▶ Refer to Appendix B, page 14 for an example of an SFA calculation using publically-sourced data

Appendix A: ANPR Simple & Modified Gross-Up

Appendix A: ANPR Simple & Modified Gross-Up

Summary

- ▶ The ANPR proposes two variations of the gross-up treatment found in the general risk based capital rules
 1. **“Simple Gross-up” treatment** – Bank maintains capital against its securitization exposures plus all related senior exposures
 - ▶ The simple gross-up is too blunt of an instrument to be an effective, broadly applied capital standard for securitization market participants
 2. **“Modified Gross-up” treatment** – Similar to simple gross-up treatment, but risk weights are assigned based on the financial and structural parameters of the underlying pool of instruments and exposure itself
 - ▶ The modified gross-up introduces variables that will allow for differentiation in capital based on structure and pool characteristics but still will not satisfy all of the agencies’ requirements for an effective securitization exposure capital standard
- ▶ Gross-up treatments are not asset risk-sensitive as they focus on capital structure, which by itself is insufficient to analyze the risk in a securitization exposure
 - ▶ For example, under the gross-up treatments, regulatory capital requirements could decrease despite severe deterioration in the performance of the underlying assets

Appendix A: ANPR Simple & Modified Gross-Up

Advantages	Disadvantages
<p>Simplicity - the approach is simple to apply, as most banks can gather the necessary information on the structure in order to determine risk weights using this approach</p>	<p>Risk insensitive - Gross-up treatment relies solely on structural parameters and ignores expected loss on underlying assets. With a focus on structural features, the approach will not be responsive to changes in risk on the underlying assets, particularly for static amortizing structures. As a result, does not recalibrate to the changing risk profile of the exposure</p>
<p>Consistency - rigidity leads to consistency of outcomes across institutions, as risk weight variables are tied solely to fact-based structural parameters</p>	<p>Imprudent risk management - without features that take into account asset risk to influence the capital outcome, the approach does not incent banks to fully understand the full breadth of risks inherent in securitization exposures</p>
	<p>Capital arbitrage - since the approach is not sensitive to asset risk in determining capital, it would lead to capital arbitrage opportunities, particularly with riskier assets that would require higher enhancement levels</p>
	<p>Inconsistent capital - using the current agency definition of seniority, high quality, yet non-senior exposures would be unfairly penalized with higher capital than necessary</p>

Appendix A: ANPR Simple & Modified Gross-Up

Example: Retail Auto Loan Securitization

Capital Structure at Closing					
Class	Size	Rating	Capital %	Basel I Capital %	Basel II Advanced Capital %
A-1	\$450	A-1+/P-1	8.0%	1.6%	0.56%
A-2	300	AAA/Aaa	12.2%	1.6%	0.96%
A-3	350	AAA/Aaa	18.9%	1.6%	0.96%
A-4	200	AAA/Aaa	52.0%	1.6%	0.96%
Total	\$1,300				

After 1 year, expected losses have **increased** from 1.0% to 2.5%, but capital allocated against A-3 and A-4 tranches has **decreased**

Capital Structure at the end of Year 1					
Class	Size	Rating	Capital %	Basel I Capital %	Basel II Advanced Capital %
A-1	Repaid	NR			
A-2	Repaid	NR			
A-3	\$350	A/A2	8.0%	4.0%	0.96%
A-4	200	BBB/Baa2	22.0%	8.0%	6.00%
Total	\$550				

▶ **Expected Loss = 1.0%**

- ▶ At close, capital allocated under the Modified Gross-up to Classes A-2 through A-4 escalates on each tranche owing to effects of seniority despite the fact they are each deemed to be at the highest ratings levels based on coverage of expected loss
- ▶ Final Rule definition of seniority will result in all tranches except A-1 to be deemed non-senior
- ▶ Capital under existing Basel I and Basel II advanced guidelines are shown for comparison

▶ **Expected Loss = 2.5%**

- ▶ Repayment of A-1 and A-2 results in recalibration of seniority and a reduction in capital for A-3 and A-4
- ▶ Expected loss increases at end of year 1 from 1.00% to 2.50% prompting ratings downgrades on the remaining outstanding tranches
- ▶ Basel I and Basel II outcomes are more sensitive to greater asset risk and increase accordingly

Conclusion: Gross-up treatment is not asset risk-sensitive, meaning capital requirements could decrease despite a severe increase in expected losses. Gross-up treatment could also incent banks to invest in higher-risk assets

Appendix B: SFA Formula

Appendix B: SFA Formula

$$\text{UE x TP x Greater of } \begin{cases} \text{(a) } 0.0056 \times T \\ \text{(b) } S[L+T] - S[L] \end{cases}$$

Where:

$$\text{(i) } S[Y] = \begin{cases} Y & \text{when } Y \leq K_{IRB} \\ K_{IRB} + K[Y] - K[K_{IRB}] + \frac{d \cdot K_{IRB}}{20} \left(1 - e^{-\frac{20 \cdot (K_{IRB} - Y)}{K_{IRB}}}\right) & \text{when } Y > K_{IRB} \end{cases}$$

$$\text{(ii) } K[Y] = (1-h) \cdot [(1-\beta[Y; a, b]) \cdot Y + \beta[Y; a+1, b] \cdot c]$$

$$\text{(iii) } h = \left(1 - \frac{K_{IRB}}{EWALGD}\right)^N$$

$$\text{(iv) } a = g \cdot c$$

$$\text{(v) } b = g \cdot (1-c)$$

$$\text{(vi) } c = \frac{K_{IRB}}{1-h}$$

$$\text{(vii) } g = \frac{(1-c) \cdot c}{f} - 1$$

$$\text{(viii) } f = \frac{v + K_{IRB}^2}{1-h} - c^2 + \frac{(1-K_{IRB}) \cdot K_{IRB} - v}{(1-h) \cdot 1000}$$

$$\text{(ix) } v = K_{IRB} \cdot \frac{(EWALGD - K_{IRB}) - .25 \cdot (1 - EWALGD)}{N}$$

$$\text{(x) } d = 1 - (1-h) \cdot (1 - \beta[K_{IRB}; a, b])$$

$$\text{(i) } S[Y] = \begin{cases} Y & \text{when } Y \leq K_{IRB} \\ K_{IRB} + K[Y] - K[K_{IRB}] + \frac{d \cdot K_{IRB}}{20} \left(1 - e^{-\frac{20 \cdot (K_{IRB} - Y)}{K_{IRB}}}\right) & \text{when } Y > K_{IRB} \end{cases}$$

$$\text{(ii) } K[Y] = (1-h) \cdot [(1-\beta[Y; a, b]) \cdot Y + \beta[Y; a+1, b] \cdot c]$$

¹As defined in the current Basel II framework

Appendix B: SFA Formula

Underlying Portfolio	Final Rule Formula	
Total UE	100	
Deal Size	100	
Class A1 (T\$)	93	
Class A2	7.50	
Class B1	-	
Class B2	-	
Class B3	-	
Class C	-	
JPMC TC (\$) Class A1	93	
TP JPMC % Share	100.00%	
Kirb	7.66%	
L Credit Enhancement Level	7.50%	
T Thickness of the tranche	92.50%	
N Number of underlying assets	100,000	
Weighted Avg LGD	50.0%	
\bar{w}	20	
τ	1000	
Supervisory Formula Intermediate		
h	-	
a = g * c	76.0611	
b = g * (1 - c)	917.0409	
c = Kirb / (1 - h)	7.66%	
g = (((1 - c) * c) / f) - 1	993.1020	
f	0.0001	
v	0.0000	
d	0.5134	
K[L] - Note 1	7.2393%	
K[L+T] - Note 2	7.6589%	
K[Kirb] - Note 3	7.3226%	
Supervisory Formula Results		
C(1): Kirb => (L+T)	C(2): Kirb <=L	C(3): L<Kirb <(L+T)
Final Capital Charge %	S[L]	S[Kirb]
JPMC Final Capital Charge Amount	IF(L<=KIRB, L, Note 4)	7.6589%
JPMC Risk Weight	S[L+T]	S[L+T]
Deduction?	IF(L+T<=KIRB, L+T, Note 5)	IF(L+T<=KIRB, L+T, Note 5)
		8.1918%
	IRB Capital Charge %	IRB Capital Charge %
	S[L+T] - S[L]	S[L+T] - S[Kirb]
		0.5329%
	IBR Capital Floor %	IBR Capital Floor %
		0.5171%
	Max IRB Capital Charge %	Max IRB Capital Charge %
	Final Capital Charge %	Final Capital Charge %
	Final IRB Capital Charge Amount (Tranche)	Final IRB Capital Charge Amount
	Final IRB Capital Charge Amount (JPMC)	Final IRB Capital Charge Amount
	JPMC RWA Amount	JPMC Capital Charge Amount (Part 1)
	JPMC Risk Weight	JPMC Share RWA Amount
	Deduction?	JPMC Risk Weight
		7.20%
		And a Partial Deduction
		Deduction Amount (Tranche)
		JPM Share Deduction (Part 2)
		0.159
		Combined JPMC Capital Charge (Part 1+ Part 2)
		1
		Blend JPMC RWA Amount
		9
		Blend JPMC Risk Weight
		9%

Appendix C: SFA Examples For Auto Loans

Appendix C: SFA Examples for Auto Loans

Below are RWA scenarios for a “AAA” senior auto loan securitization exposure with the constant of using portfolio level information to determine the PD and LGD.

	PD	LGD	CE ¹	RWA
<i>Scenario 1</i>	2.0%	100%	7.5%	73.0%
<i>Scenario 2</i>	2.0%	100%	12.35%	8.3%
<i>Scenario 3</i>	4.0%	50%	7.5%	9.0%
<i>Scenario 4</i>	4.0%	50%	12.35%	7.0%

¹Credit Enhancement is determined using either subordination only or using the collateral break-even level, e.g. 7.5% is subordination only and 12.35% is the collateral break-even level.

Appendix D: SFA Examples For Mortgage Loans

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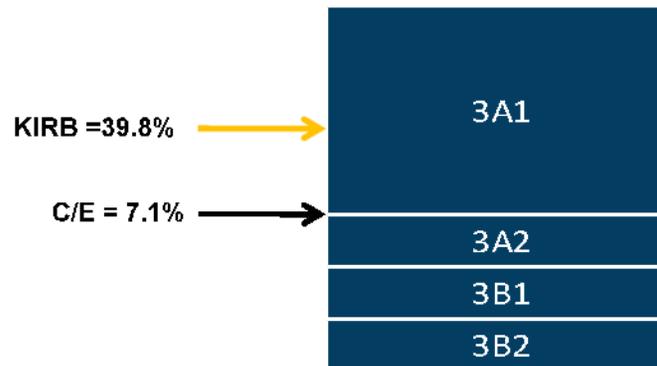
Examples of RMBS Transactions

- ▶ WAMU 07-HY2 3A1 – A Prime Hybrid Security
- ▶ WFMBS 05-7 A1 – A Prime Fixed Rate Security
- ▶ ACE 07-HE4 A2D – A Subprime Security
- ▶ SEMT 2010-H1 and SEMT 2011-1 – New Issue Deals

Appendix D: SFA Examples for Mortgage Loans

WAMU 07-HY2 3A1

- ▶ Prime Hybrid Collateral:
- ▶ Model projections on the underlying collateral Group: PD = 36.8%, LGD = 47.9% => KIRB = 39.8%



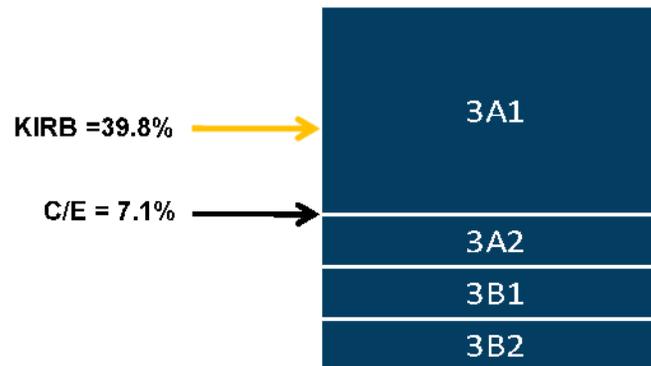
Tr.	Curr. Face (\$)	C/E	Tr. Thickness	Ratings(S&P/Fitch)		Recovery Ratings		Base Capital Charge*	
				Orig.	Curr.	Fitch	NPV / Par	%	\$
3A1	120,865,358	7.1%	92.9%	AAA/AAA	CCC/CC	RR2	71-90%	36.6%	44,242,135
3A2	5,695,413	2.7%	4.4%	AAA/AAA	CCC/C	RR5	11-30%	100.0%	5,695,413
3B1	3,522,827	0.0%	2.7%	AA/AA	CC/C	RR6	0-10%	100.0%	3,522,827
3B2	4,309	0.0%	0.0%	A/A	D/D	RR6	0-10%	100.0%	4,309

*Base Capital Charge as a percentage of Current Face Value

Appendix D: SFA Examples for Mortgage Loans

WAMU 07-HY2 3A1

- ▶ Estimate capital charge based on book value
 - ▶ Base Reg. Capital = 36.6% (% of Current Face Value)



Bank-A

Face Value= \$120,865,358
Book Value = \$120,865,358

- ▶ Reg. Cap. = Face Value * Base Reg. Cap.
- (Face Value – Book Value)
= \$120,865,358 * 36.6% - 0
= \$ 44,242,135

Bank-B

Face Value= \$ 120,865,358
Book Value = \$100,318,247

- ▶ Reg. Cap. = Face Value * Base Reg. Cap.
- (Face Value – Book Value)
= \$120,865,358 * 36.6%
- (\$120,865,358 - \$100,318,247)
= \$ 23,689,610

Appendix D: SFA Examples for Mortgage Loans

New Issue Deals

- ▶ To date, SEMT 2010-H1 and SEMT 2011-1 are the only two new issue RMBS deals in 2010 and 2011.
- ▶ Underlying Collateral
 - ▶ Prime Hybrid Loans
 - ▶ Avg. FICO = 760+
 - ▶ Avg. LTV = 56%-58%
 - ▶ NO 2nd Lien
 - ▶ NO Delinquent Loans to date

SEMT 2011-1 PD= 1.2%, LGD = 9.8% => KIRB = 1.23%

Tr	CE		Base Capital Charge SFA
	Orig.	Curr.	
A1	7.50%	7.64%	0.56%
B1	5.00%	5.09%	0.56%
B2	3.25%	3.31%	0.56%
B3	2.00%	2.04%	0.56%
B4	1.25%	1.27%	19.27%
B5	0.00%	0.00%	99.79%

SEMT 2010-H1 PD= 1.4%, LGD = 10.6% => KIRB = 1.47%

Tr	CE		Base Capital Charge SFA
	Orig.	Curr.	
A1	6.50%	13.34%	0.56%
B1	4.00%	8.21%	0.56%
B2	3.00%	6.16%	0.56%
B3	1.25%	2.57%	0.56%
B4	0.00%	0.00%	64.60%