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U.S. Adoption of Basel II and the Basel II Securitization Framework

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# U.S. ADOPTION OF BASEL II AND THE BASEL II SECURITIZATION FRAMEWORK

**ROBERT F. HUGI, JASON H.P. KRAVITT AND CAROL A. HITSELBERGER**

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* Mr. Hugi is Special Counsel with the law firm of Mayer Brown LLP. Mr. Kravitt and Ms. Hitselberger are partners at Mayer Brown LLP. The authors would like to thank Babback Sabahi, an associate at Mayer Brown LLP, for his assistance in preparing this Article.
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I. INTRODUCTION

On December 7, 2007, the U.S. federal bank regulators (Agencies) published final rules1 (Final Rules) to implement the Basel II advanced internal ratings-based approach to bank capital adequacy in the United States. The Final Rules are based on the capital standards adopted by the Basel Committee on Banking Supervision (BCBS), which is a committee of the Bank of International Settlements (BIS), located in Basel, Switzerland. BCBS consists of senior representatives of bank supervisory authorities and central banks around the world. In 1988, BCBS published an Accord entitled International Convergence of Capital Measurement and Capital Standards (Basel I). That Accord formed the basis for the risk-based capital standards adopted by bank regulators in member and many non-member countries. Under these standards, a bank’s assets are grouped into several categories based on the type of obligor (or obligation) and then risk-weighted. The risk weights range from 0% to 100%. Off-balance sheet liabilities are first converted into on-balance sheet items by application of a credit conversion factor and then risk-weighted based on the type of obligor.

While Basel I was viewed as a useful and beneficial device in encouraging banking institutions to maintain regulatory capital commensurate with credit (and later market) risks in their banking books, a consensus gradually emerged among the BIS member financial regulators and the banking industry that the standards of Basel I were not sufficiently risk-sensitive.2 In June 1999, BCBS

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2. For example, under Basel I almost all claims on private sector entities are risk-weighted at 100%, without regard to the rating or any other characteristic of the
announced that it was working on a new risk-based capital framework to replace the 1988 Accord. After years of international consultation, BCBS adopted a new Accord (Basel II) in June 2004, which is designed to be significantly more risk-sensitive across various types of banking assets, including securitization exposures.

Although many other countries, including the members of the European Union, started the process of implementation of the new Accord almost immediately after BCBS adopted it, in the United States, the Agencies did not make substantial progress on this matter for a period of time due to disagreements among themselves, as well as between them and the industry, on various issues, including the transitional timetable, the permissible level of capital reduction during the transitional period, and the options under Basel II that should be available to U.S. banks. These issues also raised uncertainty about Basel II in the Congress, which expressed its concerns and positions through various hearings that it held on the consequences of adopting the proposed rules. The Agencies ultimately resolved these issues through cooperation and consultation with the industry and the Congress, and on September 25, 2006, they published a notice of proposed rulemaking (NPR) to implement Basel II in the United States. After consideration of the comments received from the public, they published the Final Rules on December 7, 2007, with compliance to start on April 1, 2008.

In this Article, we summarize the portions of the Final Rules that apply to banks' securitization exposures, including both traditional and synthetic securitizations. We focus on the

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5. For further information on the process leading to the adoption of the Final Rules, see the Basel II sections of the Agencies' websites, including the Board of Governors of the Federal Reserve System (available at www.federalreserve.gov/generalinfo/basel2/default.htm) and the Office of the Comptroller of Currency (available at www.occ.treas.gov/law/basel.htm).

6. In this Article, we use the term “bank” to refer to any depository institution or bank holding company.
minimum capital requirements – the “first pillar” of Basel II – as opposed to the supervisory review process and market discipline (the second and third pillars). Within the minimum capital requirements, the Final Rules deal only with the credit risk or banking book component. The Agencies have indicated that final rules to update the market risk or trading book rules will be issued in the near future.7

Parts II and III of this Article provide general information on Basel II and the threshold issue of what is a “securitization exposure.” Parts IV through VI then summarize the aspects of the Final Rules that are most relevant to banks as investors in asset-backed securities, originators of securitized assets, and participants in the asset-backed commercial paper conduit market, respectively. Part VII discusses credit risk mitigation techniques in the securitization context generally, and Part VIII discusses synthetic securitizations.

Unless otherwise indicated, section references, infra, refer to sections of the Final Rules.

II. STATUS OF BASEL II

A. Scope and Approaches

Basel II is meant to be applied “on a consolidated basis to internationally active banks.”8 It provides two broad methods for calculating minimum capital requirements relating to credit risk:

- a “standardized approach,” which relies heavily upon external credit assessments by major independent credit rating agencies; and
- an internal ratings-based (IRB) approach, which permits a bank to use some internal assessments in determining its required capital. The securitization

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8. BASEL II, supra note 3, ¶ 20. Holding companies for internationally active banking groups will also be covered. Id. ¶ 21.
framework within the IRB approach also relies heavily upon external credit assessments by rating agencies.

Within Basel II as a whole, a further distinction is made between a "foundation" IRB approach and a more "advanced" IRB approach. That distinction does not, however, apply to the securitization framework, where there is a single IRB approach.

A few years ago, the Agencies tentatively decided that only the advanced IRB approach would be implemented in the United States. However, in response to comments on the NPR, the Agencies announced in July 2007 that they had changed their minds and will also implement the standardized approach. The standardized approach will take the place of the so-called "Basel IA" rules that were proposed in December 2006. The U.S. rules implementing the standardized approach will go through an administrative rulemaking process similar to the process used to adopt the Final Rules. The Agencies expect to issue the standardized approach proposal in the first quarter of 2008. The foundation IRB approach still will not be used in the United States.

The Final Rules relate only to the advanced IRB approach and break banks up into three categories: (i) "core banks," which are large or internationally active banks that would be required to adopt the new framework; (ii) "opt-in banks," which do not meet the size thresholds for mandatory adoption but decide voluntarily (and with supervisory approval) to adopt the new

---

9. In light of the complexity of Basel II, as compared to Basel I, the Agencies decided to limit the scope of its U.S. implementation, and propose an alternative set of rules for U.S. banks not subject to Basel II, which would be more risk sensitive than Basel I, but simpler than Basel II to implement. This version, known as Basel IA, 71 Fed. Reg. 77,446 (Dec. 26, 2006), differed from Basel I in several respects, including a more extensive use of external credit ratings. Basel IA drew heavily on the BIS standardized approach, but was different from those standards in various respects, including not having a capital charge for operational risk.

10. A bank will be a core bank if it has consolidated total assets of $250 billion or more and/or consolidated total on-balance sheet foreign exposure of $10 billion or more. A bank holding company is also a "core bank" if it meets either or both of these tests or if it has any bank subsidiary that is a core bank. If a bank holding company is a core bank, then so are all of its bank subsidiaries (subject to an ability of the principal supervisor to permit some such subsidiaries to opt out of the Final Rules in appropriate circumstances). Adopting Release, supra note 1, at 69,397 (section 1(b)).
framework; and (iii) "general banks," which do not adopt the new framework and will remain subject to the currently existing domestic risk-based capital framework or may opt into the standardized approach, once adopted. In this respect, the United States is diverging from its implementation of the original Basel Accord, which applied to all banks.

**B. Timing**

Basel II sets out a time frame for adoption by member countries, but implementation in the United States is lagging behind the Basel II schedule. Both the Basel II time frame for the IRB approach and the U.S. time frame contemplate:

- one or more years of parallel calculation, in which a bank would remain subject to the existing risk-based capital rules but also calculate its risk-based capital requirements under the new framework; and
- two or three transition years, during which a bank would be subject to the new framework, but the bank's minimum risk-based capital would be subject to a floor based on a percentage of what would have been required under the prior framework.
### Basel II Time Frames

<table>
<thead>
<tr>
<th>Year</th>
<th>Foundation IRB</th>
<th>Advanced Approaches</th>
<th>U.S. Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Parallel calculation</td>
<td>Parallel calculation or impact studies</td>
<td>New framework did not apply</td>
</tr>
<tr>
<td>2007</td>
<td>Transition - 95% floor</td>
<td>Parallel calculation</td>
<td>New framework did not apply</td>
</tr>
<tr>
<td>2008</td>
<td>Transition - 90% floor</td>
<td>Parallel calculation</td>
<td>Transition - 95% floor</td>
</tr>
<tr>
<td>2009</td>
<td>Transition - 80% floor</td>
<td>Transition - 95% floor</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>No more transition</td>
<td>Transition - 90% floor</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>No more transition</td>
<td>Transition - 85% floor</td>
<td></td>
</tr>
</tbody>
</table>

Above is a comparison of the timelines for the Basel II IRB approach and U.S. implementation. These time frames apply to banks that are implementing the applicable new framework at the earliest possible time. Under the Final Rules, a parallel four year schedule applies to banks that start to implement the framework later.

### C. Basic Terminology and Mechanics

Basel II and the Final Rules continue to use some of the same fundamental terminology that was used in the original Basel Accord and is still used in the current U.S. rules. The mechanics for measuring a bank’s actual capital remain essentially unchanged, as does the division of capital between tier 1 capital (which is limited to common stockholders’ equity, qualifying noncumulative perpetual preferred stock, including related surplus, and minority interest in equity accounts of consolidated subsidiaries) and tier 2 capital (which encompasses allowances for loan and lease losses, some additional types of preferred stock and related surplus, certain hybrid capital instruments, and subordinated debt). Tier 1 capital must make up at least 50% of a

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11. These are the advanced IRB approaches for credit or the advanced measurement approaches for operational risk. *BASEL II, supra* note 3, ¶ 46.
bank's qualifying capital. For the most part, the Final Rules refer to existing (and continuing) U.S. rules on these points and do not change or restate them.

The mechanics for calculating a bank's risk-based capital requirements vary between four different categories of exposures: wholesale, retail, securitization, and equity. The mechanics for determining the risk-based capital requirements for wholesale and retail exposures will change significantly from the current U.S. rules. The mechanics for securitization exposures will change less. Since equities are rarely securitized, we do not discuss the mechanisms for those exposures.

For the wholesale category, the capital requirement will be calculated separately for each exposure. A bank will assign four quantitative risk parameters to each exposure:

- PD (probability of default) – the bank's estimate of the likelihood that the obligor (or a guarantor) will default over a one-year horizon;
- LGD (loss given default) – the bank's estimate of the percentage economic loss that would occur if the obligor defaults in an economic downturn;
- EAD (exposure at default) – the bank's estimate of the amount that the obligor would owe the bank at the time of default; and
- M – the effective remaining maturity of the exposure.

The bank will then input these parameters into an IRB risk-based capital formula to determine the risk-based capital requirement for the exposure.

Retail exposures will be divided into three subcategories – residential mortgage exposures, qualifying revolving exposures (QREs) (for example, credit cards and overdraft lines) and other retail exposures. Within these subcategories, banks will group exposures into segments with similar risk characteristics and determine risk-based capital requirements for each segment. To determine the risk-based capital requirement for a segment, a bank will assign the risk parameters PD, LGD, and EAD to each
segment and input these parameters into an IRB risk-based capital formula.

A securitization exposure resulting from a securitization of retail or wholesale exposures will not be analyzed under the capital rules for retail or wholesale exposures. Instead, a separate securitization framework will apply. The main reason is that the Agencies are not comfortable permitting banks to determine the wholesale or retail risk parameters for securitization exposures. Because securitizations are tranched exposures to an underlying pool of exposures, the assessment of risk parameters "would require implicit or explicit estimates of correlations among the losses on the underlying exposures and estimates of the credit risk consequences of tranching." The Agencies believe that, under current technology, "[s]uch correlation and tranching effects are difficult to estimate and validate in an objective manner and on a going-forward basis."

Banks will determine risk-based capital requirements for securitization exposures by multiplying their total risk-weighted assets in this category times a minimum capital requirement (8%). The risk-weighted amount of an on-balance sheet securitization exposure is the product of the amount of the exposure and a "risk weight." There are various methods for assigning risk weights and a hierarchy that determines when each

12. Adopting Release, supra note 1, at 69,357.
13. Id.
14. In order to "maintain the current overall level of minimum risk-based capital requirements within the banking system," the total credit risk-weighted assets determined under the IRB approach are also multiplied times a "scaling factor" of 1.06 before multiplying that product times the minimum capital requirement of 8%. Id. at 69,293, 69,398 (section 2) (definition of "credit risk-weighted assets").
15. In section 42(e)(1), the amount of on-balance sheet securitization exposure that is not a repo-style transaction, eligible margin loan, or OTC derivative contract (other than a credit derivative) is defined as: "(i) The [bank]'s carrying value minus any unrealized gains and plus any unrealized losses on the exposure, if the exposure is a security classified as available-for-sale; or (ii) The [bank]'s carrying value, if the exposure is not a security classified as available-for-sale." Id. at 69,419 (section 42(e)(1)).
16. The hierarchy is: (1) deducting gain-on-sale and credit-enhancing interest only strips from capital; (2) a ratings-based approach, which applies to positions with external credit ratings or on which such ratings can be inferred; (3) an internal assessment approach, which applies only to exposures to asset-backed commercial paper conduits, and a supervisory formula approach; and (4) deduction from capital for any securitization exposures not covered by any of the other approaches. See
method is used. In each case, risk weights are stated as percentages, which become larger as credit risk increases. In the ratings-based approach, which is discussed at length, infra, the risk weights vary from 7% to 1,250%.17 So the risk-weighted amount of an asset with very high credit quality (and therefore the risk-based capital requirement) will be less than the risk-weighted amount of an asset of the same size with lower credit quality.

Under current U.S. rules, off-balance sheet securitization exposures are multiplied by an additional “credit conversion factor,” and that product (sometimes referred to as a “credit equivalent amount”) is multiplied by a risk weight to determine a risk-weighted asset amount. The securitization framework in the Final Rules does not use a “credit conversion factor” or “conversion factor” concept, except in the provisions relating to early amortization features (discussed infra Part V.A.4). Under the original Basel Accord and (to a somewhat lesser extent) the current U.S. rules, some liquidity facilities for asset-backed commercial paper (ABCP) conduits have a favorable credit conversion factor, which has provided a substantial risk-based capital benefit for conduit programs. Under the Final Rules, that favorable credit conversion factor is eliminated, though other aspects may counterbalance the impact of this change. See infra Part VI.B for a discussion of this point.

D. Principle of Conservatism

The Final Rules incorporate a “principle of conservatism”18 that was not included in the NPR. This principle permits banks to make simplifying assumptions in their risk-based capital calculations, so long as the simplification increases the capital requirement. A bank is required to provide prior notice to its primary regulator before applying the principle and may not apply it to exposures that are, in the aggregate, material to the bank.

infra Parts IV-VI for further discussion of these approaches.

17. In the table at infra Part III.A of this Article, the “Deduct from tier 1 and tier 2 capital” row equates to a risk weight of 1,250%, since 1,250% times the minimum capital requirement of 8% equals 100%, meaning that exposures with that risk weight must be covered completely by capital and cannot be leveraged.

18. Adopting Release, supra note 1, at 69,397 (section 1(d)).
III. DEFINITION OF SECURITIZATION EXPOSURES

Since the Final Rules provide different rules for calculating minimum capital requirements for different categories of credit exposures, the terms used to define those categories are important. Consistent with Basel II, the Final Rules define “securitization exposure” as “[a]n on-balance sheet or off-balance sheet credit exposure that arises from a traditional or synthetic securitization (including credit-enhancing representations and warranties).”19 As in the NPR, “traditional securitization” and “synthetic securitization” are then defined mostly in terms of the tranching of credit risk. In addition, in response to comments on the NPR, the Agencies modified the definition of “traditional securitization” to expressly exclude transactions where the underlying exposures are owned by (1) an operating company, (2) a small business investment company, (3) certain firms involved in community development, and (4) other investment firms, based on determinations by the Agencies. Exceptions (1)-(3) are subject to override by the Agencies based on a particular transaction’s leverage, risk profile, or economic substance.

19. Id. at 69,404 (section 2) (definition of “securitization exposure”). The definition proposed in the NPR also specifically included mortgage-backed pass-through securities guaranteed by Fannie Mae and Freddie Mac, regardless of whether or not they otherwise satisfied the terms of the definition. NPR, supra note 4, at 55,920. That special provision has been deleted.
Synthetic securitization means a transaction in which:

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>All or a portion of the credit risk of one or more underlying exposures is transferred to one or more third parties through the use of one or more credit derivatives or guarantees (other than a guarantee that transfers only the credit risk of an individual retail exposure);</td>
</tr>
<tr>
<td>(2)</td>
<td>The credit risk associated with the underlying exposures has been separated into at least two tranches reflecting different levels of seniority;</td>
</tr>
<tr>
<td>(3)</td>
<td>Performance of the securitization exposures depends upon the performance of the underlying exposures; and</td>
</tr>
<tr>
<td>(4)</td>
<td>All or substantially all of the underlying exposures are financial exposures (such as loans, commitments, credit derivatives, guarantees, receivables, asset-backed securities, mortgage-backed securities, other debt securities, or equity securities).</td>
</tr>
</tbody>
</table>

Traditional securitization means a transaction in which:

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>All or a portion of the credit risk of one or more underlying exposures is transferred to one or more third parties through the use of credit derivatives or guarantees;</td>
</tr>
<tr>
<td>(2)</td>
<td>Performance of the securitization exposures depends upon the performance of the underlying exposures; and</td>
</tr>
<tr>
<td>(3)</td>
<td>All or substantially all of the underlying exposures are financial exposures (such as loans, commitments, credit derivatives, guarantees, receivables, asset-backed securities, mortgage-backed securities, other debt securities, or equity securities).</td>
</tr>
</tbody>
</table>

Apart from these exceptions, the definitions of “synthetic securitization” and “traditional securitization” both have four numbered paragraphs, as set out above. Paragraphs (2)-(4) are identical.

Under these definitions, it might appear that investments in many auto lease securitizations would not be treated as securitization exposures, since monetization of lease residuals arguably violates the requirement that “[a]ll or substantially all of the underlying exposures are financial exposures.” The Agencies declined to modify that requirement to address the presence of residuals in lease securitizations, but they did provide helpful interpretive guidance in the Adopting Release, stating:

Based on their cash flow characteristics, for purposes of the final rule, the [A]gencies would

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20. Adopting Release, supra note 1, at 69,404-05 (section 2) (definition of “synthetic securitization” and “traditional securitization”).
consider many of the asset classes identified by commenters — including lease residuals and entertainment royalties — to be financial assets. Both the designation of exposures as securitization exposures and the calculation of risk-based capital requirements for securitization exposures will be guided by the economic substance of a transaction rather than its legal form.\textsuperscript{21}

Interest rate swaps and other non-credit derivatives with a securitization SPE as a counterparty are securitization exposures, but the Final Rules provide a simplified method to risk weight these exposures in some circumstances.\textsuperscript{22}

\section*{IV. Banks as Investors in Securitization Exposures}

Basel II generally treats banks' securitization exposures consistently, regardless of the capacity in which a bank acquires or retains a particular exposure. However, as a practical matter the portions of the Final Rules that are of greatest interest to a bank will depend on whether the bank is acquiring a securitization exposure as an investor, securitizing assets as an originator, or taking on exposures in connection with an ABCP conduit. Consequently, in this Part IV and the following Parts V and VI, \textit{infra}, we summarize much of the substance of the Final Rules along these lines.

The following discussion applies only to securitization exposures that a bank holds in its banking book, as opposed to its trading account. Exposures held in the trading account would generally be subject to the market risk rules rather than the rules discussed below. However, under the proposed changes to the market risk rules, “residual securitization positions” — which are defined in the proposed market risk rules as any securitization position that is required to be deducted from capital under the Final Rules or the parallel existing U.S. capital rules for general

\textsuperscript{21} \textit{Id.} at 69,327.

\textsuperscript{22} \textit{Id.} at 69,419 (section 42(a)(5)).
banks\textsuperscript{23} – are required to be held in the banking book, subject to a limited exception for market makers.\textsuperscript{24}

\textbf{A. Ratings-Based Approach}

Under the hierarchy of approaches for calculating capital under the Final Rules, if a securitization exposure has a rating from one or more major credit rating agencies, a bank that invests in that exposure will calculate the associated risk-based capital requirement under a ratings-based approach (RBA). Since most securitization exposures that banks would acquire as investors are rated, the RBA is the main approach of interest to banks acting as investors. This is consistent with current U.S. risk-based capital requirements, though Basel II and the Final Rules vary the details of the RBA significantly from the current U.S. rules.

The following table sets out the main features of the RBA under the current U.S. rules and the Final Rules. The table uses S&P rating categories by way of example, but the rules apply equally to equivalent ratings from the other nationally recognized statistical rating organizations recognized by the SEC's Division of Market Regulation.\textsuperscript{25}

\begin{flushleft}
\textsuperscript{23} Market Risk NPR, \textit{supra} note 7, at 55,972.
\textsuperscript{24} \textit{Id.} at 55,964.
\textsuperscript{25} Adopting Release, \textit{supra} note 1, at 69,401-02 (section 2) (definitions of “external rating” and “nationally recognized statistical rating organization (NRSRO)").
\end{flushleft}
For investing banks, one rating is sufficient. If there are multiple ratings on a particular position (including any rating inferred as described infra), the lowest solicited rating governs.\footnote{Id. at 69,421 (section 43(b)(2)); NPR, supra note 4, at 55,938 (section 43(b)(2)).} The credit rating must cover all payments due on the exposure, including both principal and interest if the exposure features both types of payments. Also, the rating must be published in an accessible form and be included in the transition matrices published by the rating agency.\footnote{Adopting Release, supra note 1, at 69,401 (section 2) (definition of “external rating”). The Final Rules do not implement ¶ 555(d) of Basel II, which requires banks to apply external ratings “consistently across a given type of securitisation exposure” and forbids a bank to rely on different rating agencies for external ratings of different tranches from the same securitization. Presumably the Agencies thought that the combination of market discipline and supervisory discretion made these anti-abuse rules unnecessary.}
While the current U.S. rules specify only a single risk weight for any given rating, the Final Rules (consistent with Basel II) differentiate within a single rating depending upon the seniority of the exposure and the granularity of the underlying pool. For these purposes, a securitization exposure is "senior" if it has a first priority claim on the cash flows from the underlying exposures. When determining whether a securitization exposure has a first priority claim on the cash flows from the underlying exposures, a bank is not required to consider amounts due under interest rate or currency derivative contracts, fees due, or other similar payments.\(^{28}\)

In reviewing the NPR, some market participants had wondered about the effect of time tranche on seniority. The Adopting Release addresses this point, indicating that "if multiple tranches of a securitization share the transaction's highest rating, only the tranche with the shortest remaining maturity would be treated as senior, since other tranches with the same rating would not have a first claim to cash flows throughout their lifetimes."\(^{29}\)

For purposes of the Final Rules, the granularity of a pool is determined using an "effective" number of exposures in the pool, rather than the gross number.\(^{30}\) A pool is treated as granular if its effective number of exposures is six or greater. The effective-number-of-exposures approach is meant to

\[ N = \frac{(\sum_i EAD_i)^2}{\sum_i EAD_i^2} \]

\(^{28}\) Id. at 69,404 (section 2) (definition of "senior securitization exposure").

\(^{29}\) Id. at 69,363.

\(^{30}\) As a general matter, the effective number of exposures (or "N") is calculated using the formula below, where EAD, represents the exposure at default associated with the \(i\)th instrument in the pool of underlying exposures.

Id. at 69,421, 69,424 (sections 43(b)(2) and 45(e)(6)).
appropriately assess the diversification of pools that have individual underlying exposures of different sizes. An approach that simply counts the gross number of underlying exposures in a pool treats all exposures in the pool equally. This simplifying assumption could radically overestimate the granularity of a pool with numerous small exposures and one very large exposure. The effective exposure approach captures the notion that the risk profile of such an unbalanced pool is more like a pool of several medium-sized exposures than like a pool of a large number of equally sized small exposures.\(^{31}\)

Notwithstanding the insight above, the Agencies also recognize that in most cases the exposures in a securitized pool will be of generally the same size. The requirement that banks use an effective number of exposures is largely meant to avoid abuse. Consequently, the Final Rules generally permit banks to assume (for this purpose) that the effective number of exposures (referred to as "N") is six or more if either (a) the notional number of exposures is twenty-five or more or (b) all of the exposures are retail exposures. The exception to this general rule, which should cover the anti-abuse concern, is that a bank is required to actually calculate N if the bank knows or has reason to know that N is less than six.\(^{32}\)

**B. Inferred Ratings**

Besides explicitly rated exposures, the RBA is also mandatory for any exposure where a rating can be inferred, as follows. An inferred rating may (and must) be applied to a securitization exposure when:

(1) The securitization exposure does not have an external rating; and

\(^{31}\) *Id.* at 69,369.

\(^{32}\) *Id.* at 69,421 (section 43(b)(2)(i)(A)).
(2) Another securitization exposure issued by the same issuer and secured by the same underlying exposures:

(i) Has an external rating;
(ii) Is subordinated in all respects to the unrated securitization exposure;
(iii) Does not benefit from any credit enhancement that is not available to the unrated securitization exposure; and
(iv) Has an effective remaining maturity that is equal to or longer than that of the unrated securitization exposure.33

The inferred rating that will apply to the unrated exposure in these circumstances is the rating on the reference junior rated exposure.

C. Exceptions to RBA

There is an exception to the RBA for interest-only mortgage-backed securities. Regardless of their rating, these securities may never have a risk weight of less than 100%.34 Also, credit-enhancing interest-only strips are not subject to the RBA (and must be deducted from capital), regardless of the underlying asset class.35

V. BANKS AS ORIGINATORS

In addition to the specific securitization framework, the more general changes in the risk-based capital framework for retail and wholesale credit exposures under the Final Rules and Basel II are likely to influence the actions of banks as originators of securitizations. One of the regulators’ explicit goals in the process of developing Basel II has been to eliminate, or at least minimize, opportunities for perceived “regulatory arbitrage,”

33. Id. at 69,402 (section 2) (definition of “inferred rating”).
34. Id. at 69,420 (section 42(j)).
35. Id. at 69,419 (section 42(a)(1)).
where transactions are executed to achieve reductions in capital requirements that are not supported by commensurate reductions in the originator’s risk position. If and to the extent that securitizations by banks have been wholly or partially motivated by regulatory arbitrage, that motivation should be reduced by the greater risk sensitivity of the new framework.

Whether this will reduce volume or alter issuance patterns from bank originators remains to be seen, but it seems certain that banks will continue to access the securitization markets as originators because of other benefits. For banks that do so, the Final Rules include qualitative regulations relating to the process along with the quantitative risk-based capital calculations.

A. Regulating the Securitization Process

The qualitative regulations for originators include “operational requirements” for traditional and synthetic securitizations generally, as well as rules relating to a number of common features in securitizations. The features that are specifically regulated include clean-up calls, servicer advance facilities, early amortization facilities, and representations and warranties. Implicit recourse is also addressed. The operational requirements for synthetic securitizations are discussed infra Part VIII.A.

1. Operational Requirements for Traditional Securitizations

   Early in the consultative process for Basel II, one of the consultative documents referred to operational criteria for traditional securitizations as “requirements for achieving a clean break.” That is still very much their flavor. Under the Final Rules, in order for an originating bank to exclude securitized assets when calculating its risk-based capital requirements, the following “operational requirements” must be satisfied:

   - the transfer must be considered a sale under GAAP;

the bank must have transferred to third parties credit risk associated with the transferred assets; and 
any clean-up calls associated with the securitization must satisfy the requirements discussed infra Part V.A.2.

These requirements differ in several respects from the parallel requirements in Basel II. First, Basel II does not require a sale under applicable accounting rules. It includes a number of requirements that echo the requirements for sale treatment under current U.S. GAAP but does not actually require sale treatment. This could become an issue, as the Financial Accounting Standards Board is expected to propose significant changes to the applicable accounting standard in 2008. On this point, the Adopting Release states: “if GAAP in this area were to change materially in the future, the [A]gencies would reassess, and possibly revise, the operational standards.”

Second, the U.S. requirement that credit risk be transferred differs from Basel II, which requires the transfer of “significant” credit risk. The Adopting Release indicates that prior guidance provided by the Agencies “to assist banks with assessing the extent to which they have transferred credit risk and, consequently, may recognize any reduction in required regulatory capital” will generally still apply.

Third, the Final Rules omit the following additional requirements that appear in Basel II:

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37. Basel II ¶ 554(b) includes requirements that “the transferor does not maintain effective or indirect control over the transferred exposures” (including by way of an option to repurchase the exposures) and that the assets are “legally isolated from the transfer,” and ¶ 554(d) requires that the holders of beneficial interests in the SPE that holds the exposures after the transfer must have the right to pledge or exchange them without restriction. These requirements parallel all or part of paragraphs 9(c), 9(a) and 9(b), respectively, of the Financial Accounting Standards Board’s Statement No. 140, which sets out the requirements for sale treatment under U.S. GAAP.

38. Adopting Release, supra note 1, at 69,361.

The securities issued are not obligations of the transferor. Thus, investors who purchase the securities only have claim to the underlying pool of exposures[;]40 and

The securitisation does not contain clauses that (i) require the originating bank to alter systematically the underlying exposures such that the pool’s weighted average credit quality is improved unless this is achieved by selling assets to independent and unaffiliated third parties at market prices; (ii) allow for increases in a retained first loss position or credit enhancement provided by the originating bank after the transaction’s inception; or (iii) increase the yield payable to parties other than the originating bank, such as investors and third-party providers of credit enhancements, in response to a deterioration in the credit quality of the underlying pool.41

The first of these two omitted paragraphs may have been viewed as redundant with the requirement of a GAAP sale. The Agencies presumably believe that the issues dealt with in the second omitted paragraph are adequately addressed by other U.S. guidance.

2. Operational Requirements for Clean-Up Calls

As noted in Part III.A.1, supra, and Part VIII.A, infra, one of the operational requirements for both traditional and synthetic securitizations is that any clean-up calls included in the transaction meet their own operational requirements. Specifically, any clean-up call must:

(i) Be exercisable solely at the discretion of the originating bank or servicer;
(ii) Not be structured to avoid allocating losses to

40. BASEL II, supra note 3, ¶ 554(c).
41. Id. ¶ 554(f).
securitization exposures held by investors or otherwise structured to provide credit enhancement to the securitization (for example, to purchase non-performing underlying exposures); and

(iii) (A) For a traditional securitization, be exercisable only when 10[\%] or less of the principal amount of the underlying exposures or securitization exposures (determined as of the inception of the securitization) is outstanding. (B) For a synthetic securitization, be exercisable only when 10[\%] or less of the principal amount of the reference portfolio of underlying exposures (determined as of the inception of the securitization) is outstanding.\textsuperscript{42}

The Adopting Release contains the following helpful guidance as to the application of the 10[\%] limit in paragraph (iii)(A) to master trust issuances:

where a securitization SPE is structured as a master trust, a clean-up call with respect to a particular series or tranche issued by the master trust would meet criteria (iii)(A) and (iii)(B) so long as the outstanding principal amount in that series was 10[\%] or less of its original amount at the inception of the series.\textsuperscript{43}

3. Servicer Advance Facilities

Another common feature in securitizations that is specifically regulated by Basel II (and the Final Rules) is the servicer advance. The Final Rules use the phrase "servicer cash advance facility" to refer to this feature.\textsuperscript{44} While these facilities have traditionally been subject to scrutiny to assure that they did

\textsuperscript{42} Adopting Release, supra note 1, at 69,399 (section 2) (definition of "eligible clean-up call").
\textsuperscript{43} Id. at 69,361.
\textsuperscript{44} Id. at 69,404 (section 2) (definition of "servicer cash advance facility").
not act as a credit recourse, Basel II (and the Final Rules) focus on a different question: whether the servicer should be required to hold capital against the undrawn portion of any commitment it may have to make advances. The answer is that a bank is not required to hold capital against the undrawn portion of an "eligible servicer cash advance facility," but is required to calculate capital with respect to any cash advance facility that does not meet the eligibility requirements in the same manner as it would for any other undrawn securitization exposure. In any case, a servicer is required to hold capital against the outstanding amount of any advances.

The eligibility requirements for a servicer cash advance facility are:

1. The servicer is entitled to full reimbursement of advances, except that a servicer may be obligated to make non-reimbursable advances for a particular underlying exposure if any such advance is contractually limited to an insignificant amount of the outstanding principal balance of that exposure;
2. The servicer's right to reimbursement is senior in right of payment to all other claims on the cash flows from the underlying exposures of the securitization; and
3. The servicer has no legal obligation to, and does not, make advances to the securitization if the servicer concludes the advances are unlikely to be repaid.

These requirements are more stringent than Basel II and the requirements for "mortgage servicer cash advances" under the current U.S. rules. Under Basel II, only requirements (1) and (2) apply (although requirement (1) does not have the carve-out for

46. Adopting Release, supra note 1, at 69,420 (section 42(i)).
47. Id. at 69,360.
48. Id. at 69,404 (section 2) (definition of "servicer cash advance facility").
insignificant non-reimbursable advances). Basel II also allows national discretion to require no capital against a servicer cash advance facility that is unconditionally cancelable without prior notice. The Agencies did not exercise this option in the Final Rules. The current requirements for mortgage servicer cash advances also parallel requirements (1) and (2). Neither Basel II nor the current rules include requirement (3).

4. Early Amortization Features

The Final Rules impose a new “managed assets” capital charge for revolving credit securitizations that involve early amortization features. This capital charge applies to the portion of the securitized assets that has been transferred to investors in an accounting sale. In effect, this means that the accounting sale is not fully recognized for risk-based capital purposes. The Agencies believe that early amortization features place liquidity and other risks on originating banks that justify additional capital, at least in some circumstances.

The capital charge functions by applying a conversion factor to the product of (1) the EAD (exposure at default) associated with the investor interests, (2) $K_{IRB}$ for the underlying exposures (as discussed infra Part V.B.3) and (3) 12.5. This yields a risk-weighted asset amount for the investor interests, which would be included in the bank’s aggregate risk-weighted securitization assets amount.

The conversion factor to be used varies depending on the specific terms of the early amortization feature and the nature of the securitized assets. Concerning the terms of the early amortization feature, additional capital will only be required if the trigger for early amortization relates to either the performance of the securitized assets or the originating bank. Basel II includes additional exclusions from the capital charge relating to early amortization features which do not appear in the Final Rules.

50. BASEL II, supra note 3, ¶ 582.
51. Adopting Release, supra note 1, at 69,399 (section 2) (definition of “early amortization provision”).
These exclusions relate to:

- securitizations with a replenishment structure in which the individual underlying exposures do not revolve and the early amortization ends the ability of the originating bank to add new underlying exposures to the securitization;
- securitizations of revolving assets where the early amortization features mimic term structures in that the risk of the underlying exposures does not return to the originating bank; and
- securitizations where investors remain fully exposed to future draws on the underlying exposures even after the occurrence of early amortization.

A "controlled" early amortization feature will yield lower capital requirements than an "uncontrolled" one. A controlled early amortization feature is one that meets all of the following conditions:

1. The originating bank has appropriate policies and procedures to ensure that it has sufficient capital and liquidity available in the event of an early amortization;
2. Throughout the duration of the securitization (including the early amortization period), there is the same pro rata sharing of interest, principal, expenses, losses, fees, recoveries, and other cash flows from the underlying exposures based on the originating bank's and the investors' relative shares of the underlying exposures outstanding measured on a consistent monthly basis;
3. The amortization period is sufficient for at least 90[\%] of the total underlying exposures outstanding at the beginning of the early amortization period to be repaid or recognized as in default; and
4. The schedule for repayment of investor principal is not more rapid than would be allowed by straight-
Controlled amortization features have generally not been used to date in the U.S. market.

Concerning asset type, securitizations of balances arising under uncommitted revolving retail credit facilities (most notably, credit card receivables) will have a lower conversion factor than securitizations of other revolving credit facilities (either committed or non-retail). For uncommitted revolving retail credit facilities, the Final Rules (like Basel II) build on the fact that most credit card securitizations require that excess spread be trapped as an additional credit enhancement for investors if the amount of excess spread falls below a specified trapping point. If a transaction does not have this feature, a trapping point of 4.5% will be used for the calculation below.

Table H – Controlled Early Amortization Provisions

<table>
<thead>
<tr>
<th>Retail Credit Lines</th>
<th>3-month average excess spread Conversion Factor (CF)</th>
<th>Committed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>133.33% of trapping point or more</td>
<td>90% CF</td>
</tr>
<tr>
<td></td>
<td>less than 133.33% to 100% of trapping point</td>
<td>1% CF</td>
</tr>
<tr>
<td></td>
<td>less than 100% to 75% of trapping point</td>
<td>2% CF</td>
</tr>
<tr>
<td></td>
<td>less than 75% to 50% of trapping point</td>
<td>10% CF</td>
</tr>
<tr>
<td></td>
<td>less than 50% to 25% of trapping point</td>
<td>20% CF</td>
</tr>
<tr>
<td></td>
<td>less than 25% of trapping point</td>
<td>40% CF</td>
</tr>
</tbody>
</table>

| Non-retail Credit Lines | 90% CF | 90% CF |

52. Id. at 69,398 (section 2) (definition of "controlled early amortization feature").
Table I – Non-Controlled Early Amortization Provisions

<table>
<thead>
<tr>
<th>Retail Credit Lines</th>
<th>Uncommitted</th>
<th>Committed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3-month average excess spread</td>
<td>Conversion Factor (CF)</td>
</tr>
<tr>
<td></td>
<td>133.33% of trapping point or more</td>
<td>0% CF</td>
</tr>
<tr>
<td></td>
<td>less than 133.33% to 100% of trapping point</td>
<td>5% CF</td>
</tr>
<tr>
<td></td>
<td>less than 100% to 75% of trapping point</td>
<td>15% CF</td>
</tr>
<tr>
<td></td>
<td>less than 75% to 50% of trapping point</td>
<td>50% CF</td>
</tr>
<tr>
<td></td>
<td>less than 50% of trapping point</td>
<td>100% CF</td>
</tr>
</tbody>
</table>

| Non-retail Credit Lines | 100% CF | 100% CF |

The conversion factor is a function of the relationship between the three month average excess spread and the trapping point (or the deemed trapping point of 4.5%). The applicable conversion factors, depending upon the nature of the securitized assets and whether or not the early amortization feature is controlled are set out in Tables H and I above, which appear in the Adopting Release. 53

If a securitization contains a mix of retail and nonretail exposures or committed and uncommitted exposures, the originating bank may take a pro rata approach to determining the risk-based capital requirement, if feasible. Otherwise, the bank must treat the securitization as a securitization of nonretail exposures, if it includes any nonretail exposures, and as a securitization of committed exposures, if it includes any committed exposures.

53. *Id.* at 69,374-75.
5. Credit-Enhancing Representations and Warranties

Consistent with the current U.S. rules, the Final Rules recognize that one form of recourse relating to securitized assets is a warranty of collectibility or other representation or warranty that obligates an originating bank to protect another party from credit losses on the securitized assets. To differentiate representations and warranties of this type from standard representations and warranties designed to assure that a buyer receives assets consistent with the business understanding, the Final Rules define the term "credit-enhancing representations and warranties" and include credit-enhancing representations and warranties in the definition of securitization exposure.

Also consistent with the current U.S. rules, the Final Rules provide a limited carve out from the definition of "credit-enhancing representations and warranties" for two features that often appear in mortgage securitizations and whole loan sales in the secondary market for mortgages: early default clauses and premium refund clauses. Early default clauses require sellers to repurchase mortgages that default soon after their origination or sale. Premium refund clauses require the return of some or all of the premium (if any) realized by the seller if a mortgage prepays soon after sale. The Final Rules provide that the following features are not credit-enhancing representations and warranties:

- early default clauses and similar warranties that permit the return of, or premium refund clauses that cover, first-lien residential mortgage exposures for a period not to exceed 120 days from the date of transfer, provided that the date of transfer is within one year of origination of the residential mortgage exposure; and
- premium refund clauses that cover underlying exposures guaranteed, in whole or in part, by the U.S. government, a U.S. government agency, or

54. Id. at 69,398 (section 2) (definition of "credit-enhancing representations and warranties").
55. Id. at 69,404 (section 2) (definition of "securitization exposure").
a U.S. government sponsored enterprise, provided that the clauses are for a period not to exceed 120 days from the date of transfer.

6. Implicit Recourse

Consistent with Basel II, if a bank provides support to a securitization beyond the amount of support required by a pre-existing contractual obligation, then the bank will be required to:

- hold capital against the underlying exposures as if they had not been securitized;
- deduct any related gain on sale from tier 1 capital; and
- disclose publicly the fact that it provided implicit support and the regulatory consequences of that action.

The bank’s primary supervisor will also have the discretion to require the first two actions described above with respect to the bank’s other securitizations.56

B. Calculating Risk-Based Capital on Retained Interests

Once a bank, as originator, completes a securitization that satisfies the general operational requirements and any requirements relating to particular transaction features, the next question is how the bank should calculate its risk-based capital on any interests it retained in the securitized assets. Often in securitizations the originator realizes a gain on the sale of the securitized assets, and all or part of the gain results from the retention by the bank (or its bankruptcy remote subsidiary) of a subordinated interest-only (or IO) strip which represents the rights to excess cash flows from the securitized assets after other securitization exposures have received the cash flows to which they are entitled. These subordinated IO strips are referred to in the Final Rules as “credit-enhancing interest-only strips” (or CEIOs), and they are subject to special capital requirements. Originators

56. Id. at 69,361, 69,420 (section 42(h)).
may also retain securitization exposures representing a portion of
the principal balances securitized or non-subordinated IO strips.
The general securitization hierarchy of approaches to calculating
risk-weighted capital and some other coordinating rules apply to
the capital treatment of these various retained interests.

1. Gain-on-Sale and CEIOs

First, a bank is required to deduct from tier 1 capital any
non-cash, after-tax gain-on-sale resulting from a securitization and
deduct from total capital the portion of any CEIO that does not
constitute gain-on-sale. CEIOs and any other amounts required
to be deducted from total capital are to be deducted 50% from tier
1 capital and 50% from tier 2 capital. If the portion to be deducted
from tier 2 capital exceeds the bank's tier 2 capital prior to the
deduction, then the excess must be deducted from tier 1 capital. A
bank may calculate any amount required to be deducted from
regulatory capital net of any associated deferred tax liabilities.

2. Rated Exposures

Next, a bank is required to apply the RBA to any
remaining retained interests that are externally rated or for which
a rating can be inferred (as described supra Part IV). Unlike
investors, an originating bank must have two external (or inferred)
ratings in order to use the RBA. This extra rating requirement for
originating banks is not present in Basel II, but it is similar to the
existing U.S. rules.

57. Id. at 69,419 (section 42(a)(1)); see also id. at 69,401 (section 2) (definition of
"gain-on-sale"). Servicing assets, which are somewhat similar to interest only strips,
are not necessarily subject to deduction. They are not specifically addressed by the
Final Rules, but they are covered by the general hierarchy discussed here. They are
excluded from the Market Risk Rules as intangible assets. Market Risk NPR, supra
note 7, at 55,971 (clause (3)(i) of the definition of "covered position").

58. Adopting Release, supra note 1, at 69,419 (section 42(c)).

59. In the current U.S. rules, the two-rating requirement applies to "non-traded
3. Supervisory Formula

If any retained interests not deducted from capital (as described *supra* Part V.B.1) are not eligible for the RBA, then the bank is required to determine capital using a supervisory formula approach (or SFA). The SFA works from the sum of (a) the capital requirement that would apply if the underlying assets were held directly on the bank’s balance sheet plus (b) expected credit losses (ECL). Using a blend of credit risk modeling and supervisory judgment, the supervisory formula is very complicated and requires seven inputs. A bank may not use the SFA for a particular exposure unless the bank has the ongoing ability to calculate each of these seven inputs. The seven inputs are:

1. the amount of the underlying exposures (UE);
2. the securitization exposure’s proportion of the tranche in which it resides (TP);
3. the sum of the risk-based capital requirement and ECL for the underlying exposures as if they were held directly on the bank’s balance sheet, divided by the amount of the underlying exposures ($K_{IRB}$);
4. the credit enhancement level (L) of the tranche;
5. the thickness (T) of the tranche;
6. the effective number of underlying exposures ($N$)\(^{60}\) in the securitization; and
7. the exposure-weighted average loss given default (EWALGD) for the securitization.\(^{61}\)

A bank using the SFA would compute the risk-based capital requirement for an exposure by plugging these inputs into the formula set out on *Exhibit A* to this Article. A bank that cannot use the SFA to calculate the risk-based capital requirement

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\(^{60}\) *See supra* Part IV.

\(^{61}\) *See infra* Exhibit A.
for an exposure that would otherwise be subject to the SFA must instead deduct the position from capital.

This creates an issue for securitizations where the underlying exposures are not retail, wholesale, equity or securitization exposures, in that the Agencies have not approved any method for a bank to calculate $K_{IRB}$ for exposures that fall outside of these four categories. The Final Rules fill this gap by requiring banks to deduct from capital any securitization exposures where (a) the underlying exposures do not fall in any of the four regulatory categories, and (b) the exposure does not qualify for the RBA or the internal assessment approach for conduit exposures (and has not already been dealt with as gain-on-sale or CEIO).\(^6\) The Agencies have identified music concert and film receivables as assets that do not fall in any of the four categories.\(^3\)

Roughly speaking, the SFA places each exposure relating to a particular securitization on a continuum in terms of the order in which credit losses on the underlying exposures are absorbed. This continuum is illustrated in the figure below. The vertical lines marked T1, T2 and T3 mark the dividing points between the most subordinated tranche (which absorbs the first losses, from 0 to T1) the intermediate tranche (absorbing losses from T1 to T2) and the senior tranche (absorbing only losses in excess of T2). To the extent that a position falls to the left of $K_{IRB}$, a bank that holds that position is required to hold dollar-for-dollar capital against the position. To the right of $K_{IRB}$, the capital charge declines rapidly, until it reaches the capital floor.

\(^6\) Adopting Release, supra note 1, at 69,420 (section 42(g)).
\(^3\) Id. at 69,359.
4. Maximum Risk-Based Capital Requirement and Overlap Rules

Since originating banks may have multiple retained interests in a single securitization, as well as a capital charge relating to any early amortization feature, there is at least a theoretical possibility that the sum of the risk-based capital requirements for these retained interests could exceed $K_{IRB}$ for the underlying exposures. The Final Rules address this possibility by applying a cap to an originating bank’s risk-based capital requirements for a particular securitization. The cap equals $K_{IRB}$ for the underlying exposure, but any gain-on-sale or CEIO is excluded from this cap. The cap also does not apply if any of the underlying exposure is not a retail, wholesale, equity, or securitization exposure. The cap is consistent with Basel II and more favorable to originating banks than the current U.S. capital rules.

64. *Id.* at 69,419 (section 42(d)).
The Final Rules also avoid duplicative capital requirements for overlapping exposures held by a single bank.\textsuperscript{65}

5. Small Business Rule

As required by a federal statute,\textsuperscript{66} the current U.S. capital rules include a special set of more lenient rules for the transfer of small business loans and leases with recourse by well-capitalized depository institutions. The Final Rules generally preserve these more lenient rules,\textsuperscript{67} which permit a well capitalized bank that sells small business loan or leases with recourse to hold capital only against the recourse obligation if the transaction qualifies as a sale under GAAP and other specified requirements are met.

VI. ABCP CONDUIT EXPOSURES

A. Continued Relief for Conduits Consolidated Under FIN 46

In 2003, the Financial Accounting Standards Board adopted (and revised) Interpretation No. 46: Consolidation of Variable Interest Entities (FIN 46).\textsuperscript{68} Under FIN 46, many banks that sponsored multi-seller ABCP conduits would have been required to consolidate the conduits' assets and liabilities in the sponsoring bank's financial statements. Some sponsors and conduits modified their contractual arrangements so that consolidation was not required, while other sponsors consolidated one or more conduits. The Agencies did not believe that this GAAP consolidation of conduits, when applicable, would yield appropriate risk-based capital treatment of sponsoring banks' exposures to ABCP conduits. Consequently, the Agencies adopted rules that permitted sponsoring banks to exclude from risk-weighted assets any assets of ABCP conduits that the banks

\textsuperscript{65} Id. at 69,419-20 (section 42(f)).
\textsuperscript{66} 12 U.S.C. § 1835 (2000) places a cap on the risk-based capital requirement applicable to a well-capitalized depository institution that transfers small business loans with recourse.
\textsuperscript{67} Adopting Release, \textit{supra} note 1, at 69,420 (section 42(k)).
\textsuperscript{68} Fin. Accounting Standards Bd., FASB Interpretation No. 46: Consolidation of Variable Interest Entities (revised Dec. 2003).
are required to consolidate under FIN 46. The Final Rules continue this exclusion of consolidated conduit assets from a bank’s risk-weighted assets. Otherwise, however, the Final Rules substantially change the risk-based capital rules applying to banks’ ABCP conduit exposures.

B. The End of the Liquidity vs. Credit Enhancement Distinction

For most of their history, bank-sponsored ABCP conduits have relied upon a distinction drawn in the original Basel Accord between “commitments” and “direct credit substitutes.” Although the operative definitions of these categories and the details of their risk-based capital treatment evolved substantially, especially over the last ten years, commitments have always had a much lower credit conversion factor (zero through September 2005 and 10% thereafter for ABCP liquidity commitments with a tenor of one year or less) than direct credit substitutes (at least 100%). “Liquidity facilities” provided by banks to conduits can, if properly structured, qualify as commitments and receive this favorable capital treatment. The key feature in achieving this treatment is that true liquidity facilities are conditional; they cannot be drawn to cover defaults on the assets owned by the conduit.

Most conduits also need some program-wide credit enhancement, which has been unconditionally available. Bank facilities that fill this need are virtually always direct credit substitutes and require much more capital than liquidity commitments in relation to the amount of the facility. However, while conventional ABCP conduits generally need liquidity facilities that cover all of their outstanding commercial paper, the rating agencies have generally only required partial coverage (usually 10% or less) by program-wide credit enhancement.

Given the big differences in capital treatment between liquidity and credit enhancement facilities, the line between these two categories has been very important and has received a great


70. Adopting Release, supra note 1, at 69,420 (section 42(I)).
deal of regulatory attention. After operating for nearly twenty years on the basis of less formal guidance, in 2004 the Agencies adopted eligibility standards for liquidity facilities to continue to receive favorable capital treatment.\footnote{Id. at 69,419 (section 42(d)).} Implementation issues relating to those standards led the Agencies to release further interagency guidance on the topic.\footnote{See SR Letter 05-13, Interagency Guidance on the Eligibility of Asset-Backed Commercial Paper Liquidity Facilities and the Resulting Risk-Based Capital Treatment (Aug. 4, 2005); see also Letter from the OCC and FRB to the American Securitization Forum (Mar. 1, 2007).} Basel II also contains eligibility standards for liquidity facilities, but they apply primarily to the standardized approach, which is not included in the Final Rules.\footnote{BASEL II, supra note 3, ¶ 578. As indicated above, the Agencies are expected to propose a U.S. version of the standardized approach in 2008.}

In a major change from this historical approach, the Final Rules do not distinguish between true or eligible liquidity, on one hand, and direct credit substitutes or credit enhancement, on the other, in terms of the applicable conversion factor or risk weight. Section 42(e)(2) states:

The amount of an off-balance sheet securitization exposure that is not an OTC derivative contract (other than a credit derivative) is the notional amount of the exposure. For an off-balance-sheet securitization exposure to an ABCP program, such as a liquidity facility, the notional amount may be reduced to the maximum potential amount that the [bank] could be required to fund given the ABCP program’s current underlying assets (calculated without regard to the current credit quality of those assets).\footnote{Adopting Release, supra note 1, at 69,419 (section 42(e)(2)).}

Effectively this applies a 100% credit conversion factor to both liquidity and credit enhancement facilities, subject to the ability to reduce the notional amount to the maximum potential funding amount (which would usually be relevant only for liquidity
facilities). Any difference in the risk-based capital required for these facilities under the Final Rule will depend upon other factors.

This is consistent with the IRB approach under Basel II, which also generally does not distinguish between eligible liquidity (in the sense commonly used in the U.S. markets) and credit enhancement facilities. Basel II does provide a favorable credit conversion factor for a narrower category of liquidity facilities that are only available in the event of general market disruption,75 but the Final Rules do not.

C. Risk-Based Capital Calculations

1. Rated Exposures

Assuming that a bank does not hold any CEIOs or gain-on-sale relating to conduit assets, the first possible method for calculating capital relating to an exposure to a conduit is the RBA. For a bank that sponsors the conduit that benefits from an exposure, the RBA is only available if the sponsor's actual exposure (e.g., a liquidity commitment or credit enhancing letter of credit) has at least two qualifying external ratings, either directly or by inference (as described supra Part IV). The two-rating requirement applies because sponsors of conduits fall within the definition of “originating bank.”76 It appears that only one rating would be required if the bank analyzing an exposure under the RBA was not the sponsor of the conduit and did not directly or indirectly originate the underlying exposures.77

The definition of “ABCP program sponsor” covers banks that establish the program, approve sellers to, or exposures purchased by, the program or administer the program by providing any of a variety of specified services.78 Merely providing a liquidity facility to a program does not appear to make a bank a “sponsor.”

75. BASEL II, supra note 3, ¶ 580, 638.
76. Adopting Release, supra note 1, at 69,403 (section 2) (definition of “originating bank”).
77. Id.
78. Id. The specified services include underwriting or placing the ABCP, which has generally been seen by the market as a function separate from the sponsor.
This differs from Basel II, which indicates that a bank "would generally be considered a sponsor" if the bank provides any of a variety of services or facilities, including "liquidity . . . enhancements." 79

The Final Rules provide some specific guidance on applying the RBA to a liquidity facility. The definition of "senior securitization exposure" (which is relevant in determining which column in the RBA risk weight table to use) states:

Both the most senior commercial paper issued by an ABCP program and a liquidity facility that supports the ABCP program may be senior securitization exposures if the liquidity facility provider's right to reimbursement of the drawn amounts is senior to all claims on the cash flows from the underlying exposures except amounts due under interest rate or currency derivative contracts, fees due, or other similar payments. 80

This guidance differs from Basel II, which says the following about the seniority of liquidity facilities:

Usually a liquidity facility supporting an ABCP programme would not be the most senior position within the programme; the commercial paper, which benefits from the liquidity support, typically would be the most senior position. However, if the liquidity facility is sized to cover all of the outstanding commercial paper, it can be viewed as covering all losses on the underlying receivables pool that exceed the amount of over-collateralisation/reserves provided by the seller and as being most senior. 81

79. BASEL II, supra note 3, ¶ 543(b).
80. Adopting Release, supra note 1, at 69,404 (section 2) (definition of “senior securitization exposure”).
81. BASEL II, supra note 3, ¶ 613(c).
The U.S. guidance is more favorable to banks than at least the first sentence above, and better reflects the application of the general concept of "senior securitization exposure" to liquidity facilities in the U.S. market.

The Adopting Release provides additional interpretive guidance relating to the application of the definition of "external rating" to a liquidity facility. To qualify as an "external rating" for the RBA, a rating must "fully reflect[] the entire amount of credit risk with regard to all payments owed to the holder of the exposure."82 However:

A commenter asked whether the applicable NRSRO83 rating criteria must cover all contractual payments owed to the bank holding the exposure, or only contractual principal and interest. For example, liquidity facilities typically obligate the seller to make certain future fee and indemnity payments directly to the liquidity bank. These ancillary obligations, however, are not an exposure to the ABCP program and would not normally be covered by NRSRO rating criteria, which focus on the risks of the underlying assets and the exposure's vulnerability to those risks. The agencies agree that such ancillary obligations of the seller need not be covered by the applicable NRSRO rating criteria for an exposure to be eligible for the IAA.84

2. Internal Assessment Approach

Traditionally, most liquidity and credit enhancement facilities for ABCP conduits have not received external ratings or been senior to positions from which ratings could be inferred. This would have tended to push ABCP exposures into the SFA, but banks that are active in this market were concerned that they often

82. Adopting Release, supra note 1, at 69,401 (definition of "external rating").
83. NRSRO stands for Nationally Recognized Statistical Rating Organization.
84. Adopting Release, supra note 1, at 69,365. IAA stands for Internal Assessments Approach.
would not have sufficient information to calculate capital requirements using that approach. In response, the Agencies, which have generally tried to accommodate banks' participation in this market, added an IAA to Basel II and the Final Rules. The IAA permits a bank to set the risk-based capital for conduit-related exposures based on the bank's internal assessment of the credit quality of the exposure. These internal assessments must map to ratings issued by external rating agencies.

A bank wishing to use the IAA must receive approval from its primary federal supervisor, in a process separate from overall approval to implement the new risk-based capital rules. The specific ABCP program must also qualify, and the bank must have initially assessed the exposure under consideration as at least investment grade. The eligibility criteria for banks and programs are set out in Section 44(a) and summarized infra. A bank that elects to use the IAA for any securitization exposures must use the IAA for all exposures that are eligible for the IAA.

To use the IAA, a bank must demonstrate to its primary federal supervisor that:

(i) The bank's credit assessments of securitization exposures are based on publicly available rating criteria used by one or more of the major external credit rating agencies and are consistent with those used in the bank's internal risk management process, management information reporting systems and capital adequacy assessment process.

(ii) The bank's assessment process identifies gradations of risk, and each of the bank's...
assessment categories corresponds to a rating category used by one or more of the major rating agencies.

(iii) The bank’s assessment process, particularly the stress test factors used to set credit enhancement, is at least as conservative as the most conservative of the publicly available criteria of the agencies that rate the commercial paper issued by the subject program. If there is a split between two or more agencies that rate the ABCP, the bank must use the stress factor that requires the most credit enhancement. If one of the rating agencies changes its methodology, the bank must use the revised methodology to evaluate whether the bank’s internal assessments should be revised.

(iv) The bank has an effective system of controls and oversight and an independent internal audit function that assesses the controls at least annually.

(v) The bank reviews and updates its internal assessments as new material information becomes available and at least annually.

(vi) The bank validates its assessment process on an ongoing basis and at least annually.\(^{87}\)

The Adopting Release clarifies that the reference to publicly available rating criteria in the IAA eligibility criteria does not mean that these criteria must be published formally by the NRSRO. While the agencies expect banks to rely on published rating criteria when these criteria are available, an NRSRO often delays publication of rating criteria for securitizations.

\(^{87}\) Adopting Release, *supra* note 1, at 69,421-22 (section 44(a)).
involving new asset types until the NRSRO builds sufficient experience with such assets. Similarly, as securitization structures evolve over time, published criteria may be revised with some lag. Especially for securitizations involving new structures or asset types, the requirement that rating criteria be publicly available should be interpreted broadly to encompass not only published criteria, but also criteria that are obtained through written correspondence or other communications with an NRSRO. In such cases, these communications should be documented and available for review by the bank’s primary Federal supervisor. The [A]gencies believe this flexibility is appropriate only for unique situations when published rating criteria are not generally applicable. 88

The Final Rules permit banks to apply the IAA to exposures relating to securitizations of assets that are not retail, wholesale, equity, or securitization exposures (non-IRB securitization exposures). Banks are required to deduct from capital all non-IRB securitization exposures unless the exposure qualifies for the RBA or the IAA. 89

The eligibility criteria relating to ABCP programs require that all ABCP issued by the program must have an external rating. In addition, the subject securitization exposure must meet the following eligibility criteria: (A) the bank initially rated the exposure at least the equivalent of investment grade; (B) the ABCP program has robust credit and investment guidelines for the underlying exposures; (C) the ABCP program performs a detailed credit analysis of the sellers of the exposures underlying the securitization exposure; (D) the ABCP program’s underwriting policy for the exposures underlying the securitization exposure establishes minimum asset eligibility criteria that include the prohibition of the purchase of assets that are significantly past due

88. Id. at 69,365.
89. Id. at 69,420 (section 42(g)).
or of assets that are defaulted, as well as limitations on concentration to individual obligors or geographic areas and the tenor of the assets to be purchased; (E) the aggregate estimate of loss on the exposures underlying the securitization exposure considers all sources of potential risk, such as credit and dilution risk; and (F) where relevant, the ABCP program incorporates structural features into each purchase of exposures underlying the securitization exposure to mitigate potential credit deterioration of the underlying exposures.90

The Adopting Release indicates that the criterion prohibiting purchase of assets that are defaulted or significantly past due would be met if:

The ABCP program does not fund underlying assets that are significantly past due or defaulted when placed into the program (that is, the program’s advance rate against such assets is 0 percent) and the securitization exposure is not subject to potential losses associated with these assets. The agencies observe that the rule does not set a specific number-of-days-past due criterion. In addition, the term ‘defaulted assets’ in [this] criterion [] does not refer to the wholesale and retail definitions of default in the final rule, but rather may be interpreted as referring to assets that have been charged off or written down by the seller prior to being placed into the ABCP program or to assets that would be charged off or written down under the program’s governing contracts.91

3. Other Approaches

If a conduit exposure is not eligible for the RBA, and the bank is not able to use the IAA or the SFA to calculate the capital requirement for the exposure, then the bank must deduct the

90. Id. at 69,422 (section 42(a)(2)-(3)).
91. Id. at 69,366.
amount of the exposure from capital. The Final Rules do not include a fall-back approach permitted by Basel II, which states that "on an exceptional basis and subject to supervisory consent," a bank may temporarily:

- apply to a liquidity facility the highest risk weight assigned under the standardized approach to any of the underlying individual exposures; and
- apply a credit conversion factor of (a) 50% for an eligible liquidity facility with an original maturity of one year or less, (b) 100% for an eligible liquidity with an original maturity of more than one year and (c) 20% for a facility that is only available in the case of general market disruption. 92

4. Calculation Rules

The definition of "amount" for securitization exposures states that, for a commitment, such as a liquidity facility extended to an ABCP program, "the notional amount may be reduced to the maximum potential amount that the [bank] could be required to fund" under the arrangement's documentation "calculated without regard to the current credit quality of those assets[]." 93 The Final Rules also avoid duplicative capital requirements on overlapping exposures held by the same bank and relating to a single conduit. The sum of the commitments under the liquidity and credit enhancement facilities extended to a conduit commonly exceed the amount of commercial paper outstanding. When this happens, a bank that has overlapping exposures "is not required to hold duplicative risk-based capital against the overlapping position. Instead, the [bank] may apply to the overlapping position the applicable risk-based capital treatment that results in the highest risk-based capital requirement." 94 This only applies when a single bank has overlapping exposures. If two separate banks have

92. BASEL II, supra note 3, ¶639.
93. Adopting Release, supra note 1, at 69,419 (section 42(e)(2)).
94. Id. at 69,419-20 (section 42(f)).
overlapping exposures, each calculates its risk-based capital requirement without reference to the other exposure.

5. Exclusion from Market Risk Rules

Consistent with the current U.S. capital rules, the proposed Market Risk Rules exclude “[a]ny position that, in form or substance, acts as a liquidity facility that provides support to [ABCP].” Capital for these facilities must be determined under the credit risk-based standards in the Final Rules.

VII. CREDIT RISK MITIGATION

The credit risk mitigation (CRM) rules in Basel II and the Final Rules regulate the impact that guaranties and financial collateral have on the risk-based capital requirements associated with an exposure. The CRM rules for securitization exposures differ from the rules for retail and wholesale exposures because the CRM rules for retail and wholesale exposures permit banks to substitute or adjust risk parameters of the underlying exposure based on eligible CRM. Since banks are not permitted to estimate risk parameters for securitization exposures, the retail and wholesale approach would not fit securitization exposures.

A. Scope – Wrapped Deals and the RBA

The CRM rules do not apply to possibly the most common transaction structure where investors in securitization exposures rely on a guarantee. If a securitization exposure is rated in part based on a surety bond or other guarantee (as would be the case in “wrapped” deals), then a bank will calculate the risk-based capital required for that exposure using the RBA and the actual rating of the transaction. Since the rating depends in part on the wrap, this capital treatment implicitly gives effect to the wrap as CRM without requiring (or permitting) an investor to go through the

95. Market Risk NPR, supra note 7, at 55,971 (section 2) (clause (3)(iii) of the definition of “covered position”).
96. Adopting Release, supra note 1, at 69,370.
CRM rules. The flip side of this approach is that a bank cannot double count the CRM by seeking to apply the CRM rules to further reduce the risk-based capital requirement for an exposure of this type. If the CRM is reflected in the rating that drives the RBA capital treatment, the same CRM may not also be used to reduce the capital requirement derived from the RBA.\textsuperscript{97}

In addition, the Adopting Release notes that:

> if a bank purchases an asset-backed security issued by a securitization SPE and purchases a credit derivative to protect itself from credit losses associated with the asset-backed security, the purchase of the credit derivative by the investing bank does not turn the traditional securitization into a synthetic securitization. Instead, the investing bank would be viewed as having purchased a traditional securitization exposure and would reflect the CRM benefits of the credit derivative through the securitization CRM rules . . . \textsuperscript{98}

If a bank provided a credit derivative or guarantee in the scenario described above, that credit derivative or guarantee would also be a securitization exposure.

\textbf{B. Financial Collateral}

The Final Rules and Basel II treat collateral and guaranties separately. This is important for synthetic securitizations. Although SPEs are not eligible guarantors for CRM purposes, an undertaking by an SPE can be used for CRM if the SPE’s obligations are collateralized with recognized collateral. The only collateral that will be recognized for CRM purposes is “financial collateral,” which is defined as cash, gold bullion, conforming residential mortgages, and specified types of marketable securities.\textsuperscript{99}

\textsuperscript{97} Id. at 69,424 (section 46(a)). The same principles apply under the IAA.

\textsuperscript{98} Id. at 69,327.

\textsuperscript{99} Id. at 69,401 (section 2) (definition of “financial collateral”). Non-financial
The risk-based capital requirement for a securitization exposure that is collateralized with financial collateral is determined by multiplying the risk-based capital requirement for the exposure without giving effect to the collateral times a factor that takes into account the current market value of the collateral and haircuts for market price volatility and (if applicable) foreign exchange volatility. With prior regulatory approval, a bank may calculate its own haircuts. Otherwise, the Final Rule provides standard supervisory haircuts.

C. Eligible Guarantors, Guaranties and Credit Derivatives

To be eligible as CRM, a guarantee or credit derivative must be issued by an eligible securitization guarantor and must satisfy the additional requirements specified below. Eligible securitization guarantor is defined to include:

(i) sovereign entities, some international organizations, the Federal Home Loan Banks, Farmer Mac, multi-lateral development banks, domestic and foreign banks, bank holding companies, some savings and loan holding companies and securities firms; and (ii) other entities (excluding SPEs) that have either (A) unsecured long-term debt ratings not lower than the A category or (B) a PD assigned by the bank under the rules for wholesale exposures that equates to at least the A category.

The additional requirements for a guarantee are that the guarantee must be in writing, must cover all or a pro rata portion of all contractual payments of the obligor on the reference

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100. Id. at 69,424 (section 46(b)).
101. Id. at 69,400 (section 2) (definition of “eligible securitization guarantor”).
exposure and must be unconditional and (except for breach of contract by the beneficiary) non-cancelable. It also must give the beneficiary a direct claim against the guarantor, must be legally enforceable in a jurisdiction where the guarantor has sufficient assets against which a judgment may be attached and enforced, and must require the guarantor to pay the beneficiary upon the obligor’s default without first requiring the beneficiary to demand payment from the obligor. Finally, it must not increase the beneficiary’s cost of credit protection in response to deterioration in the credit quality of the reference exposure and may not be provided by an affiliate of the bank, other than certain affiliates that are insured depository institutions, banks, securities brokers or dealers, or insurance companies.

A credit derivative must satisfy the eligible guarantee requirements described in the preceding paragraph and must be in the form of a credit default swap, nth-to-default swap, total return swap or other form approved by the applicable Agency. For credit default swaps and nth-to-default swaps, the contract must include failure to pay and insolvency credit events, must state who is responsible for determining if a credit event has occurred (which may not be the sole responsibility of the protection provider), and must give the protection purchaser the right to notify the protection provider of the occurrence of a credit event. For total return swaps, if the bank records net swap payments received as net income, the bank must also record offsetting deterioration in the value of the hedged exposure (either through reductions in fair value or by an addition to reserves). The eligibility standards also impose requirements as to the confirmation of the swap and any assignments by relevant parties and the terms and conditions of settlement.102

A bank that obtains an eligible credit derivative or other eligible guarantee from an eligible securitization guarantor may adjust the risk-based capital requirement for the covered securitization exposure as follows. To the extent of the notional amount of the derivative or guarantee, the bank may substitute the risk-weighted asset amount of a direct exposure to the eligible

102. Id. at 69,399 (section 2) (definition of “eligible credit derivative”).
securitization guarantor for the risk-weighted asset amount of the securitization exposure. To the extent that the protection amount is less than the amount of the securitization exposure, the bank must continue to hold risk-based capital on the uncovered portion of the securitization exposure in an amount proportional to the total risk-based capital requirement for the exposure prior to application of the CRM rules.

The general treatment of CRM in the Final Rules requires adjustments to risk-based capital if (a) there is a maturity or currency mismatch between a guarantee or credit derivative and the hedged exposure or (b) a credit derivative used as CRM does not include a credit event trigger based on specified types of restructurings of the hedged exposure. The rules for securitization CRM incorporate these requirements.

The presence of an eligible guarantee or eligible credit derivative will never increase the capital requirement for a securitization exposure. If the capital requirement calculated giving effect to the guarantee or credit derivative is greater than the capital requirement for the exposure without the guarantee or derivative, then the bank is permitted to disregard the guarantee or derivative. When a bank recognizes a guarantee or derivative in calculating its capital requirement for a securitization exposure, the bank is also required to calculate the expected credit loss for the exposure using the same risk parameters and add that ECL to the bank’s total ECL.

VIII. SYNTHETIC SECURITIZATIONS

The Final Rules generally treat synthetic securitizations like traditional securitizations. Most provisions apply to securitization exposures neutrally, without regard to whether the exposure arises from a traditional or synthetic securitization. However, additional rules apply to synthetic securitizations, in part because of the importance of CRM in synthetic securitizations. The Adopting Release describes the interaction between the

103. Id. at 69,417 (section 33(d)-(f)).
104. Id. at 69,425 (section 46(c)(4)).
105. NPR, supra note 4, at 55,891.
securitization rules and CRM rules in the context of synthetic securitizations as follows:

Although synthetic securitizations typically employ credit derivatives, which might suggest that such transactions would be subject to the CRM rules in section 33 of the final rule, banks must apply the securitization framework when calculating risk-based capital requirements for a synthetic securitization exposure. Banks may ultimately be redirected to the securitization CRM rules to adjust the securitization framework capital requirement for an exposure to reflect the CRM technique used in the transaction.  

D. Operational Requirements

The operational requirements for synthetic securitizations are more detailed than those for traditional securitizations. These requirements are generally consistent with Basel II and are "intended to ensure that the originating bank has truly transferred credit risk of the underlying exposures to one or more third-party protection providers." The requirements, which must be met in order for an originating bank to reduce its risk-based capital, are:

(i) The credit risk mitigant is financial collateral, an eligible credit derivative from an eligible securitization guarantor, or an eligible guarantee from an eligible securitization guarantor.

(ii) The bank transfers credit risk associated with the underlying exposures to third-party investors, and the terms and conditions in the credit risk mitigants employed do not include provisions that:

(A) Allow for the termination of the credit protection due to deterioration in the credit quality of the underlying exposures;

(B) Require the bank to alter or replace the

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106. Adopting Release, supra note 1, at 69,371.
107. Id.
underlying exposures to improve the credit quality of the underlying exposures;
(C) Increase the bank's cost of credit protection in response to deterioration in the credit quality of the underlying exposures;
(D) Increase the yield payable to parties other than the bank in response to a deterioration in the credit quality of the underlying exposures; or
(E) Provide for increases in a retained first loss position or credit enhancement provided by the bank after the inception of the securitization.

(iii) The bank obtains a well-reasoned opinion from legal counsel that confirms the enforceability of the credit risk mitigant in all relevant jurisdictions.
(iv) Any clean-up calls relating to the securitization satisfy the requirements discussed supra Part III.A.3.108

Although failure to meet these requirements will prevent the originating bank from reducing its risk-based capital requirements based on a synthetic securitization, the Adopting Release states that a bank that provides credit protection in a synthetic securitization "must use the securitization framework to compute risk-based capital requirements for its exposures to the synthetic securitization even if the originating bank failed to meet one or more of the operational requirements for a synthetic securitization."109

E. Calculation of Risk-Based Capital Requirements

Since synthetic securitizations do not result in gain-on-sale and generally do not create CEIOs, the first step in the hierarchy applicable to synthetic securitizations is the RBA. As with traditional securitizations, two external or inferred ratings are required for the originating bank to use the RBA, but an investing bank would need only one. For originating banks, this would
generally apply to a retained “super senior” tranche, which often has inferred ratings.

If the RBA does not apply to an exposure to a synthetic securitization, the bank would apply the SFA, if both the bank and the exposure qualify to use the SFA. The SFA would be applied without considering any CRM provided through the synthetic securitization. Then the bank would apply the CRM rules to reduce its risk-based capital requirement based upon any such CRM. If the bank or the exposure does not qualify for the SFA, then the bank would be required to deduct the position from capital. The same would be true for any portion of an exposure covered by the SFA that was at or below $K_{IRB}$. This would generally apply to the first-loss tranche.

Typically, the originating bank in a synthetic securitization obtains credit protection on a mezzanine tranche. The credit protection may take one of two forms: (a) a credit default swap or financial guarantee from another financial institution; or (b) similar protection from an SPE that provides financial collateral for its protection obligations. In situation (a), assuming the protection provider is an eligible securitization guarantor, the originating bank would calculate its risk-based capital requirement as described *supra* Part VII.C. In situation (b), the bank would first use the SFA to calculate its risk-based capital requirement on the mezzanine tranche, without giving effect to the CRM and then apply the securitization CRM rules to adjust the capital requirement based on the availability of the financial collateral.

F. Nth to Default Credit Derivatives

The Final Rules provide a simplified method to calculate the risk-based capital effects of a credit derivative that provides credit protection only for the nth reference exposure that defaults in a specified group of reference exposures, which are referred to as “nth to default credit derivatives.” The treatment varies for 1st to default credit derivatives vs. other nth to default credit derivatives. The risk-based capital treatment for banks that obtain or provide
credit protection using these derivatives is summarized in the table below:

<table>
<thead>
<tr>
<th>Protection purchaser</th>
<th>1\textsuperscript{st} to default credit derivative</th>
<th>Other nth to default credit derivatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Derivative is treated as covering only the reference exposure with the lowest risk-based capital requirement. Securitization CRM rules are applied to that exposure.</td>
<td>No risk-based capital reduction unless either (a) bank has also obtained credit protection on exposures 1 through (n-1) to default or (b) exposures 1 through (n-1) have already defaulted.</td>
</tr>
<tr>
<td>Protection provider</td>
<td>Use RBA if applicable. Otherwise, risk-weighted asset amount equals (a) notional amount of derivative, times (b) 12.5, times (c) the sum of the risk-based capital requirements for all of the underlying exposures (but this clause (c) is limited to 100%).</td>
<td>Use RBA if applicable. Otherwise, risk-weighted asset amount equals (a) notional amount of derivative, times (b) 12.5, times (c) the sum of the risk-based capital requirements for all of the underlying exposures, excluding the n-1 exposures with the lowest risk-based capital requirements (and this clause (c) is limited to 100%).</td>
</tr>
</tbody>
</table>

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110. Id. at 69,420 (section 42(m)).
Supervisory Formula

The SFA capital requirement for a securitization exposure is UE multiplied by TP multiplied by the greater of (i) 0.0056*T; or (ii) S[L+T] – S[L], where:

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

\( d = 1 - (1 - \beta[K_{IRB}; a, b]) \)

(i) \( S[Y] = \frac{Y}{K_{IRB} + K[Y] - K[K_{IRB}] + \frac{d \cdot K_{IRB}}{20} \left( 1 - e^{\frac{20(K_{IRB} - Y)}{K_{IRB}}} \right)} \)

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

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

(iv) \( a = g \cdot c \)

(v) \( b = g \cdot (1 - c) \)

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

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

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

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

In these expressions, \([Y; a, b]\) refers to the cumulative beta distribution with parameters \(a\) and \(b\) evaluated at \(Y\). In the case where \(N=1\) and \(EWALGD=100\) percent, \(S[Y]\) in formula (1) must be calculated with \(K[Y]\) set equal to the product of \(K_{IRB}\) and \(Y\), and \(d\) set equal to \(1 - K_{IRB}\).