Market Risk Capital Rules: Creditworthiness Standards to Replace Credit Ratings

On December 21, 2011, the Office of the Comptroller of the Currency (“OCC”), Board of Governors of the Federal Reserve System (“Board”), and Federal Deposit Insurance Corporation (“FDIC”) (collectively, the “agencies”) proposed rules on market risk capital (the “December Proposal”). The primary purpose of the December Proposal is to incorporate into the current market risk rules new creditworthiness standards to be used in risk-weighting certain debt and securitization positions without relying on credit ratings. Comments on the December Proposal are due by February 3, 2012.

The December Proposal substantially modifies an earlier proposal from January 2011 (“the January Proposal”). The January Proposal was an effort to bring the U.S. market risk capital rules in line with Basel II. Broadly, this proposal sought to modify the scope of the market risk capital rules to better reflect appropriate levels of risk, reduce procyclicality in market risk capital requirements, and increase transparency through enhanced disclosures.

Section 939A of the Dodd-Frank Wall Street Reform and Consumer Protection Act effectively prohibits the use of credit ratings in assessing the creditworthiness of a security or money market instrument. Basel II, however, relies on credit ratings in risk-weighting certain debt and securitization positions. Accordingly, the January Proposal did not include the Basel II approach to risk-weighting and, as a kind of placeholder, made no change to the treatment of these positions under the current market risk capital standards. The December Proposal provides an alternative approach (absent the credit ratings) for risk-weighting the certain traded debt and securitization positions that the January Proposal left unresolved.

2 12 C.F.R. part 225, Appendix E.
3 The creditworthiness standards in the December Proposal are limited to the market risk capital rules. To reduce the potential for regulatory arbitrage, the agencies will propose in a separate rulemaking changes to the general risk-based capital rules that would incorporate creditworthiness standards for debt and securitization positions that are similar to those included in the December Proposal.
We review first below the January Proposal and its effect on the current market risk capital rule, and then turn to the methodologies in the December Proposal for risk-weighting various categories of traded positions.

**Effect of the January Proposal on the Current Rule**

The current market risk capital rule ("MRR") supplements both the general risk-based capital rules and the advanced capital adequacy guidelines by requiring banks to adjust risk-based capital ratios to reflect market risk in their trading activities. The rule applies to all banks with worldwide, consolidated trading activity equal to 10 percent or more of total assets, or $1 billion or more.

The MRR requires a bank to maintain regulatory capital against the market risk of its covered positions. Covered positions are defined as all on- and off-balance sheet positions in a bank’s trading account and all foreign exchange and commodity positions, whether or not they are in the trading account. The January Proposal proposes to modify the definition of a covered position to include trading assets and trading liabilities that are trading positions. Thus the proposed definition would capture a trading position that is held by a bank for the purpose of short-term resale or with the intent of benefitting from actual or expected short-term price movements, or to lock in arbitrage profits. The January Proposal also has new requirements for the identification of trading positions and management of covered positions.

The January Proposal would make three broad changes to provisions in the MRR regarding internal modeling, the specific calculation of risk-based capital that incorporates market risk, and disclosures.

First, with respect to internal modeling, a bank must receive the prior written approval of its primary federal supervisor before using any internal model to calculate its market risk capital requirement. In addition, a bank must notify its federal supervisor promptly if it makes any change to its internal models that would result in a material change in the bank’s amount of risk-weighted assets for a portfolio of covered positions or when the bank makes any material change to its modeling assumptions. The January Proposal requires annual reviews of internal models, requires a bank to incorporate its internal models in risk management process, and requires banks to have rigorous and well-defined processes for reevaluating and updating its internal models to ensure continued applicability and relevance.

Second, relating to revised formulas for calculation of the risk-based capital ratios, the January Proposal would employ a more sophisticated approach to measuring market risk. As under the current rule, the January Proposal requires a bank to calculate its risk-based capital ratio denominator as the sum of its adjusted risk-weighted assets and market risk equivalent assets. To calculate market risk, the January Proposal would require a bank’s measure of market risk to equal the sum of its Value-at-Risk- ("VaR") based capital requirement, its stressed VaR-based capital requirement, any specific risk add-ons, any incremental risk capital requirement, any comprehensive risk capital requirement, and any capital requirement for *de minimis* exposures, each calculated according to the requirements of the proposed rule.

Third, the January Proposal imposes disclosure requirements designed to increase transparency and improve market discipline, and includes a breakdown of certain components of a bank’s market risk capital requirement, information on a bank’s modeling approaches, and quantitative disclosures relating to a bank’s securitization activities.

---

7 See, *e.g.*, 12 C.F.R. part 225, Appendix A.  
8 See, *e.g.*, 12 C.F.R. part 225, Appendix G.
December Proposal

This proposal sets forth methodologies for taking specific risks (risks that apply singularly to an identified position) into account in risk-weighting debt and securitization positions. The December Proposal attempts to calibrate the new capital requirements produced under these methodologies to be broadly consistent with the requirements under the Basel standardized measurement method for specific risk. That is, the agencies expect that the December Proposal would result in capital requirements comparable under the Basel standardized measurement method. The December Proposal includes alternative methodologies for calculating capital requirements for (i) sovereign debt positions, (ii) exposures to supranational entities and multilateral development banks, (iii) exposures to government-sponsored entities, (iv) exposures to depository institutions, foreign banks, and credit unions, (v) public sector entity debt positions, (vi) corporate debt positions, and (vii) securitization positions.

**Sovereign Debt Positions**

The specific risk-weighting factors for sovereign debt positions in the MRR are based on membership of the sovereign entity in the Organization for Economic Co-operations and Development (“OECD”). Covered debt positions that are exposures to sovereign entities that are OECD members receive a zero percent specific risk-weighting factor, whereas exposures to sovereign entities that are non-OECD members receive an 8.0 percent specific risk-weighting factor.9

The agencies are proposing that a bank determine its specific risk-weighting factors for sovereign debt positions based on OECD Country Risk Classifications (“CRCs”).10 The OECD’s CRCs are used for transactions covered by the OECD Export Credit Arrangement in order to provide a basis under the arrangement for participating countries to calculate the premium interest rate to be charged to cover the risk of nonpayment of export credits. The proposed methodology classifies countries using a range from zero percent for those assigned a CRC of 0 or 1 to 12.0 percent for a sovereign debt position assigned a CRC of 7, with countries having the lowest possible risk assessment assigned to the 0 category and countries having the highest assigned to the CRC 7 category. Out of a concern that the CRC assumes that “high-income” countries will not default, the agencies are also proposing to apply a specific risk-weighting factor of 12.0 percent to sovereign debt positions where the sovereign entity has defaulted on any exposure in the previous five years.

In developing the proposed rule, the agencies also considered two other market-based approaches, either to replace or to supplement the use of CRCs. The two approaches are sovereign credit default swap (“CDS”) spreads and or bond spreads. Higher CDS and bond spreads for a given sovereign entity could result in higher-risk-specific risk-weighting factors, as they reflect market expectations of default risk. The agencies are requesting comment on whether the proposed methodology accurately reflects the relative risk of such exposure and the relative merits of using CDS or bond spreads as supplements to CRCs.

The impact of the December Proposal is to require more capital for exposures to sovereign entities that are non-OECD members.

**Exposures to Supranational Entities and Multilateral Development Banks**

Under the MRR, debt positions that are exposures to certain supranational entities and multilateral development banks (“MDBs”) receive specific risk-weighting factors that range between 0.25 percent and 1.6 percent,

---

9 Under the January Proposal, “sovereign debt positions” are defined as a direct exposure to a sovereign entity. A sovereign entity is defined as a central government or an agency, department, ministry, or central bank of a central government.
10 The CRC methodology was established in 1999 and classifies countries into categories based on country credit risk and political and other risks. More information on the OECD CRC methodology can be found at www.oecd.org/document/49/0,2340,en_2649_34171_1901105_1_1_1_1,00
depending on their remaining maturity. The MMR does not vary the risk weight depending on the credit risk of the specific MDB. The Basel II framework treats these exposures in the same way.

The December Proposal would apply a zero percent specific risk-weighting factor to debt positions that are exposures to MDBs, as defined in the proposed rule. This treatment is based on these MDBs’ generally high credit quality, strong shareholder support, and a shareholder structure composed of a significant proportion of sovereign entities with strong creditworthiness. The proposed rule defines an MDB to include the International Bank for Reconstruction and Development, the Multilateral Investment Guarantee Agency, the International Finance Corporation, the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, the European Bank for Reconstruction and Development, the European Investment Fund, the Nordic Investment Bank, the Caribbean Development Bank, the International Monetary Fund, the Council of Europe Development Bank, and any other multilateral lending institution or regional development bank in which the U.S. government is a shareholder or contributing member. A bank’s primary federal regulator may determine that other multilateral or regional institutions have comparable credit risks and should be added to this list.

Additionally, consistent with the treatment of exposures to supranational entities under Basel II, the agencies are proposing to assign a zero percent specific risk-weighting factor to debt positions that are exposures to the Bank for International Settlements, the European Central Bank, the European Commission, and the International Monetary Fund.

Exposures to Government-Sponsored Entities

Under the current market risk capital rules, debt positions that are exposures to government-sponsored entities (“GSEs”)\textsuperscript{11} are assigned specific risk-weighting factors ranging from 0.25 percent to 1.6 percent, based solely on maturity. The MRR does not attempt to take into account the individual credit risks of each GSE. The December Proposal does not change this approach. Additionally, GSE equity exposures, including preferred stock, would be assigned a specific risk-weighting factor of 8.0 percent.

Exposures to Depository Institutions, Foreign Banks, and Credit Unions

The MRR currently assigns specific risk-weighting factors of between 0.25 percent and 1.6 percent to debt positions that are exposures to banks incorporated in OECD countries. The size of the factor is based solely on the maturity of the debt. Exposures to banks in non-OECD countries are evaluated through a more complicated methodology that includes credit ratings.

The December Proposal would eliminate the distinction between banks in OECD and non-OECD countries and assign specific risk-weighting factors on the basis of the CRC of a bank’s sovereign of incorporation, as well as on the basis of maturity. For example, exposures to a bank in a CRC 2-rated country would be assigned a factor of between 0.25 percent and 1.6 percent, depending on the maturity of the exposure. All exposures of a bank in a 3-rated country would carry a specific risk-weighting factor of 8.0 percent, regardless of maturity, and exposures for banks rated 4, 5, 6, or 7 would receive a factor of 12.0 percent. If a country does not have a CRC, then the factor is 8.0 percent.

Public Sector Entity Debt Positions

The December Proposal takes essentially the same approach here as it does with exposures to banks in different countries. Currently, the MRR assigns a specific risk-weighting factor to general obligations of public sector

\textsuperscript{11} For the purposes of the December 2011 proposal, a GSE would be defined as an agency or corporation originally established or chartered by the U.S. government to serve public purposes specified by the U.S. Congress, but whose obligations are not explicitly guaranteed by the full faith and credit of the U.S. government.
entities ("PSEs")—U.S. state or local governments and similar subdivisions of foreign sovereigns—of between 0.25 percent and 1.6 percent based on maturity. The specific risk-weighting factor for a revenue bond depends upon several conditions, including credit ratings.

The approach in the December Proposal is to assign specific risk-weighting factors on the basis of the CRC of the sovereign in which the public sector entity is organized. One factor is different, depending on whether the exposure is a general obligation or a revenue obligation. For general obligations, CRC ratings between 0 and 2 would yield factors between 0.25 percent and 1.6 percent, based on maturity. For revenue obligations, these factors are available only in countries rated O or 1. All general obligation exposures to a public sector entity in a country rated 3 and all revenue obligations to an entity in a country rated 2 or 3 would receive a factor of 8.0 percent. Twelve percent is the risk-weighting factor for obligations of entities in countries with ratings from 4 to 7. If the sovereign of incorporation does not have a CRC rating, then debt positions of a PSE within its jurisdiction would also receive a specific risk-weighting factor of 8.0.

**Corporate Debt Positions**

Under the current rules, capital requirements are a function of the type of obligor, the credit rating of the obligor, and the remaining maturity of the exposure.

The proposed rule distinguishes between financial and nonfinancial corporations, and between publicly traded and private corporations. For financial company debt positions (whether the company is public or private) and private company debt positions, the proposed rule would require a bank to assign a specific risk-weighting factor of 8.0 percent.

For a debt position of a publicly traded nonfinancial company, the proposed rule requires a bank to assign a specific risk-weighting factor of either 8.0 or 12.0 percent, based on the profitability, stock price volatility and leverage of the entity, in accordance with Table A below, as supplemented by Table B. For purposes of Table A, the measure “EBITDA-to-assets ratio” means a ratio calculated by dividing: (1) a corporate entity’s earnings before interest expense, taxes, depreciation, and amortization (“EBITDA”) using data from the four most recently reported calendar quarters; by (2) its equity market value plus total liabilities as reported as of the end of the most recent calendar quarter.

**Table A – Debt Positions of a Publicly-Traded Non-financial Company (percentages)**

<table>
<thead>
<tr>
<th>EBITDA-to-assets ratio</th>
<th>Stock market volatility measure</th>
<th>Debt-to-assets ratio less than 0.2</th>
<th>Debt-to-assets ratio between 0.2 and 0.5</th>
<th>Debt-to-assets ratio greater than 0.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>greater than zero</td>
<td>less than 0.1</td>
<td>see table B</td>
<td>8.0</td>
<td>8.0</td>
</tr>
<tr>
<td></td>
<td>between 0.1 and 0.15</td>
<td>8.0</td>
<td>8.0</td>
<td>8.0</td>
</tr>
<tr>
<td></td>
<td>greater than 0.15</td>
<td>8.0</td>
<td>8.0</td>
<td>12.0</td>
</tr>
<tr>
<td>less than zero</td>
<td>less than 0.1</td>
<td>8.0</td>
<td>8.0</td>
<td>8.0</td>
</tr>
</tbody>
</table>
Table B – Debt Positions of a Publicly Traded Non-financial Company

<table>
<thead>
<tr>
<th>Remaining Contractual Maturity</th>
<th>Specific Risk-Weighting Factor (percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residual term to final maturity 6 months or less</td>
<td>0.25</td>
</tr>
<tr>
<td>Residual term to final maturity greater than 6 months and up to and including 24 months</td>
<td>1.0</td>
</tr>
<tr>
<td>Residual term to final maturity exceeding 24 months</td>
<td>1.6</td>
</tr>
</tbody>
</table>

The proposal defines a corporate debt position to mean a debt position that is an exposure to a company that is not a sovereign entity, the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, a multilateral development bank, a depository institution, a foreign bank, a credit union, a PSE, a GSE, or a securitization.

The proposal includes the following definition of “financial institution” to distinguish between companies that are primarily engaged in financial activities and those that are not. Under the proposal, a financial institution is either:

1. A commodity pool as defined in Section 1a(10) of the Commodity Exchange Act (7 U.S.C. 1a(10));

2. A private fund as defined in Section 202(a) of the Investment Advisors Act of 1940 (15 U.S.C. 80-b-2(a)); except for small business investment companies, as defined in Section 102 of the Small Business Investment Act of 1958 (15 U.S.C. 662), or a private fund designed primarily to promote the public welfare, of the type permitted under Section 24 (Eleventh) of the National Bank Act (12 U.S.C. 24 (Eleventh)) and 12 CFR part 24;

3. An employee benefit plan as defined in paragraphs (3) and (32) of Section 3 of the Employee Retirement Income and Security Act of 1974 (29 U.S.C. 1002);

4. A bank holding company, depository institution, foreign bank, credit union, insurance company, or a securities firm, other than an entity selected as a Community Development Financial Institution (CDFI) under 12 U.S.C. 4701 et seq. and 12 CFR part 1805;
(5) Any other company predominantly engaged" in activities that are (i) in the business of banking under Section 24 (Seventh) of the National Bank Act (12 U.S.C. 24), or (ii) in activities that are financial in nature under Section 4(k) of the Bank Holding Company Act of 1956 (12 U.S.C. 1843(k)) as of the date this subpart becomes effective. There is a proviso, however: if the company (collectively, “financial activities”) is not an affiliate of the bank calculating its capital requirements under the proposed rule, then the bank may exclude activities set forth on Schedule A when determining whether the company is predominantly engaged in financial activities;

(6) Any non-U.S. entity that would be covered by any of paragraphs (1) through (5) if such entity was organized in the United States; or

(7) Any other company that an agency may determine is a financial institution based on the nature and scope of its activities.

The agencies considered using bond spreads as an alternative to using credit ratings for assigning capital requirements to both financial and nonfinancial corporate debt positions. The agencies are seeking comment on whether to permit banks to assign a risk-weighting factor of 6.0 percent and whether a non-investment-grade exposure might be assigned a risk-weighting factor of 12.0 percent.

The proposed rule seeks comments on the proposed definition of “financial institution,” what operational challenges banks would face in implementing the three-indicator methodology, and how well the proposed methodology would capture credit risk. The proposed rule also seeks comments on the other alternatives such as the bond spread approach to the use of credit ratings when assigning minimum capital requirements for debt positions.

**Securitization Positions**

Under the current market risk capital rules, if a bank does not model specific risk, it must calculate a specific risk capital add-on for each securitization position subject to the rule using a standardized method. Under the standardized method, a bank must multiply the absolute value of the current market value of each net long and net short position in a securitization position by the appropriate specific risk-weighting factor specified in the rule. These specific risk-weighting factors range from zero to 8.0 percent and are based on the credit rating and remaining contractual maturity of the position. In addition, banks must apply the highest specific risk-weighting factor (8.0 percent) to unrated securitization positions. Under the 2009 revisions and the January Proposal, a bank is no longer permitted to model specific risk for securitization positions, including re-securitization positions, with the exception of certain correlation trading positions. Instead, the bank must use the specific risk-weighting factors based on credit ratings.

As part of the December Proposal, the agencies have developed a simplified supervisory formula approach (“SSFA”) based on the supervisory formula approach included in the agencies’ Basel II advanced approaches rules. The SSFA is designed to apply relatively high capital requirements to the more subordinated, risky tranches of a securitization that are the first to absorb losses and relatively lower requirements to the most senior positions.

The goal of the SSFA is to provide a straightforward methodology for determining the specific risk add-on for a securitization position. To use the SSFA, a bank would apply the following inputs, which are publicly available from servicer reports, to a formula provided in the proposed rule:

---

12 For the purposes of the proposed rule, a company would be predominantly engaged in financial activities if either (i) 85 percent or more of the total consolidated annual gross revenues (as determined in accordance with applicable accounting standards) of the company in either of the two most recent calendar years were derived, directly or indirectly, by the company on a consolidated basis from financial activities; or (ii) 85 percent or more of the company’s consolidated total assets (as determined in accordance with applicable accounting standards) as of the end of either of the two most recent calendar years were related to financial activities.
(i) The weighted average risk weight of the underlying assets, determined in accordance with the general risk-based capital rules ($K_G$);

(ii) The attachment point of the relevant tranche. This represents the threshold at which credit losses would first be allocated to the tranche. (Parameter $A$);

(iii) The detachment point of the tranche. This represents the threshold at which credit losses allocated to the tranche would result in a total loss to the investor in the tranche. (Parameter $D$);

(iv) The securitization surcharge. This is a supervisory calibration input. For securitization positions this input is 0.5, and for re-securitization exposures it is 1.5; and the amount of capital that would be required to be held against the pool at origination if the pool was held directly on-balance sheet by a banking organization. (Parameter $P$);

(v) Cumulative losses on the pool of underlying assets as a percent of Parameter $A$, which will increase as cumulative losses to the pool increase over time, as a percentage of the general risk-based capital requirement.

The SSFA formula is as follows:

\[
K_{SSFA} = \frac{e^{a \cdot u} - e^{a \cdot l}}{a(u - l)}
\]

Where,

\[
a = -\frac{1}{p \cdot K_G}
\]

\[
u = D - K_G
\]

\[
l = A - K_G
\]

\[
e = 2.71828
\]

(the base of the natural logarithms) is equal to the greater of:

(i) $K_{SSFA}$ multiplied by 100 and expressed as a percent; or

(ii) The supervisory minimum specific risk-weighting factor assigned to the tranche based on cumulative losses (see Table C).
TABLE C—SUPERVISORY MINIMUM SPECIFIC RISK-WEIGHTING FACTOR FLOORS FOR SECURITIZATION EXPOSURES

<table>
<thead>
<tr>
<th>Cumulative losses of principal on originally issued securities as a percent of KG at origination</th>
<th>Specific risk-weighting factor (in percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than:</td>
<td>Less than or equal to:</td>
</tr>
<tr>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>100</td>
<td>150</td>
</tr>
<tr>
<td>150</td>
<td>n/a</td>
</tr>
</tbody>
</table>

If a bank does not know the KG for a position because it lacks the necessary information, then the bank may not use the SSFA and must apply a specific risk-weighting factor of 100.0 percent. There is a minimum risk weight floor, which will increase as cumulative losses to the pool increase over time, as a percentage of the general risk-based capital requirement.

Under certain circumstances, the SSFA may produce a specific risk add-on for a securitization position that exceeds the specific risk add-on that would otherwise be generated by the ratings-based approach (“RBA”), as set forth in the Basel II 2005 and 2009 revisions. Accordingly, the agencies are seeking comment on ways to better align the SSFA and RBA, including through the use of a scaling factor to adjust the SSFA for certain securitization positions or asset classes.

The December Proposal also seeks comment on whether to include an adjustment factor that would increase or decrease the total amount of capital required for certain securitizations at their inception, alternative methodologies such as using a concentration ratio, the credit spread approach, a third-party vendor approach, and whether banks that are permitted to use the advanced approaches should be permitted to use the advanced approach SSFA.

**Conclusion**

The December Proposal marks an early step toward the use of improved tools to measure the credit risk of various assets. This proposal is limited to the market risk capital rule, but the underlying concepts are likely to reappear in changes to the general risk-based capital standards.
Contacts

Indira Lall  
(202) 778-1446  
ilall@mofo.com

Dwight Smith  
(202) 887-1562  
dsmith@mofo.com

About Morrison & Foerster

We are Morrison & Foerster—a global firm of exceptional credentials. Our clients include some of the largest financial institutions, investment banks, Fortune 100, technology and life sciences companies. We’ve been included on The American Lawyer's A-List for eight straight years, and Fortune named us one of the “100 Best Companies to Work For.” Our lawyers are committed to achieving innovative and business-minded results for our clients, while preserving the differences that make us stronger. This is MoFo. Visit us at www.mofo.com. © 2012 Morrison & Foerster LLP. All rights reserved.

Because of the generality of this update, the information provided herein may not be applicable in all situations and should not be acted upon without specific legal advice based on particular situations.