FEDERAL REGISTER

Part IV

Department of the Treasury

Office of the Comptroller of the Currency
12 CFR Part 3

Federal Reserve System

12 CFR Part 217

Federal Deposit Insurance Corporation

12 CFR Parts 324, 325

Regulatory Capital Rules: Advanced Approaches Risk-Based Capital Rule; Market Risk Capital Rule; Proposed Rule

DEPARTMENT OF THE TREASURY

Office of the Comptroller of the Currency

12 CFR Part 3

[Docket No. ID OCC–2012–0010]

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FEDERAL RESERVE SYSTEM

12 CFR Part 217

[Regulation Q; Docket No. R–1442]

RIN 7100 AD–87

FEDERAL DEPOSIT INSURANCE CORPORATION

12 CFR Parts 324 and 325

RIN 3064–AD97

Regulatory Capital Rules: Advanced Approaches Risk-Based Capital Rule; Market Risk Capital Rule

AGENCY: Office of the Comptroller of the Currency, Treasury; the Board of Governors of the Federal Reserve System; and the Federal Deposit Insurance Corporation.

ACTION: Joint notice of proposed rulemaking.

SUMMARY: The Office of the Comptroller of the Currency (OCC), the Board of Governors of the Federal Reserve System (Board), and the Federal Deposit Insurance Corporation (FDIC) (collectively, the agencies) are seeking comment on three notices of proposed rulemaking (NPRs) that would revise and replace the agencies' current capital rules.

In this NPR (Advanced Approaches and Market Risk NPR) the agencies are proposing to revise the advanced approaches risk-based capital rule to incorporate certain aspects of "Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems" (Basel III) that the agencies would apply only to advanced approach banking organizations. This NPR also proposes other changes to the advanced approaches rule that the agencies believe are consistent with changes by the Basel Committee on Banking Supervision (BCBS) to its "International Convergence of Capital Measurement and Capital Standards: A Revised Framework" (Basel II), as revised by the BCBS between 2006 and 2009, and recent consultative papers published by the BCBS. The agencies also propose to revise the advanced approaches risk-based capital rule to be consistent with Dodd-Frank Wall Street Reform and

Consumer Protection Act of 2010 (Dodd-Frank Act). These revisions include replacing references to credit ratings with alternative standards of creditworthiness consistent with section 939A of the Dodd-Frank Act.

Additionally, the OCC and FDIC are proposing that the market risk capital rule be applicable to federal and state savings associations, and the Board is proposing that the advanced approaches and market risk capital rules apply to top-tier savings and loan holding companies domiciled in the United States that meet the applicable thresholds. In addition, this NPR would codify the market risk rule consistent with the proposed codification of the other regulatory capital rules across the three proposals.

DATES: Comments must be submitted on or before October 22, 2012.

ADDRESSES: Comments should be directed to:

OCC: Because paper mail in the Washington, DC area and at the OCC is subject to delay, commenters are encouraged to submit comments by the Federal eRulemaking Portal or email, if possible. Please use the title "Regulatory Capital Rules: Advanced Approaches Risk-based Capital Rule; Market Risk Capital Rule" to facilitate the organization and distribution of the comments. You may submit comments by any of the following methods:

• *Federal eRulemaking Portal— "Regulations.gov":* Go to *http://www.regulations.gov,* under the "More Search Options" tab click next to the "Advanced Docket Search" option where indicated, select "Comptroller of the Currency" from the agency drop-down menu, and then click "Submit." In the "Docket ID" column, select "OCC–2012–0010" to submit or view public comments and to view supporting and related materials for this proposed rule. The "How to Use This Site" link on the Regulations.gov home page provides information on using Regulations.gov, including instructions for submitting or viewing public comments, viewing other supporting and related materials, and viewing the docket after the close of the comment period.

• *Email: regs.comments@occ.treas.gov.*

• *Mail:* Office of the Comptroller of the Currency, 250 E Street SW., Mail Stop 2–3, Washington, DC 20219.

• *Fax:* (202) 874–5274.

• *Hand Delivery/Courier:* 250 E Street SW., Mail Stop 2–3, Washington, DC 20219.

Instructions: You must include "OCC" as the agency name and "Docket

Number OCC–2012–0010" in your comment. In general, OCC will enter all comments received into the docket and publish them on the Regulations.gov Web site without change, including any business or personal information that you provide such as name and address information, email addresses, or phone numbers. Comments received, including attachments and other supporting materials, are part of the public record and subject to public disclosure. Do not enclose any information in your comment or supporting materials that you consider confidential or inappropriate for public disclosure. You may review comments and other related materials that pertain to this notice by any of the following methods:

• *Viewing Comments Electronically:* Go to *http://www.regulations.gov.* Select "Document Type" of "Public Submissions," in "Enter Keyword or ID Box," enter Docket ID "OCC–2012– 0010," and click "Search." Comments will be listed under "View By Relevance" tab at bottom of screen. If comments from more than one agency are listed, the "Agency" column will indicate which comments were received by the OCC.

• *Viewing Comments Personally:* You may personally inspect and photocopy comments at the OCC, 250 E Street SW., Washington, DC. For security reasons, the OCC requires that visitors make an appointment to inspect comments. You may do so by calling (202) 874–4700. Upon arrival, visitors will be required to present valid government-issued photo identification and to submit to security screening in order to inspect and photocopy comments.

• *Docket:* You may also view or request available background documents and project summaries using the methods described above.

Board: When submitting comments, please consider submitting your comments by email or fax because paper mail in the Washington, DC area and at the Board may be subject to delay. You may submit comments, identified by Docket No. [XX][XX], by any of the following methods:

• *Agency Web Site: http:// www.federalreserve.gov.* Follow the instructions for submitting comments at *http://www.federalreserve.gov/ generalinfo/foia/ProposedRegs.cfm.*

• *Federal eRulemaking Portal: http:// www.regulations.gov.* Follow the instructions for submitting comments.

• *Email: regs.comments@federalreserve.gov.* Include docket number in the subject line of the message.

• *Fax:* (202) 452–3819 or (202) 452– 3102.

• *Mail:* Jennifer J. Johnson, Secretary, Board of Governors of the Federal Reserve System, 20th Street and Constitution Avenue NW., Washington, DC 20551.

All public comments are available from the Board's Web site at *http://www.federalreserve.gov/generalinfo/foia/ProposedRegs.cfm* as submitted, unless modified for technical reasons. Accordingly, your comments will not be edited to remove any identifying or contact information. Public comments may also be viewed electronically or in paper form in Room MP–500 of the Board's Martin Building (20th and C Street NW., Washington, DC 20551) between 9 a.m. and 5 p.m. on weekdays.

FDIC: You may submit comments by any of the following methods:

• *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.

• *Agency Web site: http://www.FDIC.gov/regulations/laws/federal/propose.html.*

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

• *Hand Delivered/Courier:* The guard station at the rear of the 550 17th Street Building (located on F Street), on business days between 7 a.m. and 5 p.m.

• *E-mail: comments@FDIC.gov.*

Instructions: Comments submitted must include "FDIC" and "RIN 3064–D97." Comments received will be posted without change to *http://www.FDIC.gov/regulations/laws/federal/propose.html,* including any personal information provided.

FOR FURTHER INFORMATION CONTACT:

OCC: Margot Schwadron, Senior Risk Expert, (202) 874–6022, David Elkes, Risk Expert, (202) 874–3846, or Mark Ginsberg, Risk Expert, (202) 927–4580, or Ron Shimabukuro, Senior Counsel, Patrick Tierney, Counsel, Carl Kaminski, Senior Attorney, or Kevin Korzeniewski, Attorney, Legislative and Regulatory Activities Division, (202) 874–5090, Office of the Comptroller of the Currency, 250 E Street SW., Washington, DC 20219.

Board: Anna Lee Hewko, Assistant Director, Capital and Regulatory Policy, (202) 530–6260, Thomas Boemio, Manager, Capital and Regulatory Policy, (202) 452–2982, or Constance M. Horsley, Manager, Capital and Regulatory Policy, (202) 452–5239, Division of Banking Supervision and Regulation; or Benjamin W. McDonough, Senior Counsel, (202) 452–2036, or April C. Snyder, Senior Counsel, (202) 452–3099, Legal

Division, Board of Governors of the Federal Reserve System, 20th and C Streets NW., Washington, DC 20551. For the hearing impaired only, Telecommunication Device for the Deaf (TDD), (202) 263–4869.

FDIC: Bobby R. Bean, Associate Director, *bbean@fdic.gov;* Ryan Billingsley, Senior Policy Analyst, *rbillingsley@fdic.gov;* or Karl Reitz, Senior Policy Analyst, *kreitz@fdic.gov,* Capital Markets Branch, Division of Risk Management Supervision, (202) 898–6888; or Mark Handzlik, Counsel, *mhandzlik@fdic.gov,* Michael Phillips, Counsel, *mphillips@fdic.gov;* or Greg Feder, Counsel, *gfeder@fdic.gov,* Ryan Clougherty, Senior Attorney, *rclougherty@fdic.gov;* Supervision Branch, Legal Division, Federal Deposit Insurance Corporation, 550 17th Street NW., Washington, DC 20429.

SUPPLEMENTARY INFORMATION: In connection with the proposed changes to the agencies' capital rules in this NPR, the agencies are also seeking comment on the two related NPRs published elsewhere in today's **Federal Register**. In the notice titled "Regulatory Capital Rules: Regulatory Capital, Implementation of Basel III, Minimum Regulatory Capital Ratios, Capital Adequacy, Transition Provisions, and Prompt Corrective Action" (Basel III NPR) the agencies are proposing to revise their minimum risk-based capital requirements and criteria for regulatory capital, as well as establish a capital conservation buffer framework, consistent with Basel III. The Basel III NPR also includes transition provisions for banking organizations to come into compliance with its requirements.

In the notice titled "Regulatory Capital Rules: Standardized Approach for Risk-weighted Assets; Market Discipline and Disclosure Requirements" (Standardized Approach NPR), the agencies are proposing to revise and harmonize their rules for calculating risk-weighted assets to enhance risk sensitivity and address weaknesses identified over recent years, including by incorporating aspects of the standardized framework in Basel II, and providing alternatives to credit ratings, consistent with section 939A of the Dodd-Frank Act. The revisions include methodologies for determining risk-weighted assets for residential mortgages, securitization exposures, and counterparty credit risk. The Standardized Approach NPR also would introduce disclosure requirements that would apply to top-tier banking organizations domiciled in the United States with $50 billion or more in total

assets, including disclosures related to regulatory capital instruments.

The proposed requirements in the Basel III NPR and Standardized Approach NPR would apply to all banking organizations that are currently subject to minimum capital requirements (including national banks, state member banks, state nonmember banks, state and federal savings associations, and top-tier bank holding companies domiciled in the United States not subject to the Board's Small Bank Holding Company Policy Statement (12 CFR part 225, appendix C)), as well as top-tier savings and loan holding companies domiciled in the United States (collectively, banking organizations).

The proposals are being published in three separate NPRs to reflect the distinct objectives of each proposal, to allow interested parties to better understand the various aspects of the overall capital framework, including which aspects of the rules would apply to which banking organizations, and to help interested parties better focus their comments on areas of particular interest.

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I. Introduction

The Office of the Comptroller of the Currency (OCC), Board of Governors of the Federal Reserve System (Board), and the Federal Deposit Insurance Corporation (FDIC) (collectively, the agencies) are issuing this notice of proposed rulemaking (NPR, proposal, or proposed rule) to revise the advanced approaches risk-based capital rule (advanced approaches rule) to incorporate certain aspects of ''Basel III: A global regulatory framework for more resilient banks and banking systems'' (Basel III). This NPR also proposes to revise the advanced approaches rule to incorporate other revisions to the Basel capital framework published by the Basel Committee on Banking Supervision (BCBS) in a series of documents between 2009 and 2011 [1] and subsequent consultative papers. The proposal would also address relevant provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act), and incorporate certain technical amendments to the existing requirements.[2]

In this NPR, the Board also proposes applying the advanced approaches rule and the market risk rule to savings and loan holding companies, and the Board, FDIC, and OCC propose applying the

market risk capital rule to savings and loan holding companies and to state and federal savings associations, respectively. In addition, this NPR would codify the market risk rule in a manner similar to the other regulatory capital rules in the three proposals. In a separate **Federal Register** notice, also published today, the agencies are finalizing changes to the market risk rule. As described in more detail below, the agencies are proposing changes to the advanced approaches rule in a manner consistent with the BCBS requirements, including the requirements introduced by the BCBS in ''Enhancements to the Basel II framework'' (2009 Enhancements) in July 2009 and in Basel III.[3] The main proposed revisions to the advanced approaches rule are related to treatment of counterparty credit risk, the securitization framework, and disclosure requirements.

Consistent with Basel III, the proposal seeks to ensure that counterparty credit risk, credit valuation adjustments (CVA), and wrong-way risk are incorporated adequately into the agencies' regulatory capital requirements. More specifically, the NPR would establish a capital requirement for the market value of counterparty credit risk; propose a more risk-sensitive approach for certain transactions with central counterparties, including the treatment of default fund contributions to central counterparties; and make certain adjustments to the methodologies used to calculate counterparty credit risk requirements. In addition, consistent with the ''2009 Enhancements,'' the agencies propose strengthening the risk-based capital requirements for certain securitization exposures by requiring banking organizations that are subject to the advanced approaches rule to conduct more rigorous credit analysis of securitization exposures and enhancing the disclosure requirements related to these exposures.

In addition to the incorporation of the BCBS standards, the agencies are proposing changes to the advanced approaches rule in a manner consistent with the Dodd-Frank Act, by removing references to, or requirements of reliance on, credit ratings from their regulations.[4] Accordingly, the agencies are proposing to remove the ratings-based approach and the internal assessment approach for securitization

exposures from the advanced approaches rule and require advanced approaches banking organizations to use either the supervisory formula approach (SFA) or a simplified version of the SFA when calculating capital requirements for securitization exposures. The agencies also are proposing to remove references to ratings from certain defined terms under the advanced approaches rule and replace them with alternative standards of creditworthiness. Finally, the proposed rule contains a number of proposed technical amendments that would clarify or adjust existing requirements under the advanced approaches rule.

In addition, in today's **Federal Register**, the agencies are publishing two separate notices of proposed rulemaking that are both relevant to the calculation of capital requirements for institutions using the advanced approaches rule. The notice titled ''Regulatory Capital Rules: Regulatory Capital, Implementation of Basel III, Minimum Regulatory Capital Ratios, Capital Adequacy, Transition Provisions, and Prompt Corrective Action'' (Basel III NPR), which is applicable to all banking organizations, would revise the definition of the risk-based capital (the numerator of the risk-based capital ratios), establish the new minimum ratio requirements, and make other changes to the agencies' general risk-based capital rules related to regulatory capital. In addition, the Basel III NPR proposes that certain elements of Basel III apply only to institutions using the advanced approaches rule, including a supplementary Basel III leverage ratio and a countercyclical capital buffer. The Basel III NPR also includes transition provisions for banking organizations to come into compliance with the requirements of that proposed rule.

The notice titled ''Regulatory Capital Rules: Standardized Approach for Risk-Weighted Assets; Market Discipline and Disclosure Requirements'' (Standardized Approach NPR) would also apply to all banking organizations. In the Standardized Approach NPR, the agencies are proposing to revise and harmonize their rules for calculating risk-weighted assets to enhance risk sensitivity and address weaknesses identified over recent years, including by incorporating aspects of the BCBS' Basel II standardized framework, changes proposed in recent consultative papers published by the BCBS and alternatives to credit ratings, consistent with section 939A of the Dodd-Frank Act. The revisions include methodologies for determining risk-weighted assets for residential mortgages, securitization exposures, and

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[1] The BCBS is a committee of banking supervisory authorities, which was established by the central bank governors of the G–10 countries in 1975. It consists of senior representatives of bank supervisory authorities and central banks from Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. Documents issued by the BCBS are available through the Bank for International Settlements Web site at *http://www.bis.org*. Basel III was published in December 2010 and revised in June 2011. The text is available at *http://www.bis.org/publ/bcbs189.htm*.

[2] Public Law 111–203, 124 Stat. 1376 (July 21, 2010) (Dodd-Frank Act).

[3] *See* ''Enhancements to the Basel II framework'' (July 2009), available at *http://www.bis.org/publ/bcbs157.htm*.

[4] *See* section 939A of Dodd-Frank Act (15 U.S.C. 78o–7 note).

counterparty credit risk. The Standardized Approach NPR also would introduce disclosure requirements that would apply to top-tier banking organizations domiciled in the United States with $50 billion or more in total assets, including disclosures related to regulatory capital instruments.

The requirements proposed in the Basel III NPR and Standardized Approach NPR, as well as the market risk capital rule in this proposal, are proposed to become the "generally applicable" capital requirements for purposes of section 171 of the Dodd-Frank Act because they would be the capital requirements applied to insured depository institutions under section 38 of the Federal Deposit Insurance Act, without regard to asset size or foreign financial exposure. Banking organizations that are or would be subject to the advanced approaches rule (advanced approaches banking organizations) or the market risk rule should also review the Basel III NPR and Standardized Approach NPR.

II. Risk-Weighted Assets—Proposed Modifications to the Advanced Approaches

A. Counterparty Credit Risk

The recent financial crisis highlighted certain aspects of the treatment of counterparty credit risk under the Basel II framework that were inadequate and of banking organizations' risk management of counterparty credit risk that were insufficient. The Basel III revisions would address both areas of weakness by ensuring that all material on- and off-balance sheet counterparty risks, including those associated with derivative-related exposures, are appropriately incorporated into banking organizations' risk-based capital ratios. In addition, new risk management requirements in Basel III strengthen the oversight of counterparty credit risk exposures. The agencies are proposing the counterparty credit risk revisions in a manner generally consistent with Basel III, modified to incorporate

alternative standards to the use of credit ratings. The discussion below highlights these revisions.

1. Revisions to the Recognition of Financial Collateral

Eligible Financial Collateral

The exposure-at-default (EAD) adjustment approach under section 132 of the proposed rules permits a banking organization to recognize the credit risk mitigation benefits of eligible financial collateral by adjusting the EAD to the counterparty. Such approaches include the collateral haircut approach, simple Value-at-Risk (VaR) approach and the internal models methodology (IMM).

Consistent with Basel III, the agencies are proposing to modify the definition of financial collateral so that resecuritizations would no longer qualify as eligible financial collateral under the advanced approaches rule. Thus, resecuritization collateral could not be used to adjust the EAD of an exposure. The agencies believe that this treatment is appropriate because resecuritizations have been shown to have more market value volatility than other collateral types. During the recent financial crisis, the market volatility of resecuritization exposures made it difficult for resecuritizations to serve as a source of liquidity because banking organizations were unable to sell those positions without incurring substantial loss or to use them as collateral for secured lending transactions.

Under the proposal, a securitization in which one or more of the underlying exposures is a securitization position would be considered a resecuritization. A resecuritization position under the proposal means an on- or off-balance sheet exposure to a resecuritization, or an exposure that directly or indirectly references a resecuritization exposure.

Consistent with these changes excluding less liquid collateral from the definition of financial collateral, the agencies also propose that conforming residential mortgages no longer qualify as financial collateral under the

advanced approaches rule. As a result, under this proposal, a banking organization would no longer be able to recognize the credit risk mitigation benefit of such instruments through an adjustment to EAD. In addition, also consistent with the Basel framework, the agencies propose to exclude all debt securities that are not investment grade from the definition of financial collateral. As discussed in section II (B) of this preamble, the agencies are proposing to revise the definition of "investment grade" for both the advanced approaches rule and market risk capital rule.

Revised Supervisory Haircuts

As reflected in Basel III, securitization exposures have increased levels of volatility relative to other collateral types. To address this issue, Basel III incorporates new standardized supervisory haircuts for securitization exposures in the EAD adjustment approach based on the credit rating of the exposure. Consistent with section 939A of the Dodd Frank Act, the agencies are proposing an alternative approach to assigning standard supervisory haircuts for securitization exposures, and are also proposing to amend the standard supervisory haircuts for other types of financial collateral to remove the references to credit ratings.

Under the proposal, as outlined in table 1 below, the standard supervisory market price volatility haircuts would be revised based on the applicable risk weight of the exposure calculated under the standardized approach. Supervisory haircuts for exposures to sovereigns, government-sponsored entities, public sector entities, depository institutions, foreign banks, credit unions, and corporate issuers would be calculated based upon the risk weights for such exposures described under section 32 of the Standardized Approach NPR. The proposed table for the standard supervisory market price volatility haircuts would be revised as follows:

TABLE 1—STANDARD SUPERVISORY MARKET PRICE VOLATILITY HAIRCUTS [1]

Residual maturity	Haircut (in percents) assigned based on:						Investment grade securitization exposures (in percent)
	Sovereign issuers risk weight under § ___ .32 [2]			Non-sovereign issuers risk weight under § ___ .32			
	Zero%	20% or 50%	100%	20%	50%	100%	
Less than or equal to 1 year	0.5	1.0	15.0	1.0	2.0	25.0	4.0
Greater than 1 year and less than or equal to 5 years	2.0	3.0	15.0	4.0	6.0	25.0	12.0
Greater than 5 years	4.0	6.0	15.0	8.0	12.0	25.0	24.0

TABLE 1—STANDARD SUPERVISORY MARKET PRICE VOLATILITY HAIRCUTS [1]—Continued

Residual maturity	Haircut (in percents) assigned based on:						Investment grade securitization ex-posures (in percent)
	Sovereign issuers risk weight under § ___.32 [2]			Non-sovereign issuers risk weight under § ___.32			
	Zero%	20% or 50%	100%	20%	50%	100%	
Main index equities (including convertible bonds) and gold	15.0						
Other publicly-traded equities (including convertible bonds)	25.0						
Mutual funds	Highest haircut applicable to any security in which the fund can invest.						
Cash collateral held	Zero						

[1] The market price volatility haircuts in Table 2 are based on a 10 business-day holding period.
[2] Includes a foreign PSE that receives a zero percent risk weight.

The agencies are also proposing to clarify that if a banking organization lends instruments that do not meet the definition of financial collateral used in the Standardized Approach NPR and the advanced approaches rule (as modified by the proposal), such as non-investment grade corporate debt securities or resecuritization exposures, the haircut applied to the exposure would be the same as the haircut for equity that is publicly traded but which is not part of a main index.

Question 1: The agencies solicit comments on the proposed changes to the recognition of financial collateral under the advanced approaches rule.

2. Changes to Holding Periods and the Margin Period of Risk

During the financial crisis, many financial institutions experienced significant delays in settling or closing-out collateralized transactions, such as repo-style transactions and collateralized over-the-counter (OTC) derivatives. The assumed holding period for collateral in the collateral haircut and simple VaR approaches and the margin period of risk in the IMM under Basel II proved to be inadequate for certain transactions and netting sets.[5] It also did not reflect the difficulties and delays experienced by institutions when settling or liquidating

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[5] Under the advanced approaches rule, the margin period of risk means, with respect to a netting set subject to a collateral agreement, the time period from the most recent exchange of collateral with a counterparty until the next required exchange of collateral plus the period of time required to sell and realize the proceeds of the least liquid collateral that can be delivered under the terms of the collateral agreement and, where applicable, the period of time required to re-hedge the resulting market risk, upon the default of the counterparty. *See* 12 CFR part 3, appendix C, and part 167, appendix C (OCC); 12 CFR part 208, appendix F, and 12 CFR part 225, appendix G (Board); 12 CFR part 325, appendix D, and 12 CFR part 390, subpart Z, appendix A (FDIC).

collateral during a period of financial stress.

Under Basel II, the minimum assumed holding period for collateral and margin period of risk are five days for repo-style transactions, and ten days for other collateralized transactions where liquid financial collateral is posted under a daily margin maintenance requirement. Under Basel III, a banking organization must assume a holding period of 20 business days under the collateral haircut or simple VaR approaches, or must assume a margin period of risk under the IMM of 20 business days for netting sets where: (1) The number of trades exceeds 5,000 at any time during the quarter (except if the counterparty is a central counterparty (CCP) or the netting set consists of cleared transactions with a clearing member); (2) one or more trades involves illiquid collateral posted by the counterparty; or (3) the netting set includes any OTC derivatives that cannot be easily replaced.

For purposes of determining whether collateral is illiquid or an OTC derivative cannot be easily replaced for these purposes, a banking organization could, for example, assess whether, during a period of stressed market conditions, it could obtain multiple price quotes within two days or less for the collateral or OTC derivative that would not move the market or represent a market discount (in the case of collateral) or a premium (in the case of an OTC derivative).

If, over the two previous quarters, more than two margin disputes on a netting set have occurred that lasted longer than the holding period or margin period of risk used in the EAD calculation, then a banking organization would use a holding period or a margin period of risk for that netting set that is at least two times the minimum holding period that would otherwise be used for

that netting set. Margin disputes occur when the banking organization and its counterparty do not agree on the value of collateral or on the eligibility of the collateral provided. In addition, such disputes also can occur when a banking organization and its counterparty disagree on the amount of margin that is required, which could result from differences in the valuation of a transaction, or from errors in the calculation of the net exposure of a portfolio (for instance, if a transaction is incorrectly included or excluded from the portfolio).

Consistent with Basel III, the agencies propose to amend the advanced approaches rule to incorporate these adjustments to the holding period in the collateral haircut and simple VaR approaches, and to the margin period of risk in the IMM that a banking organization may use to determine its capital requirement for repo-style transactions, OTC derivative transactions, or eligible margin loans. For cleared transactions, which are discussed below, the agencies propose that a banking organization not be required to adjust the holding period or margin period of risk upward when determining the capital requirement for its counterparty credit risk exposures to the central counterparty, which is also consistent with Basel III.

Question 2: The agencies solicit comments on the proposed changes to holding periods and margin periods of risk.

3. Changes to the Internal Models Methodology

During the recent financial crisis, increased volatility in the value of derivative positions and collateral led to higher counterparty exposures than amounts estimated by banking organizations' internal models. To address this issue, under Basel III, when

using the IMM, banking organizations are required to determine their capital requirements for counterparty credit risk using stressed inputs. Consistent with Basel III, the agencies propose to amend the advanced approaches rule so that the capital requirement for IMM exposures would be equal to the larger of the capital requirement for those exposures calculated using data from the most recent three-year period and data from a three-year period that contains a period of stress reflected in the credit default spreads of the banking organization's counterparties.

Under the proposal, an IMM exposure would be defined as a repo-style transaction, eligible margin loan, or OTC derivative for which a banking organization calculates its EAD using the IMM. A banking organization would be required to demonstrate to the satisfaction of the banking organization's primary federal supervisor at least quarterly that the stress period coincides with increased credit default swap (CDS) spreads, or other credit spreads of its counterparties and have procedures to evaluate the effectiveness of its stress calibration. These procedures would be required to include a process for using benchmark portfolios that are vulnerable to the same risk factors as the banking organization's portfolio. In addition, the primary federal supervisor could require a banking organization to modify its stress calibration if the primary federal supervisor believes that another calibration would better reflect the actual historic losses of the portfolio.

Consistent with Basel III, the agencies are proposing to require a banking organization to subject its internal models to an initial validation and annual model review process. As part of the model review process, the agencies propose that a banking organization would need to have a backtesting program for its model that includes a process by which unacceptable model performance would be identified and remedied. In addition, the agencies propose that when a banking organization multiplies expected positive exposure (EPE) by the default scaling factor alpha of 1.4 when calculating EAD, the primary federal supervisor may require the banking organization to set that alpha higher based on the performance of the banking organization's internal model.

The agencies also are proposing to require a banking organization to have policies for the measurement, management, and control of collateral, including the reuse of collateral and margin amounts, as a condition of using the IMM. Under the proposal, a banking

organization would be required to have a comprehensive stress testing program that captures all credit exposures to counterparties and incorporates stress testing of principal market risk factors and the creditworthiness of its counterparties.

Under Basel II, a banking organization was permitted to capture within its internal model the effect on EAD of a collateral agreement that requires receipt of collateral when the exposure to the counterparty increases. Basel II also contained a ''shortcut'' method to provide a banking organization whose internal model did not capture the effects of collateral agreements with a method to recognize some benefit from the collateral agreement. Basel III modifies that ''shortcut'' method by setting effective EPE to a counterparty as the lesser of the following two exposure calculations: (1) The exposure without any held or posted margining collateral, plus any collateral posted to the counterparty independent of the daily valuation and margining process or current exposure, or (2) an add-on that reflects the potential increase of exposure over the margin period of risk plus the larger of (i) the current exposure of the netting set reflecting all collateral received or posted by the banking organization excluding any collateral called or in dispute; or (ii) the largest net exposure (including all collateral held or posted under the margin agreement) that would not trigger a collateral call. The add-on would be computed as the largest expected increase in the netting set's exposure over any margin period of risk in the next year. The agencies propose to include the Basel III modification of the ''shortcut'' method in this NPR.

Recognition of Wrong-way Risk

The financial crisis also highlighted the interconnectedness of large financial institutions through an array of complex transactions. To recognize this interconnectedness and to mitigate the risk of contagion from the banking sector to the broader financial system and the general economy, Basel III includes enhanced requirements for the recognition and treatment of wrong-way risk in the IMM. The proposed rule would define wrong-way risk as the risk that arises when an exposure to a particular counterparty is positively correlated with the probability of default of such counterparty itself.

The agencies are proposing enhancements to the advanced approaches rule that would require banking organizations' risk management procedures to identify, monitor, and control wrong-way risk throughout the

life of an exposure. These risk management procedures should include the use of stress testing and scenario analysis. In addition, where a banking organization has identified an IMM exposure with specific wrong-way risk, the banking organization would be required to treat that transaction as its own netting set. Specific wrong-way risk is a type of wrong way risk that arises when either the counterparty and issuer of the collateral supporting the transaction, or the counterparty and the reference asset of the transaction, are affiliates or are the same entity.

In addition, where a banking organization has identified an OTC derivative transaction, repo-style transaction, or eligible margin loan with specific wrong-way risk for which the banking organization would otherwise apply the IMM, the banking organization would insert the probability of default (PD) of the counterparty and a loss given default (LGD) equal to 100 percent into the appropriate risk-based capital formula specified in table 1 of section 131 of the proposed rule, then multiply the output of the formula (K) by an alternative EAD based on the transaction type, as follows:

(1) For a purchased credit derivative, EAD would be the fair value of the underlying reference asset of the credit derivative contract;

(2) For an OTC equity derivative,[6] EAD would be the maximum amount that the banking organization could lose if the fair value of the underlying reference asset decreased to zero;

(3) For an OTC bond derivative (that is, a bond option, bond future, or any other instrument linked to a bond that gives rise to similar counterparty credit risks), EAD would be the smaller of the notional amount of the underlying reference asset and the maximum amount that the banking organization could lose if the fair value of the underlying reference asset decreased to zero; and

(4) For repo-style transactions and eligible margin loans, EAD would be calculated using the formula in the collateral haircut approach of section 132 and with the estimated value of the collateral substituted for the parameter C in the equation.

Question 3: The agencies solicit comment on the appropriateness of the proposed calculation of capital requirements for OTC equity or bond derivatives with specific wrong-way risk. What alternatives should be made

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[6] Equity derivatives that are call options are not subject to a counterparty credit risk capital requirement for specific wrong-way risk.

available to banking organizations in order to calculate the EAD in such cases? What challenges would a banking organization face in estimating the EAD for OTC derivative transactions with specific wrong-way risk if the agencies were to permit a banking organization to use its incremental risk model that meets the requirements of section 8 of the market risk rule instead of the proposed alternatives?

Increased Asset Value Correlation Factor

To recognize the correlation of financial institutions' creditworthiness attributable to similar sensitivities to common risk factors, the agencies are proposing to incorporate the Basel III increase in the correlation factor used in the formula provided in table 1 of section 131 of the proposed rule for certain wholesale exposures. Under the proposed rule, banking organizations would apply a multiplier of 1.25 to the correlation factor for wholesale exposures to unregulated financial institutions that generate a majority of their revenue from financial activities, regardless of asset size. This category would include highly leveraged entities such as hedge funds and financial guarantors. In addition, banking organizations would apply a multiplier of 1.25 to the correlation factor for wholesale exposures to regulated financial institutions with consolidated assets of greater than or equal to $100 billion.

The proposed definitions of "financial institution" and "regulated financial institution" are set forth and discussed in the Basel III NPR.

4. Credit Valuation Adjustments

CVA is the fair value adjustment to reflect counterparty credit risk in the valuation of an OTC derivative contract. The BCBS reviewed the treatment of counterparty credit risk and found that roughly two-thirds of counterparty credit risk losses during the crisis were due to marked-to-market losses from CVA, while one-third of counterparty credit risk losses resulted from actual defaults. Basel II addressed counterparty credit risk as a combination of default risk and credit migration risk. Credit migration risk accounts for market value losses resulting from deterioration of counterparties' credit quality short of default and is addressed in Basel II via the maturity adjustment multiplier. However, the maturity adjustment multiplier in Basel II was calibrated for loan portfolios and may not be suitable for addressing CVA risk. Accordingly,

Basel III requires banking organizations to directly reflect CVA risk through an additional capital requirement.

The Basel III CVA capital requirement would reflect the CVA due to changes of counterparties' credit spreads, assuming fixed expected exposure (EE) profiles. Basel III provides two approaches for calculating the CVA capital requirement: the simple approach and the advanced CVA approach. The agencies are proposing both approaches for calculating the CVA capital requirement (subject to certain requirements discussed below), but without references to credit ratings.

Only a banking organization that is subject to the market risk capital rule and has obtained prior approval from its primary federal supervisor to calculate both the EAD for OTC derivative contracts using the IMM described in section 132 of the proposed rule, and the specific risk add-on for debt positions using a specific risk model described in section 207(b) of subpart F would be eligible to use the advanced CVA approach. A banking organization that receives such approval would continue to use the advanced CVA approach until it notifies its primary federal supervisor in writing that it expects to begin calculating its CVA capital requirement using the simple CVA approach. The notice would include an explanation from the banking organization as to why it is choosing to use the simple CVA approach and the date when the banking organization would begin to calculate its CVA capital requirement using the simple CVA approach.

Under the proposal, when calculating a CVA capital requirement, a banking organization would be permitted to recognize the hedging benefits of single name CDS, single name contingent CDS, index CDS (CDS$_{ind}$), and any other equivalent hedging instrument that references the counterparty directly, provided that the equivalent hedging instrument is managed as a CVA hedge in accordance with the banking organization's hedging policies. Consistent with Basel III, under this NPR, a tranched or nth-to-default CDS would not qualify as a CVA hedge. In addition, the agencies propose that any position that is recognized as a CVA hedge would not be a covered position under the market risk capital rule, except in the case where the banking organization is using the advanced CVA approach, the hedge is a CDS$_{ind}$, and the VaR model does not capture the basis between the spreads of the index that is used as the hedging instrument and the

hedged counterparty exposure over various time periods, as discussed in further detail below.

To convert the CVA capital requirement to a risk-weighted asset amount, a banking organization would multiply its CVA capital requirement by 12.5. Under the proposal, because the CVA capital requirement reflects market risk, the CVA risk-weighted asset amount would not be a component of credit risk-weighted assets and therefore would not be subject to the 1.06 multiplier for credit risk-weighted assets.

Simple CVA Approach

The agencies are proposing the Basel III formula for the simple CVA approach to calculate the CVA capital requirement (K$_{CVA}$), with a modification in a manner consistent with section 939A of the Dodd-Frank Act. A banking organization would use the formula below to calculate its CVA capital requirement for OTC derivative transactions. The banking organization would calculate K$_{CVA}$ as the square root of the sum of the capital requirement for each of its OTC derivative counterparties multiplied by 2.33. The simple CVA approach is based on an analytical approximation derived from a general CVA VaR formulation under a set of simplifying assumptions:

• All credit spreads have a flat term structure;

• All credit spreads at the time horizon have a lognormal distribution;

• Each single name credit spread is driven by the combination of a single systematic factor and an idiosyncratic factor;

• The correlation between any single name credit spread and the systematic factor is equal to 0.5;

• All credit indices are driven by the single systematic factor; and

• The time horizon is short (the square root of time scaling to 1 year is applied in the end).

The approximation is based on the linearization of the dependence of both CVA and CDS hedges on credit spreads. Given the assumptions listed above (most notably, the single-factor assumption), CVA VaR can be expressed using an analytical formula. The formula of the simple CVA approach is obtained by applying certain standardizations, conservative adjustments, and scaling to the analytical CVA VaR result.

A banking organization would calculate K$_{CVA}$, where:

Formula 1

$$K_{CVA} = 2.33 \times \sqrt{\left(\sum_i 0.5 \times w_i \times \left(M_i \times EAD_i^{total} - M_i^{hedge} \times B_i \right) - \sum_{ind} w_{ind} \times M_{ind} \times B_{ind} \right)^2 + A}$$

Where:

$$A = \sum_i 0.75 \times w_i^2 \times \left(M_i \times EAD_i^{total} - M_i^{hedge} \times B_i \right)^2$$

In Formula 1, w_i refers to the weight applicable to counterparty i assigned according to Table 2 below.[7] In Basel III, the BCBS assigned w_i based on the external rating of the counterparty. However, to comply with the Dodd-Frank requirement to remove references to ratings, the agencies propose to assign w_i based on the relevant PD of the counterparty, as assigned by the banking organization. W_{ind} in Formula 1 refers to the weight applicable to the CDS_{ind} based on the average weight under Table 2 of the underlying reference names that comprise the index.

TABLE 2—ASSIGNMENT OF COUNTERPARTY WEIGHT UNDER THE SIMPLE CVA

Internal PD (in percent)	Weight W_{ind} (in percent)
0.00–0.07	0.70
>0.07–0.15	0.80
>0.15–0.40	1.00
>0.4–2.00	2.00
>2.0—6.00	3.00
>6.0	10.00

EAD_i^{total} in Formula 1 refers to the sum of the EAD for all netting sets of

OTC derivative contracts with counterparty i calculated using the current exposure methodology described in section 132(c) of the proposed rule as adjusted by Formula 2 or the IMM described in section 132(d) of the proposed rule. When the banking organization calculates EAD using the IMM, EAD_i^{total} equals $EAD_{unstressed}$.

Formula 2[8]

$$EAD \times \left(\frac{1 - exp^{-.05 \times M_i}}{.05 \times M_i} \right)$$

M_i in Formulas 1 and 2 refers to the EAD-weighted average of the effective maturity of each netting set with counterparty i (where each netting set's M cannot be smaller than one). M_i^{hedge} in Formula 1 refers to the notional weighted average maturity of the hedge instrument. M_{ind} in Formula 1 equals the maturity of the CDS_{ind} or the notional weighted average maturity of any CDS_{ind} purchased to hedge CVA risk of counterparty i.

B_i in Formula 1 refers to the sum of the notional amounts of any purchased single name CDS referencing counterparty i that is used to hedge CVA risk to counterparty i multiplied by (1-exp($-0.05 \times M_{i\ hedge}$))/(0.05 $\times M_{i\ hedge}$). B_{ind} in Formula 1 refers to the notional amount of one or more CDS_{ind} purchased as protection to hedge CVA risk for counterparty i multiplied by (1-exp($-0.05 \times M_{ind}$))/(0.05 $\times M_{ind}$). A banking organization would be allowed to treat the notional amount in the index

attributable to that counterparty as a single name hedge of counterparty i (B_i) when calculating K_{CVA} and subtract the notional amount of B_i from the notional amount of the CDS_{ind}. The banking organization would be required to then calculate its capital requirement for the remaining notional amount of the CDS_{ind} as a stand-alone position.

Advanced CVA Approach

Under the advanced CVA approach, a banking organization would use the VaR model it uses to calculate specific risk under section 205(b) of subpart F or another model that meets the quantitative requirements of sections 205(b) and 207(b) of subpart F to calculate its CVA capital requirement for a counterparty by modeling the impact of changes in the counterparty's credit spreads, together with any recognized CVA hedges on the CVA for the counterparty. A banking organization's total capital requirement

for CVA equals the sum of the CVA capital requirements for each counterparty.

The agencies are proposing that the VaR model incorporate only changes in the counterparty's credit spreads, not changes in other risk factors. The banking organization would not be required to capture jump-to-default risk in its VaR model. A banking organization would be required to include any immaterial OTC derivative portfolios for which it uses the current exposure methodology by using the EAD calculated under the current exposure methodology as a constant EE in the formula for the calculation of CVA and setting the maturity equal to the greater of half of the longest maturity occurring in the netting set and the notional weighted average maturity of all transactions in the netting set.

In order for a banking organization to receive approval to use the advanced CVA approach, under the NPR, the

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[7] These weights represent the assumed values of the product of a counterparties' current credit spread and the volatility of that credit spread.

[8] The term "exp" is the exponential function.

banking organization would need to have the systems capability to calculate the CVA capital requirement on a daily basis, but would not be expected or required to calculate the CVA capital requirement on a daily basis.

The CVA capital requirement under the advanced CVA approach would be equal to the general market risk capital requirement of the CVA exposure using the ten-business-day time horizon of the revised market risk framework. The capital requirement would not include

the incremental risk requirement of subpart F. The agencies propose to require a banking organization to use the Basel III formula for the advanced CVA approach to calculate K_{CVA} as follows:

Formula 3

$$K_{CVA} = 3 \times \left(CVA_{UnstressedVAR} + CVA_{StressedVAR} \right)$$

$$CVA_j = \left(LGD_{MKT} \right) \times \sum_{i=1}^{T} Max \left(0; \exp\left(-\frac{s_{i-1} \times t_{i-1}}{LGD_{MKT}} \right) - \exp\left(-\frac{s_i \times t_i}{LGD_{MKT}} \right) \right) \times \left(\frac{EE_{i-1} \times D_{i-1} + EE_i \times D_i}{2} \right)$$

In Formula 3:

(A) t_i = the time of the i-th revaluation time bucket starting from $t_0 = 0$.

(B) t_T = the longest contractual maturity across the OTC derivative contracts with the counterparty.

(C) s_i = the CDS spread for the counterparty at tenor t_i used to calculate the CVA for the counterparty. If a CDS spread is not available, the banking organization would use a proxy spread based on the credit quality, industry and region of the counterparty.

(D) LGD_{MKT} = the loss given default of the counterparty based on the spread of a publicly traded debt instrument of the counterparty, or, where a publicly traded debt instrument spread is not available, a proxy spread based on the credit quality, industry and region of the counterparty.

(E) EE_i = the sum of the expected exposures for all netting sets with the counterparty at revaluation time t_i calculated using the IMM.

(F) D_i = the risk-free discount factor at time t_i, where $D_0 = 1$.

(G) Exp is the exponential function.

Under the proposal, if a banking organization's VaR model is not based on full repricing, the banking organization would use either Formula 4 or Formula 5 to calculate credit spread sensitivities. If the VaR model is based on credit spread sensitivities for specific tenors, the banking organization would calculate each credit spread sensitivity according to Formula 4:

Formula 4

$$\text{Regulatory CS01} = 0.0001 \times t_i \times \exp\left(-\frac{s_i \times t_i}{LGD_{MKT}} \right) \times \left(\frac{EE_{i-1} \times D_{i-1} - EE_{i+1} \times D_{i+1}}{2} \right)$$

Note that for the final time bucket,[9] Formula 4 would be adjusted as follows such that:

$$\text{Regulatory CS01} = \frac{0.0001 \times t_i \times \exp\left(-\frac{s_i \times t_i}{LGD_{MKT}} \right) \times \left(\frac{EE_{i-1} \times D_{i-1} - EE_T \times D_T}{2} \right)}{}$$

If the VaR model uses credit spread sensitivities to parallel shifts in credit spreads, the banking organization would

calculate each credit spread sensitivity according to Formula 5:

Formula 5

Regulatory CS01 =

$$0.0001 \times \sum_{i=1}^{T} \left(t_i \times \exp\left(-\frac{s_i \times t_i}{LGD_{MKT}} \right) - t_{i-1} \times \exp\left(-\frac{s_{i-1} \times t_{i-1}}{LGD_{MKT}} \right) \right) \times \left(\frac{EE_{i-1} \times D_{i-1} + EE_i \times D_i}{2} \right)$$

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[9] For the final time bucket, i = T.

To calculate the $CVA_{UnstressedVAR}$ measure in Formula 3, a banking organization would use the EE for a counterparty calculated using current market data to compute current exposures and would estimate model parameters using the historical observation period required under section 205(b)(2) of subpart F. However, if a banking organization uses the shortcut method described in section 132(d)(5) of the proposed rule to capture the effect of a collateral agreement when estimating EAD using the IMM, the banking organization would calculate the EE for the counterparty using that method and keep that EE constant with the maturity equal to the maximum of half of the longest maturity occurring in the netting set, and the notional weighted average maturity of all transactions in the netting set.

To calculate the $CVA_{StressedVAR}$ measure in Formula 3, the banking organization would use the EE_i for a counterparty calculated using the stress calibration of the IMM. However, if a banking organization uses the shortcut method described in section 132(d)(5) of the proposed rule to capture the effect of a collateral agreement when estimating EAD using the IMM, the banking organization would calculate the EE_i for the counterparty using that method and keep that EE_i constant with the maturity equal to the greater of half of the longest maturity occurring in the netting set with the notional amount equal to the weighted average maturity of all transactions in the netting set. Consistent with Basel III, the agencies propose to require a banking organization to calibrate the VaR model inputs to historical data from the most severe twelve-month stress period contained within the three-year stress period used to calculate EE_i. However, the agencies propose to retain the flexibility to require a banking organization to use a different period of significant financial stress in the calculation of the $CVA_{StressedVAR}$ measure that would better reflect actual historic losses of the portfolio.

Under the NPR, a banking organization's VaR model would be required to capture the basis between the spreads of the index that is used as the hedging instrument and the hedged counterparty exposure over various time periods, including benign and stressed environments. If the VaR model does not capture that basis, the banking organization would be permitted to reflect only 50 percent of the notional amount of the CDS_{ind} hedge in the VaR model. The remaining 50 percent of the notional amount of the CDS_{ind} hedge

would be a covered position under the market risk capital rule.

Question 4: The agencies solicit comments on the proposed CVA capital requirements, including the simple CVA approach and the advanced CVA approach.

5. Cleared Transactions (Central Counterparties)

CCPs help improve the safety and soundness of the derivatives and repo-style transaction markets through the multilateral netting of exposures, establishment and enforcement of collateral requirements, and market transparency. Under the current advanced approaches rule, exposures to qualifying central counterparties (QCCPs) received a zero percent risk weight. However, when developing Basel III, the BCBS recognized that as more derivatives and repo-style transactions move to CCPs, the potential for systemic risk increases. To address these concerns, the BCBS has sought comment on a specific capital requirement for such transactions with CCPs and a more risk-sensitive approach for determining a capital requirement for a banking organization's contributions to the default funds of these CCPs. The BCBS also has sought comment on a preferential capital treatment for exposures arising from derivative and repo-style transactions with, and related default fund contributions to, CCPs that meet the standards established by the Committee on Payment and Settlement Systems (CPSS) and International Organization of Securities Commissions (IOSCO).[10] The treatment for exposures that arise from the settlement of cash transactions (such as equities, fixed income, spot (FX), and spot commodities) with a QCCP where there is no assumption of ongoing counterparty credit risk by the QCCP after settlement of the trade and associated default fund contributions remains unchanged.

A banking organization that is a clearing member, a term that is defined in the Basel III NPR as a member of, or direct participant in, a CCP that is entitled to enter into transactions with the CCP, or a clearing member client, proposed to be defined as a party to a cleared transaction associated with a CCP in which a clearing member acts either as a financial intermediary with respect to the party or guarantees the performance of the party to the CCP, would first calculate its trade exposure for a cleared transaction. The trade

exposure amount for a cleared transaction would be determined as follows:

(1) For a cleared transaction that is a derivative contract or netting set of derivative contracts, the trade exposure amount equals:

(i) The exposure amount for the derivative contract or netting set of derivative contracts, calculated using the methodology used to calculate exposure amount for OTC derivative contracts under section 132(c) or 132(d) of this NPR, plus

(ii) The fair value of the collateral posted by the banking organization and held by the CCP or a clearing member in a manner that is not bankruptcy remote.

(2) For a cleared transaction that is a repo-style transaction, the trade exposure amount equals:

(i) The exposure amount for the repo-style transaction calculated using the methodologies under sections 132(b)(2), 132(b)(3) or 132(d) of this NPR, plus

(ii) The fair value of the collateral posted by the banking organization and held by the CCP or a clearing member in a manner that is not bankruptcy remote.

When the banking organization calculates EAD under the IMM, EAD would be calculated using the most recent three years of historical data, that is, $EAD_{unstressed}$. Trade exposure would not include any collateral held by a custodian in a manner that is bankruptcy remote from the CCP.

Under the proposal, a clearing member banking organization would apply a risk weight of 2 percent to its trade exposure amount with a QCCP. The proposed definition of QCCP is discussed in the Standardized Approach NPR preamble. A banking organization that is a clearing member client would apply a 2 percent risk weight to the trade exposure amount if:

(1) The collateral posted by the banking organization to the QCCP or clearing member is subject to an arrangement that prevents any losses to the clearing member due to the joint default or a concurrent insolvency, liquidation, or receivership proceeding of the clearing member and any other clearing member clients of the clearing member; and

(2) The clearing member client has conducted sufficient legal review to conclude with a well-founded basis (and maintains sufficient written documentation of that legal review) that in the event of a legal challenge (including one resulting from default or a receivership, insolvency, or liquidation proceeding) the relevant court and administrative authorities

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[10] *See* CPSS, ''Recommendations for Central Counterparties,'' (November 2004), *available at* *http://www.bis.org/publ/cpss64.pdf?*

would find the arrangements to be legal, valid, binding, and enforceable under the law of the relevant jurisdiction, provided certain additional criteria are met.

The agencies believe that omnibus accounts (that is, accounts that are generally established by clearing entities for non-clearing members) in the United States would satisfy these requirements because of the protections afforded client accounts under certain regulations of the Securities and Exchange Commission (SEC) and Commodities Futures Trading Commission (CFTC).[11] If the criteria above are not met, a banking organization that is a clearing member client would apply a risk weight of 4 percent to the trade exposure amount.

For a cleared transaction with a CCP that is not a QCCP, a clearing member and a banking organization that is a clearing member client would risk weight the trade exposure according to the risk weight applicable to the CCP under the Standardized Approach NPR.

Collateral posted by a clearing member or clearing member client banking organization that is held in a manner that is bankruptcy remote from the CCP would not be subject to a capital requirement for counterparty credit risk. As with all posted collateral, the banking organization would continue to have a capital requirement for any collateral provided to a CCP or a custodian in connection with a cleared transaction.

Under the proposal, a cleared transaction would not include an exposure of a banking organization that is a clearing member to its clearing member client where the banking organization is either acting as a financial intermediary and enters into an offsetting transaction with a CCP or where the banking organization provides a guarantee to the CCP on the performance of the client. Such a transaction would be treated as an OTC derivative transaction. However, the agencies recognize that this treatment may create a disincentive for banking organizations to act as intermediaries and provide access to CCPs for clients. As a result, the agencies are considering approaches that could address this disincentive while at the same time appropriately reflect the risks of these transactions. For example, one approach would allow banking organizations that are clearing members to adjust the EAD calculated under section 132 downward by a certain percentage or, for banking

organizations using the IMM, to adjust the margin period of risk. International discussions are ongoing on this issue, and the agencies would expect to revisit the treatment of these transactions in the event that the BCBS revises its treatment of these transactions.

Default Fund Contribution

The agencies are proposing that, under the advanced approaches rule, a banking organization that is a clearing member of a CCP calculate its capital requirement for its default fund contributions at least quarterly or more frequently upon material changes to the CCP. Banking organizations seeking more information on the proposed risk-based capital treatment of default fund contributions should refer to the preamble of the Standardized Approach NPR.

Question 5: The agencies request comment on the proposed treatment of cleared transactions. The agencies solicit comment on whether the proposal provides an appropriately risk-sensitive treatment of a transaction between a banking organization that is a clearing member and its client and a clearing member's guarantee of its client's transaction with a CCP by treating these exposures as OTC derivative contracts. The agencies also request comment on whether the adjustment of the exposure amount would address possible disincentives for banking organizations that are clearing members to facilitate the clearing of their clients' transactions. What other approaches should the agencies consider and why?

Question 6: The agencies are seeking comment on the proposed calculation of the risk-based capital for cleared transactions, including the proposed risk-based capital requirements for exposures to a QCCP. Are there specific types of exposures to certain QCCPs that would warrant an alternative risk-based capital approach? Please provide a detailed description of such transactions or exposures, the mechanics of the alternative risk-based approach, and the supporting rationale.

6. Stress Period for Own Internal Estimates

Under the collateral haircut approach in the advanced approaches rule, banking organizations that receive prior approval from their primary federal supervisory may calculate market price and foreign exchange volatility using own internal estimates. To receive approval to use such an approach, banking organizations are required to base own internal estimates on a historical observation period of at least

one year, among other criteria. During the financial crisis, increased volatility in the value of collateral led to higher counterparty exposures than estimated by banking organizations. In response, the agencies are proposing in this NPR to modify the quantitative standards for approval by requiring banking organizations to base own internal estimates of haircuts on a historical observation period that reflects a continuous 12-month period of significant financial stress appropriate to the security or category of securities. As described in the Standardized Approach NPR preamble, a banking organization would also be required to have policies and procedures that describe how it determines the period of significant financial stress used to calculate the banking organization's own internal estimates, and to be able to provide empirical support for the period used. To ensure an appropriate level of conservativeness, in certain circumstances a primary federal supervisor may require a banking organization to use a different period of significant financial stress in the calculation of own internal estimates for haircuts.

B. Removal of Credit Ratings

Consistent with section 939A of the Dodd-Frank Act, the agencies are proposing a number of changes to the definitions in the advanced approaches rule that currently reference credit ratings.[12] These changes are similar to alternative standards proposed in the Standardized Approach NPR and alternative standards that already have been implemented in the agencies' market risk capital rule. In addition, the agencies are proposing necessary changes to the hierarchy for risk weighting securitization exposures necessitated by the removal of the ratings-based approach, as described further below.

The agencies propose to use an "investment grade" standard that does not rely on credit ratings as an alternative standard in a number of requirements under the advanced approaches rule, as explained below. Under this NPR and the Standardized Approach NPR, investment grade would mean that the entity to which the banking organization is exposed through a loan or security, or the reference entity with respect to a credit derivative, has adequate capacity to meet financial commitments for the projected life of the asset or exposure. Such an entity or reference entity has adequate capacity to meet financial commitments if the risk

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[11] *See* Securities Investor Protection Act of 1970, 15 U.S.C Section 78aaa—78lll; 17 CFR part 300; 17 CFR part 190.

[12] *See* 76 FR 79380 (Dec. 21, 2011).

of its default is low and the full and timely repayment of principal and interest is expected.

Eligible Guarantor

Under the current advanced approaches rule, guarantors are required to meet a number of criteria in order to be considered as eligible guarantors under the securitization framework. For example, the entity must have issued and outstanding an unsecured long-term debt security without credit enhancement that has a long-term applicable external rating in one of the three highest investment-grade rating categories. The agencies are proposing to replace the term ''eligible securitization guarantor'' with the term ''eligible guarantor,'' which includes certain entities that have issued and outstanding an unsecured debt security without credit enhancement that is investment grade. Other modifications to the definition of eligible guarantor are discussed in subpart C of this preamble.

Eligible Double Default Guarantor

Under this proposal, the term ''eligible double default guarantor,'' with respect to a guarantee or credit derivative obtained by a banking organization, means:

(1) *U.S.-based-entities.* A depository institution, bank holding company, savings and loan holding company, or securities broker or dealer registered with the SEC under the Securities Exchange Act of 1934 (15 U.S.C. 78o *et seq.*), if at the time the guarantee is issued or any time thereafter, has issued and outstanding an unsecured debt security without credit enhancement that is investment grade.

(2) *Non-U.S.-based entities.* A foreign bank, or a non-U.S.-based securities firm if the banking organization demonstrates that the guarantor is subject to consolidated supervision and regulation comparable to that imposed on U.S. depository institutions, or securities broker-dealers) if at the time the guarantee is issued or anytime thereafter, has issued and outstanding an unsecured debt security without credit enhancement that is investment grade. Under the proposal, insurance companies in the business of providing credit protection would no longer be eligible double default guarantors.

Conversion Factor Matrix for OTC Derivative Contracts

Under this proposal and Standardized Approach NPR, the agencies propose to retain the metrics used to calculate the potential future exposure (PFE) for derivative contracts (as set forth in table 3 of the proposed rule), and apply the

proposed definition of ''investment grade.''

Money Market Fund Approach

Previously, under the advanced approaches money market fund approach, banking organizations were permitted to assign a 7 percent risk weight to exposures to money market funds that were subject to SEC rule 2a-7 and that had an applicable external rating in the highest investment grade rating category. In this NPR, the agencies propose to eliminate the money market fund approach. The agencies believe it is appropriate to eliminate the preferential risk weight for money market fund investments due to the agencies' and banking organizations' experience with them during the recent financial crisis, in which they demonstrated, at times, elevated credit risk. As a result of the proposed changes, a banking organization would use one of the three alternative approaches under section 154 of this proposal to determine the risk weight for its exposures to a money market fund, subject to a 20 percent floor.

Modified Look-Through Approaches for Equity Exposures to Investment Funds

Under the proposal, risk weights for equity exposures under the simple modified look-through approach would be based on the highest risk weight assigned according to subpart D of the Standardized Approach NPR based on the investment limits in the fund's prospectus, partnership agreement, or similar contract that defines the fund's permissible investments.

Qualifying Operational Risk Mitigants

Under section 161 of the proposal, a banking organization may adjust its estimate of operational risk exposure to reflect qualifying operational risk mitigants. Previously, for insurance to be considered as a qualifying operational risk mitigant, it was required to be provided by an unaffiliated company rated in the three highest rating categories by a nationally recognized statistical ratings organization (NRSRO). Under the proposal, qualifying operational risk mitigants, among other criteria, would be required to be provided by an unaffiliated company that the banking organization deems to have strong capacity to meet its claims payment obligations and the obligor rating category to which the banking organization assigns the company is assigned a PD equal to or less than 10 basis points.

Question 7: The agencies request comment on the proposed use of

alternative standards as they would relate to the definitions of investment grade, eligible guarantor, eligible double default guarantor under the advanced approaches rule, as well as the treatment of certain OTC derivative contracts, operational risk mitigants, money market mutual funds, and investment funds under the advanced approaches rule.

C. Proposed Revisions to the Treatment of Securitization Exposures

1. Definitions

Consistent with the *2009 Enhancements* and as proposed in the Standardized Approach NPR, the agencies are proposing to introduce a new definition for resecuritization exposures and broaden the definition of securitization. In addition, the agencies are proposing to amend the existing definition of traditional securitization in order to exclude certain types of investment firms from treatment under the securitization framework.

The definition of a securitization exposure would be broadened to include an exposure that directly or indirectly references a securitization exposure. Specifically, a securitization exposure would be defined as an on-balance sheet or off-balance sheet credit exposure (including credit-enhancing representations and warranties) that arises from a traditional securitization or synthetic securitization exposure (including a resecuritization), or an exposure that directly or indirectly references a securitization exposure. The agencies are proposing to define a resecuritization exposure as (1) an on- or off-balance sheet exposure to a resecuritization; or (2) an exposure that directly or indirectly references a resecuritization exposure. An exposure to an asset-backed commercial paper (ABCP) program would not be a resecuritization exposure if either: the program-wide credit enhancement does not meet the definition of a resecuritization exposure; or the entity sponsoring the program fully supports the commercial paper through the provision of liquidity so that the commercial paper holders effectively are exposed to the default risk of the sponsor instead of the underlying exposures. Resecuritization would mean a securitization in which one or more of the underlying exposures is a securitization exposure.

The recent financial crisis demonstrated that resecuritization exposures, such as collateralized debt obligations (CDOs) comprised of asset-backed securities (ABS), generally present greater levels of risk relative to

other securitization exposures due to their increased complexity and lack of transparency and potential to concentrate systematic risk. Accordingly, the *2009 Enhancements* amended the Basel II internal ratings-based approach in the securitization framework to require a banking organization to assign higher risk weights to resecuritization exposures than other, similarly-rated securitization exposures. In this proposal, the agencies are proposing to assign risk weights under the simplified supervisory formula approach (SSFA) in a manner that would result in higher risk weights for resecuritization exposures. In addition, the agencies are proposing to modify the definition of financial collateral such that resecuritizations would no longer qualify as eligible financial collateral under the advanced approaches rule.

Asset-Backed Commercial Paper

The following is an example of how to evaluate whether a transaction involving a traditional multi-seller ABCP conduit would be considered a resecuritization exposure under the proposed rule. In this example, an ABCP conduit acquires securitization exposures where the underlying assets consist of wholesale loans and no securitization exposures. As is typically the case in multi-seller ABCP conduits, each seller provides first-loss protection by over-collateralizing the conduit to which it sells its loans. To ensure that the commercial paper issued by each conduit is highly-rated, a banking organization sponsor provides either a pool-specific liquidity facility or a program-wide credit enhancement such as a guarantee to cover a portion of the losses above the seller-provided protection.

The pool-specific liquidity facility generally would not be treated as a resecuritization exposure under this proposal because the pool-specific liquidity facility represents a tranche of a single asset pool (that is, the applicable pool of wholesale exposures), which contains no securitization exposures. However, a sponsor's program-wide credit enhancement that does not cover all losses above the seller-provided credit enhancement across the various pools generally would constitute tranching of risk of a pool of multiple assets containing at least one securitization exposure, and therefore would be treated as a resecuritization exposure.

In addition, if the conduit from the example funds itself entirely with a single class of commercial paper, then the commercial paper generally would

not be considered a resecuritization exposure if either the program-wide credit enhancement did not meet the proposed definition of a resecuritization exposure, or the commercial paper was fully guaranteed by the sponsoring banking organization. When the sponsoring banking organization fully guarantees the commercial paper, the commercial paper holders effectively would be exposed to the default risk of the sponsor instead of the underlying exposures, thus ensuring that the commercial paper does not represent a tranched risk position.

Definition of Traditional Securitization

Since issuing the advanced approaches rules in 2007, the agencies have received feedback from banking organizations that the existing definition of traditional securitization is inconsistent with their risk experience and market practice. The agencies have reviewed this definition in light of this feedback and agree with commenters that changes to it may be appropriate. The agencies are proposing to exclude from the definition of traditional securitization exposures to investment funds, collective investment funds, pension funds regulated under the Employee Retirement Income Security Act (ERISA) and their foreign equivalents, and transactions regulated under the Investment Company Act of 1940 and their foreign equivalents, because these entities are generally prudentially regulated and subject to strict leverage requirements. Moreover, the agencies believe that the capital requirements for an extension of credit to, or an equity holding in these transactions would be more appropriately calculated under the rules for corporate and equity exposures, and that the securitization framework was not designed to apply to such transactions.

Accordingly, the agencies propose to amend the definition of a traditional securitization by excluding any fund that is (1) An investment fund, as defined under the rule, (2) a pension fund regulated under ERISA or a foreign equivalent, or (3) a company regulated under the Investment Company Act of 1940 or a foreign equivalent. Under the current rule, the definition of investment fund, which the agencies are not proposing to amend, means a company all or substantially all of the assets of which are financial assets; and that has no material liabilities.

Question 8: The agencies request comment on the proposed revisions to the definition of traditional securitization.

Under the current advanced approaches rule, the definition of eligible securitization guarantor includes, among other entities, any entity (other than a securitization special purpose entity (SPE)) that has issued and has outstanding an unsecured long-term debt security without credit enhancement that has a long-term applicable external rating in one of the three highest investment-grade rating categories, or has a PD assigned by the banking organization that is lower than or equal to the PD associated with a long-term external rating in the third highest investment grade category. The agencies are proposing to remove the existing references to ratings from the definition of an eligible guarantor (the proposed new term for an eligible securitization guarantor). As revised, the definition for an eligible guarantor would include:

(1) A sovereign, the Bank for International Settlements, the International Monetary Fund, the European Central Bank, the European Commission, a Federal Home Loan Bank, Federal Agricultural Mortgage Corporation (Farmer Mac), a multilateral development bank, a depository institution, a bank holding company, a savings and loan holding company (as defined in 12 U.S.C. 1467a), a credit union, or a foreign bank; or

(2) An entity (other than an SPE):

(i) That at the time the guarantee is issued or anytime thereafter, has issued and outstanding an unsecured debt security without credit enhancement that is investment grade;

(ii) Whose creditworthiness is not positively correlated with the credit risk of the exposures for which it has provided guarantees; and

(iii) That is not an insurance company engaged predominantly in the business of providing credit protection (such as a monoline bond insurer or re-insurer).

During the financial crisis, certain guarantors of securitization exposures had difficulty honoring those guarantees as the financial condition of the guarantors deteriorated at the same time as the guaranteed exposures experienced losses. Therefore, the agencies are proposing to add the requirement related to the correlation between the guarantor's creditworthiness and the credit risk of the exposures it has guaranteed to address this concern.

Question 9: The agencies request comment on the proposed revisions to the definition of eligible securitization guarantor.

2. Operational Criteria for Recognizing Risk Transference in Traditional Securitizations

Section 41 of the current advanced approaches rule includes operational criteria for recognizing the transfer of risk. Under the criteria, a banking organization that transfers exposures that it has originated or purchased to a securitization SPE or other third party in connection with a traditional securitization may exclude the exposures from the calculation of risk-weighted assets only if certain conditions are met. Among the criteria listed is that the transfer is considered a sale under the Generally Accepted Accounting Principles (GAAP).

The purpose of the criterion that the transfer be considered a sale under GAAP was to ensure that the banking organization that transferred the exposures was not required under GAAP to consolidate the exposures on its balance sheet. Given changes in GAAP since the rule was published in 2007, the agencies propose to amend paragraph (a)(1) of section 41 of the advanced approaches rule to require that the transferred exposures are not reported on the banking organization's balance sheet under GAAP.[13]

Question 10: The agencies request comment on the proposed revisions to operational criteria under section 41 of the advanced approaches rule.

3. Proposed Revisions to the Hierarchy of Approaches

Consistent with section 939A of the Dodd-Frank Act, the agencies are proposing to remove the advanced approaches rule's ratings-based approach (RBA) and internal assessment approach (IAA) for securitization exposures. Under the proposal, the hierarchy for securitization exposures would be modified as follows:

(1) A banking organization would be required to deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from a securitization and apply a 1,250 percent risk weight to the portion of a credit-enhancing interest-only strip (CEIO) that does not constitute after-tax gain-on-sale.

(2) If a securitization exposure does not require deduction, a banking organization would be required to assign a risk weight to the securitization exposure using the supervisory formula approach (SFA). The agencies expect banking organizations to use the SFA rather than the SSFA in all instances

where data to calculate the SFA is available.

(3) If the banking organization cannot apply the SFA because not all the relevant qualification criteria are met, it would be allowed to apply the SSFA. A banking organization should be able to explain and justify (e.g., based on data availability) to its primary federal regulator any instances in which the banking organization uses the SSFA rather than the SFA for its securitization exposures.

If the banking organization does not apply the SSFA to the exposure, the banking organization would be required to assign a 1,250 percent risk weight, unless the exposure qualifies for a treatment available to certain ABCP exposures under section 44 of Standardized Approach NPR.

The SSFA, described in detail in the Standardized Approach NPR, is similar in construct and function to the SFA. A banking organization would need several inputs to calculate the SSFA. The first input is the weighted-average capital requirement under the requirements described in Standardized Approach NPR that would be applied to the underlying exposures if they were held directly by the banking organization. The second and third inputs indicate the position's level of subordination and relative size within the securitization. The fourth input is the level of delinquencies experienced on the underlying exposures. A bank would apply the hierarchy of approaches in section 142 of this proposed rule to determine which approach it would apply to a securitization exposure.

Banking organizations using the advanced approaches rule should note that the Standardized Approach NPR would require the use of the SSFA for certain securitizations subject to the advanced approaches rule.

Question 11: The agencies request comment on the proposed revisions to the hierarchy for securitization exposures under the advanced approaches rule.

4. Guarantees and Credit Derivatives Referencing a Securitization Exposure

The advanced approaches rule includes methods for calculating risk-weighted assets for nth-to-default credit derivatives, including first-to-default credit derivatives and second-or-subsequent-to-default credit derivatives.[14] The advanced approaches

rule, however, does not specify how to treat guarantees or non-nth-to-default credit derivatives purchased or sold that reference a securitization exposure. Accordingly, the agencies are proposing clarifying revisions to the risk-based capital requirements for credit protection purchased or provided in the form of a guarantee or derivative other than nth-to-default credit derivatives that reference a securitization exposure.

For a guarantee or credit derivative (other than an nth-to-default credit derivative), the proposal would require a banking organization to determine the risk-based capital requirement for the guarantee or credit derivative as if it directly holds the portion of the reference exposure covered by the guarantee or credit derivative. The banking organization would calculate its risk-based capital requirement for the guarantee or credit derivative by applying either (1) the SFA as provided in section 143 of the proposal to the reference exposure if the bank and the reference exposure qualify for the SFA; or (2) the SSFA as provided in section 144 of the proposal. If the guarantee or credit derivative and the reference securitization exposure would not qualify for the SFA, or the SSFA, the bank would be required to assign a 1,250 percent risk weight to the notional amount of protection provided under the guarantee or credit derivative.

The proposal also would modify the advanced approaches rule to clarify how a banking organization may recognize a guarantee or credit derivative (other than an nth-to-default credit derivative) purchased as a credit risk mitigant for a securitization exposure held by the banking organization. In addition, the proposal adds a provision that would require a banking organization to use section 131 of the proposal instead of the approach required under the hierarchy of approaches in section 142 to calculate the risk-based capital requirements for a credit protection purchased by a banking organization in the form of a guarantee or credit derivative (other than an nth-to-default credit derivative) that references a securitization exposure that a banking organization does not hold. Credit protection purchased that references a securitization exposure not held by a banking organization subjects the banking organization to counterparty credit risk with respect to the credit protection but not credit risk to the securitization exposure.

[13] For more information on the changes in GAAP related to the transfer of exposures, *see* Financial Accounting Standards Board, Topics 810 and 860.

[14] Nth-to-default credit derivative means a credit derivative that provides credit protection only for the nth-defaulting reference exposure in a group of reference exposures. *See* 12 CFR part 3, appendix

C, section 42(l) (OCC); 12 CFR part 208, appendix F, and 12 CFR part 225, appendix G (Board); 12 CFR part 325, appendix D, section 4(l), and 12 CFR part 390, subpart Z, appendix A, section 4(l) (FDIC).

Question 12: The agencies request comment on the proposed revisions to the treatment of guarantees and credit derivatives that reference a securitization exposure.

5. Due Diligence Requirements for Securitization Exposures

As the recent financial crisis unfolded, weaknesses in exposures underlying securitizations became apparent and resulted in NRSROs downgrading many securitization exposures held by banks. The agencies found that many banking organizations relied on NRSRO ratings as a proxy for the credit quality of securitization exposures they purchased and held without conducting their own sufficient independent credit analysis. As a result, some banking organizations did not have sufficient capital to absorb the losses attributable to these exposures. Accordingly, consistent with the *2009 Enhancements,* the agencies are proposing to implement due diligence requirements that banking organizations would be required to use the SFA or SSFA to determine the risk-weighted asset amount for securitization exposures under the advanced approaches proposal. These disclosure requirements are consistent with those required in the standardized approach, as discussed in the Standardized Approach NPR.

Question 13: The agencies solicit comments on what, if any, are specific challenges that are involved with meeting the proposed due diligence requirements and for what types of securitization exposures? How might the agencies address these challenges while ensuring that a banking organization conducts an appropriate level of due diligence commensurate with the risks of its exposures?

6. Nth-to-Default Credit Derivatives

The agencies propose that a banking organization that provides credit protection through an nth-to-default derivative assign a risk weight to the derivative using the SFA or the SSFA. In the case of credit protection sold, a banking organization would determine its exposure in the nth-to-default credit derivative as the largest notional dollar amount of all the underlying exposures.

When applying the SSFA to protection provided in the form of an nth-to-default credit derivative, the attachment point (parameter A) is the ratio of the sum of the notional amounts of all underlying exposures that are subordinated to the banking organization's exposure to the total notional amount of all underlying exposures. For purposes of applying the

SFA, parameter A would be set equal to the credit enhancement level (L) used in the SFA formula. In the case of a first-to-default credit derivative, there are no underlying exposures that are subordinated to the banking organization's exposure. In the case of a second-or-subsequent-to default credit derivative, the smallest (n-1) underlying exposure(s) are subordinated to the banking organization's exposure.

Under the SSFA, the detachment point (parameter D) would be the sum of the attachment point and the ratio of the notional amount of the banking organization's exposure to the total notional amount of the underlying exposures. Under the SFA, Parameter D would be set to equal L plus the thickness of the tranche (T) under the SFA formula. A banking organization that does not use the SFA or SSFA to calculate a risk weight for an nth-to-default credit derivative would assign a risk weight of 1,250 percent to the exposure.

For the treatment of protection purchased through an nth-to-default, a banking organization would determine its risk-based capital requirement for the underlying exposures as if the banking organization had synthetically securitized the underlying exposure with the lowest risk-based capital requirement and had obtained no credit risk mitigant on the underlying exposures. A banking organization would calculate a risk-based capital requirement for counterparty credit risk according to section 132 of the proposal for a first-to-default credit derivative that does not meet the rules of recognition for guarantees and credit derivatives under section 134(b).

A banking organization that obtains credit protection on a group of underlying exposures through a nth-to-default credit derivative that meets the rules of recognition of section 134(b) of the proposal (other than a first-to-default credit derivative) would be permitted to recognize the credit risk mitigation benefits of the derivative only if the banking organization also has obtained credit protection on the same underlying exposures in the form of first-through-(n-1)-to-default credit derivatives; or if n-1 of the underlying exposures have already defaulted. If a banking organization satisfies these requirements, the banking organization would determine its risk-based capital requirement for the underlying exposures as if the banking organization had only synthetically securitized the underlying exposure with the nth lowest risk-based capital requirement and had obtained no credit risk mitigant on the other underlying exposures. A

banking organization that does not fulfill these requirements would calculate a risk-based capital requirement for counterparty credit risk according to section 132 of the proposal for a nth-to-default credit derivative that does not meet the rules of recognition of section 134(b) of the proposal.

For a guarantee or credit derivative (other than an nth-to-default credit derivative) provided by a banking organization that covers the full amount or a pro rata share of a securitization exposure's principal and interest, the banking organization would risk weight the guarantee or credit derivative as if it holds the portion of the reference exposure covered by the guarantee or credit derivative.

As a protection purchaser, if a banking organization chooses (and is able) to recognize a guarantee or credit derivative (other than an nth-to-default credit derivative) that references a securitization exposure as a credit risk mitigant, where applicable, the banking organization must apply section 145 of the proposal for the recognition of credit risk mitigants. If a banking organization cannot, or chooses not to, recognize a credit derivative that references a securitization exposure as a credit risk mitigant under section 145, the banking organization would determine its capital requirement only for counterparty credit risk in accordance with section 131 of the proposal.

Question 14: The agencies request comment on the proposed treatment for nth-to-default credit derivatives.

D. Treatment of Exposures Subject to Deduction

Under the current advanced approaches rule, a banking organization must deduct certain exposures from total capital, including securitization exposures such as CEIOs, low-rated securitization exposures, and high-risk securitization exposures subject to the SFA; eligible credit reserves shortfall; and certain failed capital markets transactions.[15] Consistent with Basel III, the agencies are proposing that the exposures noted above that are currently deducted from total capital would instead be assigned a 1,250 percent risk weight, except as required under

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[15] Section 42(a)(1) of the advanced approaches rule states, in part, that a banking organization must deduct from total capital the portion of any CEIO that does not constitute gain-on-sale. The proposal would clarify that this provision relates to any CEIO that does not constitute *after-tax* gain-on-sale; *see* 12 CFR part 3, appendix C, section 11, and 12 CFR part 167, section 11 (OCC); 12 CFR part 208, appendix F, section 11, and 12 CFR part 225, appendix G, section 11 (Board); 12 CFR part 325, appendix D, section 11, and 12 CFR part 390, subpart Z, appendix A, section 11 (FDIC).

subpart B of the Standardized Approach NPR, and except for deductions from total capital of insurance underwriting subsidiaries of bank holding companies. The proposed change would reduce the differences in the measure of tier 1 capital for risk-based capital purposes under the advanced approaches rule as compared to the leverage capital requirements.

The agencies note that such treatment is not equivalent to a deduction from tier 1 capital, as the effect of a 1,250 percent risk weight would depend on an individual banking organization's current risk-based capital ratios. Specifically, when a risk-based capital ratio (either tier 1 or total risk-based capital) exceeds 8.0 percent, the effect on that risk-based capital ratio of assigning an exposure a 1,250 percent risk weight would be more conservative than a deduction from total capital. The more a risk-based capital ratio exceeds 8.0 percent, the harsher is the effect of a 1,250 percent risk weight on risk-based capital ratios. Conversely, the effect of a 1,250 percent risk weight would be less harsh than a deduction from total capital for any risk-based capital ratio that is below 8.0 percent. Unlike a deduction from total capital, however, a bank's leverage ratio would not be affected by assigning an exposure a 1,250 percent risk weight.

The agencies are not proposing to apply a 1,250 percent risk weight to those exposures currently deducted from tier 1 capital under the advanced approaches rule. For example, the agencies are proposing that gain-on-sale that is deducted from tier 1 under the advanced approaches rule be deducted from common equity tier 1 under the proposed rule. In this regard, the agencies also clarify that any asset deducted from common equity tier 1, tier 1, or tier 2 capital under the advanced approaches rule would not be included in the measure of risk-weighted assets under the advanced approaches rule.

Question 15: The agencies request comment on the proposed 1,250 percent risk weighting approach to CEIOs, low-rated securitization exposures, and high-risk securitization exposures subject to the SFA, any eligible credit reserves shortfall, and certain failed capital markets transactions.

E. Technical Amendments to the Advanced Approaches Rule

The agencies are proposing other amendments to the advanced approaches rule that are designed to refine and clarify certain aspects of the rule's implementation. Each of these revisions is described below.

1. Eligible Guarantees and Contingent U.S. Government Guarantees

In order to be recognized as an eligible guarantee under the advanced approaches rule, the guarantee, among other criteria, must be unconditional. The agencies note that this definition would exclude certain guarantees provided by the U.S. Government or its agencies that would require some action on the part of the bank or some other third party. However, based on their risk perspective, the agencies believe that these guarantees should be recognized as eligible guarantees. Therefore, the agencies are proposing to amend the definition of eligible guarantee so that it explicitly includes a contingent obligation of the U.S. Government or an agency of the U.S. Government, the validity of which is dependent on some affirmative action on the part of the beneficiary or a third party (for example, servicing requirements) irrespective of whether such contingent obligation would otherwise be considered a conditional guarantee. A corresponding provision is included in section 36 of the Standardized Approach NPR.

2. Calculation of Foreign Exposures for Applicability of the Advanced Approaches—Insurance Underwriting Subsidiaries

A banking organization is subject to the advanced approaches rule if it has consolidated assets greater than or equal to $250 billion, or if it has total consolidated on-balance sheet foreign exposures of at least $10 billion.[16] For bank holding companies, in particular, the advanced approaches rule provides that the $250 billion threshold criterion excludes assets held by an insurance underwriting subsidiary. However, a similar provision does not exist for the $10 billion foreign-exposure threshold criteria. Therefore, for bank holding companies and savings and loan holding companies, the Board is proposing to exclude assets held by insurance underwriting subsidiaries from the $10 billion in total foreign exposures threshold. The Board believes such a parallel provision would result in a more appropriate scope of application for the advanced approaches rule.

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[16] *See* 12 CFR part 3, appendix C, and 12 CFR part 167, appendix C (OCC); 12 CFR part 208, appendix F, and 12 CFR part 225, appendix G (Board); 12 CFR part 325, appendix D, and 12 CFR part 390, subpart Z (FDIC).

3. Calculation of Foreign Exposures for Applicability of the Advanced Approaches—Changes to FFIEC 009

The agencies are proposing to revise the advanced approaches rule to comport with changes to the Federal Financial Institutions Examination Council (FFIEC) Country Exposure Report (FFIEC 009) that occurred after the issuance of the advanced approaches rule in 2007. Specifically, the FFIEC 009 replaced the term "local country claims" with the term "foreign-office claims." Accordingly, the agencies have made a similar change under section 100, the section of the advanced approaches rule that makes the rules applicable to a banking organization that has consolidated total on-balance sheet foreign exposures equal to $10 billion or more. As a result, to determine total on-balance sheet foreign exposure, a bank would sum its adjusted cross-border claims, local country claims, and cross-border revaluation gains calculated in accordance with FFIEC 009. Adjusted cross-border claims would equal total cross-border claims less claims with the head office or guarantor located in another country, plus redistributed guaranteed amounts to the country of the head office or guarantor.

4. Applicability of the Rule

The agencies believe it would not be appropriate for banking organizations to move in and out of the scope of the advanced approaches rule based on fluctuating asset sizes. As a result, the agencies are proposing to amend the advanced approaches rule to clarify that once a banking organization is subject to the advanced approaches rule, it would remain subject to the rule until its primary federal supervisor determines that application of the rule would not be appropriate in light of the banking organization's asset size, level of complexity, risk profile, or scope of operations. In connection with the consideration of a banking organization's level of complexity, risk profile, and scope of operations, the agencies also may consider a banking organization's interconnectedness and other relevant risk-related factors.

5. Change to the Definition of Probability of Default Related to Seasoning

The advanced approaches rule requires an upward adjustment to estimated PD for segments of retail exposures for which seasoning effects are material. The rationale underlying this requirement was the seasoning pattern displayed by some types of retail

exposures—that is, the exposures have very low default rates in their first year, rising default rates in the next few years, and declining default rates for the remainder of their terms. Because of the one-year internal ratings-based (IRB) default horizon, capital based on the very low PDs for newly originated, or ''unseasoned,'' loans would be insufficient to cover the elevated risk in subsequent years. The upward seasoning adjustment to PD was designed to ensure that banking organizations would have sufficient capital when default rates for such segments rose predictably beginning in year two.

Since the issuance of the advanced approaches rule, the agencies have found the seasoning provision to be problematic. First, it is difficult to ensure consistency across institutions, given that there is no guidance or criteria for determining when seasoning is ''material'' or what magnitude of upward adjustment to PD is ''appropriate.'' Second, the advanced approaches rule lacks flexibility by requiring an upward PD adjustment whenever there is a significant relationship between a segment's default rate and its age (since origination). For example, the upward PD adjustment may be inappropriate in cases where (1) The outstanding balance of a segment is falling faster over time (due to defaults and prepayments) than the default rate is rising; (2) the age (since origination) distribution of a portfolio is stable over time; or (3) where the loans in a segment are intended, with a high degree of certainty, to be sold or securitized within a short time period.

Therefore, the agencies are proposing to delete the regulatory (Pillar 1) seasoning provision and instead to treat seasoning under Pillar 2. In addition to the difficulties in applying the advanced approaches rule's seasoning requirements discussed above, the agencies believe that the consideration of seasoning belongs more appropriately in Pillar 2 First, seasoning involves the determination of minimum required capital for a period in excess of the 12-month time horizon of Pillar 1. It thus falls more appropriately under longer-term capital planning and capital adequacy, which are major focal points of the internal capital adequacy assessment process component of Pillar 2. Second, seasoning is a major issue only where a banking organization has a concentration of unseasoned loans. The capital treatment of loan concentrations of all kinds is omitted from Pillar 1; however, it is dealt with explicitly in Pillar 2.

6. Cash Items in Process of Collection

Previously under the advanced approaches rule issued in 2007, cash items in the process of collection were not assigned a risk-based capital treatment and, as a result, would have been subject to a 100 percent risk weight. Under the proposed rule, the agencies are revising the advanced approaches rule to risk weight cash items in the process of collection at 20 percent of the carrying value, as the agencies have concluded that this treatment would be more commensurate with the risk of these exposures. A corresponding provision is included in section 32 of the Standardized Approach NPR.

7. Change to the Definition of Qualified Revolving Exposure

The agencies are proposing to modify the definition of Qualified Revolving Exposure (QRE) such that certain unsecured and unconditionally cancellable exposures where a banking organization consistently imposes in practice an upper exposure limit of $100,000 and requires payment in full every cycle will now qualify as QRE. Under the current definition, only unsecured and unconditionally cancellable revolving exposures with a pre-established maximum exposure amount of $100,000 (such as credit cards) are classified as QRE. Unsecured, unconditionally cancellable exposures that require payment in full and have no communicated maximum exposure amount (often referred to as ''charge cards'') are instead classified as ''other retail.'' For regulatory capital purposes, this classification is material and would generally result in substantially higher minimum required capital to the extent that the exposure's asset value correlation (AVC) will differ if classified as QRE (where it is assigned an AVC of 4 percent) or other retail (where AVC varies inversely with through-the-cycle PD estimated at the segment level and can go as high as almost 16 percent for very low PD segments).

The proposed definition would allow certain charge card products to qualify as QRE. Charge card exposures may be viewed as revolving in that there is an ability to borrow despite a requirement to pay in full. Where a banking organization consistently imposes in practice an upper exposure limit of $100,000 the agencies believe that charge cards are more closely aligned from a risk perspective with credit cards than with any type of ''other retail'' exposure and are therefore proposing to amend the definition of QRE in order to allow such products to qualify as QRE.

The agencies also have considered the appropriate treatment of hybrid cards. Hybrid cards have characteristics of both charge and credit cards. The agencies are uncertain whether it would be prudent to allow hybrid cards to qualify as QREs at this time. Hybrid cards are a relatively new product, and there is limited information available about them including data on their market and risk characteristics.

Question 16: Do hybrid cards exhibit similar risk characteristics to credit and charge cards and should the agencies allow them to qualify as QREs? Commenters are requested to provide a detailed explanation, as appropriate, as well as the relevant data and impact analysis to support their positions. Such information should include data on the number or dollar-amounts of cards issued to date, anticipated growth rate, and performance data including default and delinquency rates, credit score distribution of cardholders, volatilities, or asset-value correlations.

8. Trade-Related Letters of Credit

In 2011, the BCBS revised the Basel II advanced internal ratings-based approach to remove the one-year maturity floor for trade finance instruments. Consistent with this revision, this proposed rule would specify that an exposure's effective maturity must be no greater than five years and no less than one year, except that an exposure's effective maturity must be no less than one day if the exposure is a trade-related letter of credit, or if the exposure has an original maturity of less than one year and is not part of a banking organization's ongoing financing of the obligor.

A corresponding provision is included in section 33 of the Standardized Approach NPR.

Question 17: The agencies request comment on all the other proposed amendments to the advanced approaches rule described in section E (items 1 through 8), of this preamble.

F. Pillar 3 Disclosures

1. Frequency and Timeliness of Disclosures

Under the proposed rule, a banking organization is required to provide certain qualitative and quantitative disclosures on a quarterly, or in some cases, annual basis, and these disclosures must be ''timely.'' In the preamble to the advanced approaches rule issued in 2007, the agencies indicated that quarterly disclosures would be timely if they were provided within 45 days after calendar quarter-end. The preamble did not specify

expectations regarding annual disclosures. The agencies acknowledged that timing of disclosures required under the federal banking laws may not always coincide with the timing of disclosures under other federal laws, including federal securities laws and their implementing regulations by the SEC. The agencies also indicated that a banking organization may use disclosures made pursuant to SEC, regulatory reporting, and other disclosure requirements to help meet its public disclosure requirements under the advanced approaches rule.

The agencies understand that the deadline for certain SEC financial reports is more than 45 calendar days after calendar quarter-end. Therefore, the agencies are proposing to clarify in this NPR that, where a banking organization's fiscal year-end coincides with the end of a calendar quarter, the requirement for timely disclosure would be no later than the applicable reporting deadlines for regulatory reports (for example, FR Y–9C) and financial reports (for example, SEC Forms 10–Q and 10–K). When these deadlines differ, banking organizations would adhere to the later deadline. In cases where a banking organization's fiscal year-end does not coincide with the end of a calendar quarter, the agencies would consider those disclosures that are made within 45 days as timely.

2. Enhanced Securitization Disclosure Requirements

In view of the significant contribution of securitization exposures to the financial crisis, the agencies believe that enhanced disclosure requirements are appropriate. Consistent with the disclosures introduced by the 2009 Enhancements, the agencies are proposing to amend the qualitative section for Table 11.8 disclosures (Securitization) to include the following:

▪ The nature of the risks inherent in a banking organization's securitized assets,

▪ A description of the policies that monitor changes in the credit and market risk of a banking organization's securitization exposures,

▪ A description of a banking organization's policy regarding the use of credit risk mitigation for securitization exposures,

▪ A list of the special purpose entities a banking organization uses to securitize exposures and the affiliated entities that a bank manages or advises and that invest in securitization exposures or the referenced SPEs, and

▪ A summary of the banking organization's accounting policies for securitization activities.

To the extent possible, the agencies are proposing the disclosure requirements included in the 2009 Enhancements. However, due to the prohibition on the use of credit ratings in the risk-based capital rules required by the Dodd-Frank Act, the proposed tables do not include those disclosure requirements related to the use of ratings.

3. Equity Holding That Are Not Covered Positions

Section 71 of the current advanced approaches rule requires banking organizations to include in their public disclosures a discussion of ''important policies covering the valuation of and accounting for equity holdings in the banking book.'' Since ''banking book'' is not a defined term under the advanced approaches rule, the agencies propose to refer to such exposures as equity holdings that are not covered positions.

III. Market Risk Capital Rule

In today's **Federal Register**, the federal banking agencies are finalizing revisions to the agencies' market risk capital rule (the market risk capital rule), which generally requires national banks, state banks, and bank holding companies with significant exposure to market risk to implement systems and procedures necessary to manage and measure that risk and to hold a commensurate amount of capital. As noted in the introduction of this preamble, in this NPR, the agencies are proposing to expand the scope of the market risk capital rule to include savings associations and savings and loan holding companies and codify the market risk rule in a manner similar to the other regulatory capital rules in the three proposals. In the process of incorporating the market risk rule into the regulatory capital framework, the agencies note that there will be some overlap among certain defined terms. In any final rule, the agencies intend to merge definitions and make any appropriate technical changes.

As a general matter, a banking organization subject to the market risk capital rule will not include assets held for trading purposes when calculating its risk-weighted assets for the purpose of the other risk-based capital rules. Instead, the banking organization must determine an appropriate capital requirement for such assets using the methodologies set forth in the final market risk capital rule. The banking organization then must multiply its market risk capital requirement by 12.5

to determine a risk-weighted asset amount for its market risk exposures and then add that amount to its credit risk-weighted assets to arrive at its total risk-weighted asset amount.

As described in the preamble to the market risk capital rule, the agencies revised their respective market risk rules to better capture positions subject to market risk, reduce pro-cyclicality in market risk capital requirements, enhance the rule's sensitivity to risks that were not adequately captured under the prior regulatory measurement methodologies, and increase transparency through enhanced disclosures.

The market risk capital rules is designed to determine capital requirements for trading assets based on general and specific market risk associated with these assets. General market risk is the risk of loss in the market value of positions resulting from broad market movements, such as changes in the general level of interest rates, equity prices, foreign exchange rates, or commodity prices. Specific market risk is the risk of loss from changes in the market value of a position due to factors other than broad market movements, including event risk (changes in market price due to unexpected events specific to a particular obligor or position) and default risk.

The agencies' current market risk capital rules do not apply to savings associations or savings and loan holding companies. The Board has previously expressed its intention to assess the condition, performance, and activities of savings and loan holding companies (SLHCs) on a consolidated risk-based basis in a manner that is consistent with the Board's established approach regarding bank holding company supervision while considering any unique characteristics of SLHCs and the requirements of the Home Owners' Loan Act.[17] Therefore, as noted above, the agencies are proposing in this NPR to expand the scope of the market risk rule to savings associations and savings and loan holding companies that meet the stated thresholds. As proposed, the market risk capital rule would apply to any savings association or savings and loan holding company whose trading activity (the gross sum of its trading assets and trading liabilities) is equal to 10 percent or more of its total assets or $1 billion or more. Under the proposed rule, each agency would retain the authority to apply its respective market risk rule to any entity under its jurisdiction, regardless of whether it

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[17] *See* 76 FR 22663 (April, 22, 2011).

meets the aforementioned thresholds, if the agency deems it necessary or appropriate for safe and sound banking practices.

As a general matter, savings associations and savings and loan holding companies do not engage in trading activity to a substantial degree. However, the agencies believe that any savings association or savings and loan holding company whose trading activity grows to the extent that it meets the thresholds should hold capital commensurate with the risk of the trading activity and should have in place the prudential risk management systems and processes required under the market risk capital rule. Therefore, the agencies believe it would be necessary and appropriate to expand the scope of the market risk rule to apply to savings associations and savings and loan holding companies.

Application of the market risk capital rule to all banking organizations with material exposure to market risk would be particularly important because of banking organizations' increased exposure to traded credit products, such as credit default swaps, asset-backed securities and other structured products, as well as other less liquid products. In fact, many of the revisions to the final market risk capital rule were made in response to concerns that arose during the financial crisis when certain trading assets suffered substantial losses, causing banking organizations holding those assets to suffer substantial losses. For example, in addition to a market risk capital requirement to account for general market risk, the revised rules apply more conservative standardized specific risk capital requirements to most securitization positions, implement an additional incremental risk capital requirement for a banking organization that models specific risk for one or more portfolios of debt or, if applicable, equity positions. Additionally, to address concerns about the appropriate treatment of traded positions that have limited price transparency, a banking organization subject to the market risk capital rule must have a well-defined valuation process for all covered positions.

Question 18: The agencies request comment on the application of the market risk rule to savings associations and savings and loan holding companies.

IV. List of Acronyms

ABCP   Asset-Backed Commercial Paper
ABS   Asset-Backed Security
AVC   Asset Value Correlation
BCBS   Basel Committee on Banking Supervision

CCP   Central Counterparty
CDO   Collateralized Debt Obligation
CDS   Credit Default Swap
CDS$_{ind}$ Index Credit Default Swap
CEIO   Credit-Enhancing Interest-Only Strip
CPSS   Committee on Payment and Settlement Systems
CVA   Credit Valuation Adjustment
DFA   Dodd-Frank Act
DvP   Delivery-versus-Payment
E   Measure of Effectiveness
EAD   Exposure-at-Default
EE   Expected Exposure
Expected Operational Loss   (EOL)
EPE   Expected Positive Exposure
FDIC   Federal Deposit Insurance Corporation
FFIEC   Federal Financial Institutions Examination Council
FR   **Federal Register**
GAAP   Generally Accepted Accounting Principles
HVCRE   High-Volatility Commercial Real Estate
IAA   Internal Assessment Approach
IMA   Internal Models Approach
IMM   Internal Models Methodology
I/O   Interest-Only
IOSCO   International Organization of Securities Commissions
IRB   Internal Ratings-Based
Loss Given Default   (LGD)
M   Effective Maturity
NGR   Net-to-Gross Ratio
NPR   Notice of Proposed Rulemaking
NRSRO   Nationally Recognized Statistical Rating Organization
OCC   Office of the Comptroller of the Currency
OTC   Over-the-Counter
PD   Probability of Default
PFE   Potential Future Exposure
PvP   Payment-versus-Payment
QCCP   Qualifying Central Counterparty
QRE   Qualified Retail Exposure
RBA   Ratings-Based Approach
RVC   Ratio of Value Change
SFA   Supervisory Formula Approach
SSFA   Simplified Supervisory Formula Approach
U.S.C.   United States Code
VaR   Value-at-Risk

V. Regulatory Flexibility Act Analysis

The Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.* (RFA) requires an agency to provide an initial regulatory flexibility analysis with a proposed rule or to certify that the rule will not have a significant economic impact on a substantial number of small entities (defined for purposes of the RFA to include banks with assets less than or equal to $175 million) and publish its certification and a short, explanatory statement in the **Federal Register** along with the proposed rule.

The Board is providing an initial regulatory flexibility analysis with respect to this NPR. The OCC and FDIC are certifying that the proposals in this NPR will not have a significant economic impact on a substantial number of small entities.

Board

Under regulations issued by the Small Business Administration,[18] a small entity includes a depository institution or bank holding company with total assets of $175 million or less (a small banking organization). As of March 31, 2012 there were 373 small state member banks. As of December 31, 2011, there were approximately 128 small savings and loan holding companies and 2,385 small bank holding companies.[19]

As discussed previously in the Supplementary Information, the Board is proposing to revise its capital requirements to promote safe and sound banking practices, implement Basel III, and other aspects of the Basel capital framework, and codify its capital requirements.

The proposals also satisfy certain requirements under the Dodd-Frank Act by imposing new or revised minimum capital requirements on certain depository institution holding companies.[20] Additionally, under section 38(c)(1) of the Federal Deposit Insurance Act, the agencies may prescribe capital standards for depository institutions that they regulate.[21] In addition, among other authorities, the Board may establish capital requirements for state member banks under the Federal Reserve Act,[22] for state member banks and bank holding companies under the International Lending Supervision Act and Bank Holding Company Act,[23] and for savings and loan holding companies under the Home Owners' Loan Act.[24]

The proposed requirements in this NPR generally would not apply to small bank holding companies that are not engaged in significant nonbanking activities, do not conduct significant off-balance sheet activities, and do not have a material amount of debt or equity securities outstanding that are registered with the SEC. These small bank holding companies remain subject to the Board's Small Bank Holding Company Policy Statement (Policy Statement).[25]

[18] *See* 13 CFR 121.201.
[19] The December 31, 2011, data are the most recent available data on small savings and loan holding companies and small bank holding companies.
[20] *See* 12 U.S.C. 5371.
[21] *See* 12 U.S.C. 1831o(c)(1).
[22] *See* 12 CFR 208.43.
[23] *See* 12 U.S.C. 3907; 12 U.S.C. 1844.
[24] *See* 12 U.S.C. 1467a(g)(1).
[25] *See* 12 CFR part 225, appendix C; *see also* 12 U.S.C. 5371(b)(5)(C). Section 171 of the Dodd-Frank provides an exemption from its requirements for bank holding companies subject to the Policy Statement (as in effect on May 19, 2010). Section 171 does not provide a similar exemption for small savings and loan holding companies and they are therefore subject to the proposed rules.

The proposals in this NPR would generally not apply to other small banking organizations. Those small banking organizations that would be subject to the proposed modifications to the advanced approaches rules would only be subject to those requirements because they are a subsidiary of a large banking organization that meets the criteria for advanced approaches. The Board expects that all such entities would rely on the systems developed by their parent banking organizations and would have no additional compliance costs. The Board also expects that the parent banking organization would remedy any capital shortfalls at such a subsidiary that would occur due to the proposals in this NPR.

The Board welcomes comment on all aspects of its analysis. A final regulatory flexibility analysis will be conducted after consideration of comments received during the public comment period.

OCC

Pursuant to section 605(b) of the Regulatory Flexibility Act, (RFA), the regulatory flexibility analysis otherwise required under section 604 of the RFA is not required if an agency certifies that the rule will not have a significant economic impact on a substantial number of small entities (defined for purposes of the RFA to include banks with assets less than or equal to $175 million) and publishes its certification and a short, explanatory statement in the **Federal Register** along with its rule.

As of March 31, 2012, there were approximately 599 small national banks and 284 small federally chartered savings associations. The proposed changes to OCC's minimum risk-based capital requirements included in this NPR would impact only those small national banks and federal savings associations that are subsidiaries of large internationally active banking organizations that use the advanced approaches risk-based capital rules, and those small federal savings associations that meet the threshold criteria for application of the market risk rule. Only six small institutions would be subject to the advanced approaches risk-based capital rules, and no small federal savings associations satisfy the threshold criteria for application of the market risk rule. Therefore, the OCC does not believe that the proposed rule will result in a significant economic impact on a substantial number of small entities.

FDIC Regulatory Flexibility Act Analysis

Pursuant to section 605(b) of the Regulatory Flexibility Act, (RFA), the regulatory flexibility analysis otherwise required under section 604 of the RFA is not required if an agency certifies that the rule will not have a significant economic impact on a substantial number of small entities (defined for purposes of the RFA to include banks with assets less than or equal to $175 million) and publishes its certification and a short, explanatory statement in the **Federal Register** along with its rule.

As of March 31, 2012, there were approximately 2,433 small state nonmember banks, 115 small state savings banks, and 45 small state savings associations (collectively, small banks and savings associations). The proposed changes to FDIC's minimum risk-based capital requirements included in this NPR would impact only those small banks and savings associations that are subsidiaries of large, internationally-active banking organizations that use the advanced approaches risk-based capital rules, and those small state savings associations that meet the threshold criteria for application of the market risk rule. There are no small banks and savings associations subject to the advanced approaches risk-based capital rules, and no small state savings associations satisfy the threshold criteria for application of the market risk rule. Therefore, the FDIC does not believe that the proposed rule will result in a significant economic impact on a substantial number of small entities.

VI. Paperwork Reduction Act

Request for Comment on Proposed Information Collection

In accordance with the requirements of the Paperwork Reduction Act (PRA) of 1995, the Agencies may not conduct or sponsor, and the respondent is not required to respond to, an information collection unless it displays a currently valid Office of Management and Budget (OMB) control number. The Agencies are requesting comment on a proposed information collection.

The information collection requirements contained Subpart E of this joint notice of proposed rulemaking (NPR) have been submitted by the OCC and FDIC to OMB for review under the PRA, under OMB Control Nos. 1557–0234 and 3064–0153. The information collection requirements contained in Subpart F of this NPR have been submitted by the OCC and FDIC to OMB for review under the PRA. In accordance with the PRA (44 U.S.C. 3506; 5 CFR part 1320, Appendix A.1), the Board has reviewed the NPR under the authority delegated by OMB. The Board's OMB Control Number for the information

collection requirements contained Subpart E of this NPR is 7100–0313 and for the information collection requirements contained Subpart F of this NPR is 7100–0314. The requirements in Subpart E are found in proposed sections __.121, __.122, __.123, __.124, __.132, __.141, __.142, __.152, __.173. The requirements in Subpart F are found in proposed sections __.203, __.204, __.205, __.206, __.207, __.208, __.209, __.210, and __.212.

The Agencies have published two other NPRs in this issue of the **Federal Register**. Please see the NPRs entitled "Regulatory Capital Rules: Regulatory Capital, Minimum Regulatory Capital Ratios, Capital Adequacy, Transition Provisions" and "Regulatory Capital Rules: Standardized Approach for Risk-Weighted Assets; Market Discipline and Disclosure Requirements." While the three NPRs together comprise an integrated capital framework, the PRA burden has been divided among the three NPRs and a PRA statement has been provided in each.

Comments are invited on:

(a) Whether the collection of information is necessary for the proper performance of the Agencies' functions, including whether the information has practical utility;

(b) The accuracy of the estimates of the burden of the information collection, including the validity of the methodology and assumptions used;

(c) Ways to enhance the quality, utility, and clarity of the information to be collected;

(d) Ways to minimize the burden of the information collection on respondents, including through the use of automated collection techniques or other forms of information technology; and

(e) Estimates of capital or start up costs and costs of operation, maintenance, and purchase of services to provide information.

All comments will become a matter of public record.

Comments should be addressed to:

OCC: Communications Division, Office of the Comptroller of the Currency, Public Information Room, Mail stop 1–5, Attention: 1557–0234, 250 E Street SW., Washington, DC 20219. In addition, comments may be sent by fax to 202–874–4448, or by electronic mail to *regs.comments@occ.treas.gov.* You can inspect and photocopy the comments at the OCC's Public Information Room, 250 E Street SW., Washington, DC 20219. You can make an appointment to inspect the comments by calling 202–874–5043.

Board: You may submit comments, identified by R–1443, by any of the following methods:

• *Agency Web Site: http://www.federalreserve.gov.* Follow the instructions for submitting comments on the *http://www.federalreserve.gov/generalinfo/foia/ProposedRegs.cfm.*

• *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.

• *Email: regs.comments@federalreserve.gov.* Include docket number in the subject line of the message.

• *Fax:* 202–452–3819 or 202–452–3102.

• *Mail:* Jennifer J. Johnson, Secretary, Board of Governors of the Federal Reserve System, 20th Street and Constitution Avenue NW, Washington, DC 20551.

All public comments are available from the Board's Web site at *http://www.federalreserve.gov/generalinfo/foia/ProposedRegs.cfm* as submitted, unless modified for technical reasons. Accordingly, your comments will not be edited to remove any identifying or contact information. Public comments may also be viewed electronically or in paper in Room MP–500 of the Board's Martin Building (20th and C Streets NW.) between 9 a.m. and 5 p.m. on weekdays.

FDIC: You may submit written comments, which should refer to RIN 3064–AD97 Advanced Approaches Risk-based Capital Rule (3064–0153); Market Risk Capital Rule (NEW), by any of the following methods:

• *Agency Web Site: http://www.fdic.gov/regulations/laws/federal/propose.html.* Follow the instructions for submitting comments on the FDIC Web site.

• *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.

• *Email: Comments@FDIC.gov.*

• *Mail:* Robert E. Feldman, Executive Secretary, Attention: Comments, FDIC, 550 17th Street NW., Washington, DC 20429.

• *Hand Delivery/Courier:* Guard station at the rear of the 550 17th Street Building (located on F Street) on business days between 7 a.m. and 5 p.m.

Public Inspection: All comments received will be posted without change to *http://www.fdic.gov/regulations/laws/federal/propose/html* including any personal information provided. Comments may be inspected at the FDIC Public Information Center, Room 100, 801 17th Street NW., Washington, DC, between 9 a.m. and 4:30 p.m. on business days.

Proposed Information Collection

Title of Information Collection: Regulatory Capital Rules (Part 3): Advanced Approaches Risk-based Capital Rules (Basel III, Part 3).

Frequency of Response: Quarterly and annually.

Affected Public:

OCC: National banks and federally chartered savings associations.

Board: State member banks (SMBs), bank holding companies (BHCs), and savings and loan holding companies (SLHCs).

FDIC: Insured state nonmember banks, certain subsidiaries of these entities, and state chartered savings associations.

Estimated Burden: The burden estimates below exclude any regulatory reporting burden associated with changes to the Consolidated Reports of Income and Condition for banks (FFIEC 031 and FFIEC 041; OMB Nos. 7100–0036, 3064–0052, 1557–0081), Advanced Capital Adequacy Framework Regulatory Reporting Requirements (FFIEC 101; OMB Nos. 7100–0319, 3064–0159, 1557–0239), the Financial Statements for Bank Holding Companies (FR Y–9; OMB No. 7100–0128), and the Capital Assessments and Stress Testing information collection (FR Y–14A/Q/M; OMB No. 7100–0341). The agencies are still considering whether to revise these information collections or to implement a new information collection for the regulatory reporting requirements. In either case, a separate notice would be published for comment on the regulatory reporting requirements.

OCC

Estimated Number of Respondents: 45.

Estimated Burden per Respondent: One-time recordkeeping, 460 hours; ongoing recordkeeping, 176 hours; one-time disclosures, 280 hours; ongoing disclosures, 140 hours.

Total Estimated Annual Burden: 47,520 hours.

Board

Estimated Number of Respondents: SMBs, 4; BHCs, 20; SLHCs, 13.

Estimated Burden per Respondent: One-time recordkeeping, 460 hours; ongoing recordkeeping, 176 hours; one-time disclosures, 280 hours; ongoing disclosures, 140 hours.

Total Estimated Annual Burden: 39,072 hours.

FDIC

Estimated Number of Respondents: 8.

Estimated Burden per Respondent: One-time recordkeeping, 460 hours; ongoing recordkeeping, 176 hours; one-time disclosures, 280 hours; ongoing disclosures, 140 hours.

Total Estimated Annual Burden: 8,448 hours.

Abstract

The PRA burden associated with reporting, recordkeeping, and disclosure requirements of Subpart E that are found in proposed sections ____.121, ____.122, ____.123, ____.124, ____.132(b)(2)(iii), ____.132(b)(3), ____.132 (d)(1), ____.132(d)(1)(iii), ____.141(b)(3), ____.142(h)(2), ____.152(c)(2), ____.173 (tables: 11.1, 11.2, 11.3, 11.6, 11.7, 11.8, 11.10, and 11.11) are currently accounted for under the Agencies' existing information collections (ICs).

The PRA burden associated with recordkeeping and disclosure requirements found in proposed sections ____.132(b)(2)(iii)(A), ____.132(d)(2)(iv), ____.132(d)(3)(vi), ____.132(d)(3)(viii), ____.132(d)(3)(ix), ____.132(d)(3)(x), ____.132(d)(3)(xi), ____.141(c)(2)(i), ____.141(c)(2)(ii), ____.173 (tables: 11.4, 11.5, 11.9, and 11.12) would revise the Agencies' existing ICs and are described below.

Section-by-Section Analysis

Recordkeeping Requirements

Under proposed section ____.132(b)(2)(iii)(A), counterparty credit risk of repo-style transactions, eligible margin loans, and OTC derivative contracts, Own internal estimates for haircuts. With the prior written approval of the [AGENCY], a [BANK] may calculate haircuts (Hs and Hfx) using its own internal estimates of the volatilities of market prices and foreign exchange rates. To receive [AGENCY] approval to use its own internal estimates, a [BANK] must satisfy the minimum quantitative standards outlined in this section. The agencies estimate that respondents would take on average 80 hours (two business weeks) to reprogram and update systems with the requirements outlined in this section. In addition, the agencies estimate that, on a continuing basis, respondents would take on average 16 hours annually to maintain their internal systems.

Under proposed section ____.132(d)(2)(iv), counterparty credit risk of repo-style transactions, eligible margin loans, and OTC derivative contracts, Risk-weighted assets using IMM—Under the IMM, a [BANK] uses an internal model to estimate the expected exposure (EE) for a netting set and then calculates EAD based on that EE. A [BANK] must calculate two EEs and two EADs (one stressed and one unstressed) for each netting as outlined

in this section. The agencies estimate that respondents would take on average 80 hours (two business weeks) to update their current model with the requirements outlined in this section. In addition, the agencies estimate that, on a continuing basis, respondents would take on average 40 hours annually to maintain their internal model.

Under proposed section ____.132(d)(3)(vi), counterparty credit risk of repo-style transactions, eligible margin loans, and OTC derivative contracts. To obtain [AGENCY] approval to calculate the distributions of exposures upon which the EAD calculation is based, the [BANK] must demonstrate to the satisfaction of the [AGENCY] that it has been using for at least one year an internal model that broadly meets the minimum standards, with which the [BANK] must maintain compliance. The [BANK] must have procedures to identify, monitor, and control wrong-way risk throughout the life of an exposure. The procedures must include stress testing and scenario analysis. The agencies estimate that respondents would take on average 80 hours (two business weeks) to implement a model with the requirements outlined in this section.

Under proposed section ____.132(d)(3)(viii), counterparty credit risk of repo-style transactions, eligible margin loans, and OTC derivative contracts. When estimating model parameters based on a stress period, the [BANK] must use at least three years of historical data that include a period of stress to the credit default spreads of the [BANK]'s counterparties. The [BANK] must review the data set and update the data as necessary, particularly for any material changes in its counterparties. The [BANK] must demonstrate at least quarterly that the stress period coincides with increased CDS or other credit spreads of the [BANK]'s counterparties. The [BANK] must have procedures to evaluate the effectiveness of its stress calibration that include a process for using benchmark portfolios that are vulnerable to the same risk factors as the [BANK]'s portfolio. The [AGENCY] may require the [BANK] to modify its stress calibration to better reflect actual historic losses of the portfolio. The agencies estimate that respondents would take on average 80 hours (two business weeks) to implement procedures with the requirements outlined in this section.

Under proposed section ____.132(d)(3)(ix), counterparty credit risk of repo-style transactions, eligible margin loans, and OTC derivative contracts. A [BANK] must subject its internal model to an initial validation

and annual model review process. The model review should consider whether the inputs and risk factors, as well as the model outputs, are appropriate. As part of the model review process, the [BANK] must have a backtesting program for its model that includes a process by which unacceptable model performance will be determined and remedied. The agencies estimate that respondents would take on average 40 hours (one business week) to implement a model with the requirements outlined in this section. In addition, the agencies estimate that, on a continuing basis, respondents would take on average 40 hours annually to maintain their internal model.

Under proposed section ____.132(d)(3)(x), counterparty credit risk of repo-style transactions, eligible margin loans, and OTC derivative contracts. A [BANK] must have policies for the measurement, management and control of collateral and margin amounts. The agencies estimate that respondents would take on average 20 hours to implement policies with the requirements outlined in this section.

Under proposed section ____.132(d)(3)(xi), counterparty credit risk of repo-style transactions, eligible margin loans, and OTC derivative contracts. A [BANK] must have a comprehensive stress testing program that captures all credit exposures to counterparties, and incorporates stress testing of principal market risk factors and creditworthiness of counterparties. The agencies estimate that respondents would take on average 40 hours (one business week) to implement a program with the requirements outlined in this section. In addition, the agencies estimate that, on a continuing basis, respondents would take on average 40 hours annually to maintain their program.

Under proposed sections ____.141(c)(2)(i) and (ii), operational criteria for recognizing the transfer of risk. A [BANK] must demonstrate its comprehensive understanding of a securitization exposure under section 141(c)(1), for each securitization exposure by conducting an analysis of the risk characteristics of a securitization exposure prior to acquiring the exposure and document such analysis within three business days after acquiring the exposure. On an on-going basis (no less frequently than quarterly), evaluate, review, and update as appropriate the analysis required under this section for each securitization exposure. The agencies estimate that respondents would take on average 40 hours (one business week) to implement a program with the

requirements outlined in this section. The agencies estimate that, on a continuing basis, respondents would take on average 10 hours quarterly to evaluate, review, and update the program requirements.

Disclosure Requirements

Under proposed section ____.173, disclosures by banks that are advanced approaches banks that have successfully completed parallel run. A [BANK] that is an advanced approaches bank must make the disclosures described in Tables 11.1 through 11.12. The [BANK] must make these disclosures publicly available for each of the last three years (that is, twelve quarters) or such shorter period beginning on the effective date of this subpart E.

Under proposed table 11.4—Capital Conservation and Countercyclical Buffers. The [BANK] must comply with the qualitative and quantitative public disclosures outlined in this table. The agencies estimate that respondents would take on average 80 hours (two business weeks) to comply with the disclosure requirements outlined in this table. The agencies estimate that, on a continuing basis, respondents would take on average 40 hours annually comply with the disclosure requirements outlined in this table.

Under proposed table 11.5—Credit Risk: General Disclosures. The [BANK] must comply with the qualitative and quantitative public disclosures outlined in this table. The agencies estimate that respondents would take on average 80 hours (two business weeks) to comply with the disclosure requirements outlined in this table. The agencies estimate that, on a continuing basis, respondents would take on average 40 hours annually to comply with the disclosure requirements outlined in this table.

Under proposed table 11.9—Securitization. The [BANK] must comply with the qualitative and quantitative public disclosures outlined in this table. The agencies estimate that respondents would take on average 60 hours to comply with the disclosure requirements outlined in this table. The agencies estimate that, on a continuing basis, respondents would take on average 30 hours annually comply with the disclosure requirements outlined in this table.

Under proposed Table 11.12—Interest Rate Risk for Non-trading Activities. The [BANK] must comply with the qualitative and quantitative public disclosures outlined in this table. The agencies estimate that respondents would take on average 60 hours to comply with the disclosure

requirements outlined in this table. The agencies estimate that, on a continuing basis, respondents would take on average 30 hours annually comply with the disclosure requirements outlined in this table.

Proposed Information Collection

Title of Information Collection: Regulatory Capital Rules (Part 3): Market Risk Capital Rule (Basel III, Part 3).

Frequency of Response: Quarterly and annually.

Affected Public:

OCC: National banks and federally chartered savings associations.

Board: Savings associations and saving and loan holding companies.

FDIC: Insured state nonmember banks, state savings associations, and certain subsidiaries of these entities.

Estimated Burden:

OCC

Estimated Number of Respondents: 45.

Estimated Burden per Respondent: 1,964 hours.

Total Estimated Annual Burden: 99,180 hours.

Board

Estimated Number of Respondents: 30.

Estimated Burden per Respondent: 2,204 hours.

Total Estimated Annual Burden: 66,120 hours.

FDIC

Estimated Number of Respondents: 2.

Estimated Burden per Respondent: 1,964 hours.

Total Estimated Annual Burden: 3,928 hours.

Abstract:

The PRA burden associated with reporting, recordkeeping, and disclosure requirements of Subpart F that are found in proposed sections ____.203, ____.204, ____.205, ____.206, ____.207, ____.208, ____.209, ____.210, and ____.212. They would enhance risk sensitivity and introduce requirements for public disclosure of certain qualitative and quantitative information about a savings association's or a savings and loan holding company's market risk. The collection of information is necessary to ensure capital adequacy according to the level of market risk.

Section-by-Section Analysis

Section ____lowbarm;____lowbarm;.203 sets forth the requirements for applying the market risk framework. Section

____.203(a)(1) requires clearly defined policies and procedures for determining which trading assets and trading liabilities are trading positions, which of its trading positions are correlation trading positions, and specifies what must be taken into account. Section ____.203(a)(2) requires a clearly defined trading and hedging strategy for trading positions approved by senior management and specifies what each strategy must articulate. Section ____.203(b)(1) requires clearly defined policies and procedures for actively managing all covered positions and specifies the minimum that they must require. Sections ____.203(c)(4) through ____.203(c)(10) require the annual review of internal models and include certain requirements that the models must meet. Section ____.203(d)(4) requires an annual report to the board of directors on the effectiveness of controls supporting market risk measurement systems.

Section ____.204(b) requires quarterly backtesting. Section ____.205(a)(5) requires institutions to demonstrate to the agencies the appropriateness of proxies used to capture risks within value-at- risk models. Section ____.205(c) requires institutions to retain value-at-risk and profit and loss information on sub-portfolios for two years. Section ____.206(b)(3) requires policies and procedures for stressed value-at-risk models and prior approvals on determining periods of significant financial stress.

Section ____.207(b)(1) specifies what internal models for specific risk must include and address. Section 208(a) requires prior written approval for incremental risk. Section ____.209(a) requires prior approval for comprehensive risk models. Section ____.209(c)(2) requires retaining and making available the results of supervisory stress testing on a quarterly basis. Section ____.210(f) requires documentation quarterly for analysis of risk characteristics of each securitization position it holds. Section ____.212 requires quarterly quantitative disclosures, annual qualitative disclosures, and a formal disclosure policy approved by the board of directors that addresses the bank's approach for determining the market risk disclosures it makes.

VII. Plain Language

Section 722 of the Gramm-Leach-Bliley Act requires the Federal banking agencies to use plain language in all proposed and final rules published after January 1, 2000. The agencies have sought to present the proposed rule in a simple and straightforward manner,

and invite comment on the use of plain language.

VIII. OCC Unfunded Mandates Reform Act of 1995 Determination

Section 202 of the Unfunded Mandates Reform Act of 1995 (UMRA) (2 U.S.C. 1532 *et seq.*) requires that an agency prepare a written statement before promulgating a rule that includes a Federal mandate that may result in the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector of $100 million or more (adjusted annually for inflation) in any one year. If a written statement is required, the UMRA (2 U.S.C. 1535) also requires an agency to identify and consider a reasonable number of regulatory alternatives before promulgating a rule and from those alternatives, either select the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule, or provide a statement with the rule explaining why such an option was not chosen.

This NPR would incorporate revisions to the Basel Committee's capital framework into the banking agencies' advanced approaches risk-based capital rules and remove references to credit ratings consistent with section 939A of the Dodd-Frank Act. This NPR would modify various elements of the advanced approaches risk-based capital rules regarding the determination of risk-weighted assets. These changes would (1) Modify treatment of counterparty credit risk, (2) remove references to credit ratings, (3) modify the treatment of securitization exposures, and (4) modify the treatment of exposures subject to deduction from capital. The NPR also would enhance disclosure requirements, especially with regard to securitizations, and would amend the advanced approaches so that capital requirements using the internal models methodology take into consideration stress in calibration data, stress testing, initial validation, collateral management, and annual model review. The NPR rule also would require national banks and federal savings associations subject to the advanced approaches risk-based capital rules to identify, monitor, and control wrong-way risk.

Finally, the NPR would expand the scope of the agencies' market risk capital rule to savings associations that meet certain thresholds.

To estimate the impact of this NPR on national banks and federal savings associations, the OCC estimated the amount of capital banks will need to raise to meet the new requirements relative to the amount of capital they

currently hold, as well as the compliance costs associated with establishing the infrastructure to determine correct risk weights using the revised methods for calculating risk-weighted assets and the compliance costs associated with new disclosure requirements. The OCC has determined that its proposed rule will not result in expenditures by State, local, and Tribal governments, or by the private sector, of $100 million or more. Accordingly, the UMRA does not require that a written statement accompany this NPR.

Text of the Proposed Common Rule [All Agencies]

The text of the proposed common rule appears below:

PART ____ CAPITAL ADEQUACY OF [BANK]S

Subpart E—Risk-Weighted Assets—Internal Ratings-Based and Advanced Measurement Approaches

Subpart E—Risk Weighted Assets—Internal Ratings-Based and Advanced Measurement Approaches

§ ____.100 Purpose, applicability, and principle of conservatism.

(a) *Purpose.* This subpart E establishes:

(1) Minimum qualifying criteria for [BANK]s using [BANK]-specific internal risk measurement and management processes for calculating risk-based capital requirements; and

(2) Methodologies for such [BANK]s to calculate their total risk-weighted assets.

(b) *Applicability.* (1) This subpart applies to a [BANK] that:

(i) Has consolidated total assets, as reported on the most recent year-end [Regulatory Reports] equal to $250 billion or more;

(ii) Has consolidated total on-balance sheet foreign exposure at the most recent year-end equal to $10 billion or more (where total on-balance sheet foreign exposure equals total cross-border claims less claims with a head office or guarantor located in another country plus redistributed guaranteed amounts to the country of head office or guarantor plus local country claims on local residents plus revaluation gains on foreign exchange and derivative products, calculated in accordance with the Federal Financial Institutions

Examination Council (FFIEC) 009 Country Exposure Report);

(iii) Is a subsidiary of a depository institution that uses the advanced approaches pursuant to subpart E of 12 CFR part 3 (OCC), 12 CFR part 217 (Board), or 12 CFR part 325 (FDIC) to calculate its total risk-weighted assets;

(iv) Is a subsidiary of a bank holding company or savings and loan holding company that uses the advanced approaches pursuant to 12 CFR part 217 to calculate its total risk-weighted assets; or

(v) Elects to use this subpart to calculate its total risk-weighted assets.

(2) A bank that is subject to this subpart shall remain subject to this subpart unless the [AGENCY] determines in writing that application of this subpart is not appropriate in light of the [BANK]'s asset size, level of complexity, risk profile, or scope of operations. In making a determination under this paragraph, the [AGENCY] will apply notice and response procedures in the same manner and to the same extent as the notice and response procedures in 12 CFR 3.12 (OCC), 12 CFR 263.202 (Board), and 12 CFR 325.6(c) (FDIC).

(3) A market risk [BANK] must exclude from its calculation of risk-weighted assets under this subpart the risk-weighted asset amounts of all covered positions, as defined in subpart F of this part (except foreign exchange positions that are not trading positions, over-the-counter derivative positions, cleared transactions, and unsettled transactions).

(c) *Principle of Conservatism.* Notwithstanding the requirements of this subpart, a [BANK] may choose not to apply a provision of this subpart to one or more exposures provided that:

(1) The [BANK] can demonstrate on an ongoing basis to the satisfaction of the [AGENCY] that not applying the provision would, in all circumstances, unambiguously generate a risk-based capital requirement for each such exposure greater than that which would otherwise be required under this subpart;

(2) The [BANK] appropriately manages the risk of each such exposure;

(3) The [BANK] notifies the [AGENCY] in writing prior to applying this principle to each such exposure; and

(4) The exposures to which the [BANK] applies this principle are not, in the aggregate, material to the [BANK].

§ ____. 101 Definitions.

(a) Terms set forth in § ____.2 and used in this subpart have the definitions assigned thereto in § ____.2.

(b) For the purposes of this subpart, the following terms are defined as follows:

Advanced internal ratings-based (IRB) systems means an advanced approaches [BANK]'s internal risk rating and segmentation system; risk parameter quantification system; data management and maintenance system; and control, oversight, and validation system for credit risk of wholesale and retail exposures.

Advanced systems means an advanced approaches [BANK]'s advanced IRB systems, operational risk management processes, operational risk data and assessment systems, operational risk quantification systems, and, to the extent used by the [BANK], the internal models methodology, advanced CVA approach, double default excessive correlation detection process, and internal models approach (IMA) for equity exposures.

Backtesting means the comparison of a [BANK]'s internal estimates with actual outcomes during a sample period not used in model development. In this context, backtesting is one form of out-of-sample testing.

Benchmarking means the comparison of a [BANK]'s internal estimates with relevant internal and external data or with estimates based on other estimation techniques.

Bond option contract means a bond option, bond future, or any other instrument linked to a bond that gives rise to similar counterparty credit risk.

Business environment and internal control factors means the indicators of a [BANK]'s operational risk profile that reflect a current and forward-looking assessment of the [BANK]'s underlying business risk factors and internal control environment.

Credit default swap (CDS) means a financial contract executed under standard industry documentation that allows one party (the protection purchaser) to transfer the credit risk of one or more exposures (reference exposure(s)) to another party (the protection provider) for a certain period of time.

Credit valuation adjustment (CVA) means the fair value adjustment to reflect counterparty credit risk in valuation of an OTC derivative contract.

Default—For the purposes of calculating capital requirements under this subpart:

(1) *Retail.* (i) A retail exposure of a [BANK] is in default if:

(A) The exposure is 180 days past due, in the case of a residential mortgage exposure or revolving exposure;

(B) The exposure is 120 days past due, in the case of retail exposures that are not residential mortgage exposures or revolving exposures; or

(C) The [BANK] has taken a full or partial charge-off, write-down of principal, or material negative fair value adjustment of principal on the exposure for credit-related reasons.

(ii) Notwithstanding paragraph (1)(i) of this definition, for a retail exposure held by a non-U.S. subsidiary of the [BANK] that is subject to an internal ratings-based approach to capital adequacy consistent with the Basel Committee on Banking Supervision's ''International Convergence of Capital Measurement and Capital Standards: A Revised Framework'' in a non-U.S. jurisdiction, the [BANK] may elect to use the definition of default that is used in that jurisdiction, provided that the [BANK] has obtained prior approval from the [AGENCY] to use the definition of default in that jurisdiction.

(iii) A retail exposure in default remains in default until the [BANK] has reasonable assurance of repayment and performance for all contractual principal and interest payments on the exposure.

(2) *Wholesale.* (i) A [BANK]'s wholesale obligor is in default if:

(A) The [BANK] determines that the obligor is unlikely to pay its credit obligations to the [BANK] in full, without recourse by the [BANK] to actions such as realizing collateral (if held); or

(B) The obligor is past due more than 90 days on any material credit obligation(s) to the [BANK].[1]

(ii) An obligor in default remains in default until the [BANK] has reasonable assurance of repayment and performance for all contractual principal and interest payments on all exposures of the [BANK] to the obligor (other than exposures that have been fully written-down or charged-off).

Dependence means a measure of the association among operational losses across and within units of measure.

Economic downturn conditions means, with respect to an exposure held by the [BANK], those conditions in which the aggregate default rates for that exposure's wholesale or retail exposure subcategory (or subdivision of such subcategory selected by the [BANK]) in the exposure's national jurisdiction (or subdivision of such jurisdiction selected by the [BANK]) are significantly higher than average.

Effective maturity (M) of a wholesale exposure means:

(1) For wholesale exposures other than repo-style transactions, eligible margin loans, and OTC derivative contracts described in paragraph (2) or (3) of this definition:

(i) The weighted-average remaining maturity (measured in years, whole or fractional) of the expected contractual cash flows from the exposure, using the undiscounted amounts of the cash flows as weights; or

(ii) The nominal remaining maturity (measured in years, whole or fractional) of the exposure.

(2) For repo-style transactions, eligible margin loans, and OTC derivative contracts subject to a qualifying master netting agreement for which the [BANK] does not apply the internal models approach in section 132(d), the weighted-average remaining maturity (measured in years, whole or fractional) of the individual transactions subject to the qualifying master netting agreement, with the weight of each individual transaction set equal to the notional amount of the transaction.

(3) For repo-style transactions, eligible margin loans, and OTC derivative contracts for which the [BANK] applies the internal models approach in § ___.132(d), the value determined in § ___.132(d)(4).

Effective notional amount means, for an eligible guarantee or eligible credit derivative, the lesser of the contractual notional amount of the credit risk mitigant and the EAD of the hedged exposure, multiplied by the percentage coverage of the credit risk mitigant.

Eligible double default guarantor, with respect to a guarantee or credit derivative obtained by a [BANK], means:

(1) *U.S.-based entities.* A depository institution, a bank holding company, a savings and loan holding company, or a securities broker or dealer registered with the SEC under the Securities Exchange Act, if at the time the guarantee is issued or anytime thereafter, has issued and outstanding an unsecured debt security without credit enhancement that is investment grade.

(2) *Non-U.S.-based entities.* A foreign bank, or a non-U.S.-based securities firm if the [BANK] demonstrates that the guarantor is subject to consolidated supervision and regulation comparable to that imposed on U.S. depository institutions, or securities broker-dealers) if at the time the guarantee is issued or anytime thereafter, has issued and outstanding an unsecured debt security without credit enhancement that is investment grade.

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[1] Overdrafts are past due once the obligor has breached an advised limit or been advised of a limit smaller than the current outstanding balance.

Eligible operational risk offsets means amounts, not to exceed expected operational loss, that:

(1) Are generated by internal business practices to absorb highly predictable and reasonably stable operational losses, including reserves calculated consistent with GAAP; and

(2) Are available to cover expected operational losses with a high degree of certainty over a one-year horizon.

Eligible purchased wholesale exposure means a purchased wholesale exposure that:

(1) The [BANK] or securitization SPE purchased from an unaffiliated seller and did not directly or indirectly originate;

(2) Was generated on an arm's-length basis between the seller and the obligor (intercompany accounts receivable and receivables subject to contra-accounts between firms that buy and sell to each other do not satisfy this criterion);

(3) Provides the [BANK] or securitization SPE with a claim on all proceeds from the exposure or a pro rata interest in the proceeds from the exposure;

(4) Has an M of less than one year; and

(5) When consolidated by obligor, does not represent a concentrated exposure relative to the portfolio of purchased wholesale exposures.

Expected exposure (EE) means the expected value of the probability distribution of non-negative credit risk exposures to a counterparty at any specified future date before the maturity date of the longest term transaction in the netting set. Any negative market values in the probability distribution of market values to a counterparty at a specified future date are set to zero to convert the probability distribution of market values to the probability distribution of credit risk exposures.

Expected operational loss (EOL) means the expected value of the distribution of potential aggregate operational losses, as generated by the [BANK]'s operational risk quantification system using a one-year horizon.

Expected positive exposure (EPE) means the weighted average over time of expected (non-negative) exposures to a counterparty where the weights are the proportion of the time interval that an individual expected exposure represents. When calculating risk-based capital requirements, the average is taken over a one-year horizon.

Exposure at default (EAD) means:

(1) For the on-balance sheet component of a wholesale exposure or segment of retail exposures (other than an OTC derivative contract, a repo-style transaction or eligible margin loan for which the [BANK] determines EAD under § ____.132, a cleared transaction, or default fund contribution), EAD means the [BANK]'s carrying value (including net accrued but unpaid interest and fees) for the exposure or segment less any allocated transfer risk reserve for the exposure or segment.

(2) For the off-balance sheet component of a wholesale exposure or segment of retail exposures (other than an OTC derivative contract, a repo-style transaction or eligible margin loan for which the [BANK] determines EAD under § ____.132, cleared transaction, or default fund contribution) in the form of a loan commitment, line of credit, trade-related letter of credit, or transaction-related contingency, EAD means the [BANK]'s best estimate of net additions to the outstanding amount owed the [BANK], including estimated future additional draws of principal and accrued but unpaid interest and fees, that are likely to occur over a one-year horizon assuming the wholesale exposure or the retail exposures in the segment were to go into default. This estimate of net additions must reflect what would be expected during economic downturn conditions. For the purposes of this definition:

(i) Trade-related letters of credit are short-term, self-liquidating instruments that are used to finance the movement of goods and are collateralized by the underlying goods.

(ii) Transaction-related contingencies relate to a particular transaction and include, among other things, performance bonds and performance-based letters of credit.

(3) For the off-balance sheet component of a wholesale exposure or segment of retail exposures (other than an OTC derivative contract, a repo-style transaction, or eligible margin loan for which the [BANK] determines EAD under § ____.132, cleared transaction, or default fund contribution) in the form of anything other than a loan commitment, line of credit, trade-related letter of credit, or transaction-related contingency, EAD means the notional amount of the exposure or segment.

(4) EAD for OTC derivative contracts is calculated as described in § ____.132. A [BANK] also may determine EAD for repo-style transactions and eligible margin loans as described in § ____.132.

Exposure category means any of the wholesale, retail, securitization, or equity exposure categories.

External operational loss event data means, with respect to a [BANK], gross operational loss amounts, dates, recoveries, and relevant causal information for operational loss events occurring at organizations other than the [BANK].

IMM exposure means a repo-style transaction, eligible margin loan, or OTC derivative for which a [BANK] calculates its EAD using the internal models methodology of § ____.132(d).

Internal operational loss event data means, with respect to a [BANK], gross operational loss amounts, dates, recoveries, and relevant causal information for operational loss events occurring at the [BANK].

Loss given default (LGD) means:

(1) For a wholesale exposure, the greatest of:

(i) Zero;

(ii) The [BANK]'s empirically based best estimate of the long-run default-weighted average economic loss, per dollar of EAD, the [BANK] would expect to incur if the obligor (or a typical obligor in the loss severity grade assigned by the [BANK] to the exposure) were to default within a one-year horizon over a mix of economic conditions, including economic downturn conditions; or

(iii) The [BANK]'s empirically based best estimate of the economic loss, per dollar of EAD, the [BANK] would expect to incur if the obligor (or a typical obligor in the loss severity grade assigned by the [BANK] to the exposure) were to default within a one-year horizon during economic downturn conditions.

(2) For a segment of retail exposures, the greatest of:

(i) Zero;

(ii) The [BANK]'s empirically based best estimate of the long-run default-weighted average economic loss, per dollar of EAD, the [BANK] would expect to incur if the exposures in the segment were to default within a one-year horizon over a mix of economic conditions, including economic downturn conditions; or

(iii) The [BANK]'s empirically based best estimate of the economic loss, per dollar of EAD, the [BANK] would expect to incur if the exposures in the segment were to default within a one-year horizon during economic downturn conditions.

(3) The economic loss on an exposure in the event of default is all material credit-related losses on the exposure (including accrued but unpaid interest or fees, losses on the sale of collateral, direct workout costs, and an appropriate allocation of indirect workout costs). Where positive or negative cash flows on a wholesale exposure to a defaulted obligor or a defaulted retail exposure (including proceeds from the sale of collateral, workout costs, additional extensions of credit to facilitate

repayment of the exposure, and draw-downs of unused credit lines) occur after the date of default, the economic loss must reflect the net present value of cash flows as of the default date using a discount rate appropriate to the risk of the defaulted exposure.

Obligor means the legal entity or natural person contractually obligated on a wholesale exposure, except that a [BANK] may treat the following exposures as having separate obligors:

(1) Exposures to the same legal entity or natural person denominated in different currencies;

(2)(i) An income-producing real estate exposure for which all or substantially all of the repayment of the exposure is reliant on the cash flows of the real estate serving as collateral for the exposure; the [BANK], in economic substance, does not have recourse to the borrower beyond the real estate collateral; and no cross-default or cross-acceleration clauses are in place other than clauses obtained solely out of an abundance of caution; and

(ii) Other credit exposures to the same legal entity or natural person; and

(3)(i) A wholesale exposure authorized under section 364 of the U.S. Bankruptcy Code (11 U.S.C. 364) to a legal entity or natural person who is a debtor-in-possession for purposes of Chapter 11 of the Bankruptcy Code; and

(ii) Other credit exposures to the same legal entity or natural person.

Operational loss means a loss (excluding insurance or tax effects) resulting from an operational loss event. Operational loss includes all expenses associated with an operational loss event except for opportunity costs, forgone revenue, and costs related to risk management and control enhancements implemented to prevent future operational losses.

Operational loss event means an event that results in loss and is associated with any of the following seven operational loss event type categories:

(1) Internal fraud, which means the operational loss event type category that comprises operational losses resulting from an act involving at least one internal party of a type intended to defraud, misappropriate property, or circumvent regulations, the law, or company policy excluding diversity- and discrimination-type events.

(2) External fraud, which means the operational loss event type category that comprises operational losses resulting from an act by a third party of a type intended to defraud, misappropriate property, or circumvent the law. Retail credit card losses arising from non-contractual, third-party-initiated fraud (for example, identity theft) are external

fraud operational losses. All other third-party-initiated credit losses are to be treated as credit risk losses.

(3) Employment practices and workplace safety, which means the operational loss event type category that comprises operational losses resulting from an act inconsistent with employment, health, or safety laws or agreements, payment of personal injury claims, or payment arising from diversity- and discrimination-type events.

(4) Clients, products, and business practices, which means the operational loss event type category that comprises operational losses resulting from the nature or design of a product or from an unintentional or negligent failure to meet a professional obligation to specific clients (including fiduciary and suitability requirements).

(5) Damage to physical assets, which means the operational loss event type category that comprises operational losses resulting from the loss of or damage to physical assets from natural disaster or other events.

(6) Business disruption and system failures, which means the operational loss event type category that comprises operational losses resulting from disruption of business or system failures.

(7) Execution, delivery, and process management, which means the operational loss event type category that comprises operational losses resulting from failed transaction processing or process management or losses arising from relations with trade counterparties and vendors.

Operational risk means the risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events (including legal risk but excluding strategic and reputational risk).

Operational risk exposure means the 99.9th percentile of the distribution of potential aggregate operational losses, as generated by the [BANK]'s operational risk quantification system over a one-year horizon (and not incorporating eligible operational risk offsets or qualifying operational risk mitigants).

Other retail exposure means an exposure (other than a securitization exposure, an equity exposure, a residential mortgage exposure, a pre-sold construction loan, a qualifying revolving exposure, or the residual value portion of a lease exposure) that is managed as part of a segment of exposures with homogeneous risk characteristics, not on an individual-exposure basis, and is either:

(1) An exposure to an individual for non-business purposes; or

(2) An exposure to an individual or company for business purposes if the [BANK]'s consolidated business credit exposure to the individual or company is $1 million or less.

Probability of default (PD) means:

(1) For a wholesale exposure to a non-defaulted obligor, the [BANK]'s empirically based best estimate of the long-run average one-year default rate for the rating grade assigned by the [BANK] to the obligor, capturing the average default experience for obligors in the rating grade over a mix of economic conditions (including economic downturn conditions) sufficient to provide a reasonable estimate of the average one-year default rate over the economic cycle for the rating grade.

(2) For a segment of non-defaulted retail exposures, the [BANK]'s empirically based best estimate of the long-run average one-year default rate for the exposures in the segment, capturing the average default experience for exposures in the segment over a mix of economic conditions (including economic downturn conditions) sufficient to provide a reasonable estimate of the average one-year default rate over the economic cycle for the segment.

(3) For a wholesale exposure to a defaulted obligor or segment of defaulted retail exposures, 100 percent.

Qualifying cross-product master netting agreement means a qualifying master netting agreement that provides for termination and close-out netting across multiple types of financial transactions or qualifying master netting agreements in the event of a counterparty's default, provided that:

(1) The underlying financial transactions are OTC derivative contracts, eligible margin loans, or repo-style transactions; and

(2) The [BANK] obtains a written legal opinion verifying the validity and enforceability of the agreement under applicable law of the relevant jurisdictions if the counterparty fails to perform upon an event of default, including upon receivership, insolvency, liquidation, or similar proceeding.

Qualifying revolving exposure (QRE) means an exposure (other than a securitization exposure or equity exposure) to an individual that is managed as part of a segment of exposures with homogeneous risk characteristics, not on an individual-exposure basis, and:

(1) Is revolving (that is, the amount outstanding fluctuates, determined largely by the borrower's decision to

borrow and repay, up to a pre-established maximum amount);

(2) Is unsecured and unconditionally cancelable by the [BANK] to the fullest extent permitted by Federal law; and

(3) Has a maximum contractual exposure amount (drawn plus undrawn) of up to $100,000, or the [BANK] consistently imposes in practice an upper limit of $100,000.

Retail exposure means a residential mortgage exposure, a qualifying revolving exposure, or an other retail exposure.

Retail exposure subcategory means the residential mortgage exposure, qualifying revolving exposure, or other retail exposure subcategory.

Risk parameter means a variable used in determining risk-based capital requirements for wholesale and retail exposures, specifically probability of default (PD), loss given default (LGD), exposure at default (EAD), or effective maturity (M).

Scenario analysis means a systematic process of obtaining expert opinions from business managers and risk management experts to derive reasoned assessments of the likelihood and loss impact of plausible high-severity operational losses. Scenario analysis may include the well-reasoned evaluation and use of external operational loss event data, adjusted as appropriate to ensure relevance to a [BANK]'s operational risk profile and control structure.

Total wholesale and retail risk-weighted assets means:

(1) The sum of:

(i) Risk-weighted assets for wholesale exposures that are not IMM exposures, cleared transactions, or default fund contributions to non-defaulted obligors and segments of non-defaulted retail exposures;

(ii) Risk-weighted assets for wholesale exposures to defaulted obligors and segments of defaulted retail exposures;

(iii) Risk-weighted assets for assets not defined by an exposure category;

(iv) Risk-weighted assets for non-material portfolios of exposures;

(v) Risk-weighted assets for IMM exposures (as determined in §____.132(d));

(vi) Risk-weighted assets for cleared transactions and risk-weighted assets for default fund contributions (as determined in §____.133); and

(vii) Risk-weighted assets for unsettled transactions (as determined in §____.136); minus

(2) Any amounts deducted from capital pursuant to §____.22.

Unexpected operational loss (UOL) means the difference between the [BANK]'s operational risk exposure and the [BANK]'s expected operational loss.

Unit of measure means the level (for example, organizational unit or operational loss event type) at which the [BANK]'s operational risk quantification system generates a separate distribution of potential operational losses.

Wholesale exposure means a credit exposure to a company, natural person, sovereign, or governmental entity (other than a securitization exposure, retail exposure, or equity exposure).

Wholesale exposure subcategory means the HVCRE or non-HVCRE wholesale exposure subcategory.

QUALIFICATION

§____.121 Qualification process.

(a) *Timing.* (1) A [BANK] that is described in §____.100(b)(1)(i) through (iv) must adopt a written implementation plan no later than six months after the date the [BANK] meets a criterion in that section. The implementation plan must incorporate an explicit start date no later than 36 months after the date the [BANK] meets at least one criterion under §____.100(b)(1)(i) through (iv). The [AGENCY] may extend the start date.

(2) A [BANK] that elects to be subject to this appendix under §____.100(b)(1)(v) must adopt a written implementation plan.

(b) *Implementation plan.* (1) The [BANK]'s implementation plan must address in detail how the [BANK] complies, or plans to comply, with the qualification requirements in §____.122. The [BANK] also must maintain a comprehensive and sound planning and governance process to oversee the implementation efforts described in the plan. At a minimum, the plan must:

(i) Comprehensively address the qualification requirements in §____.122 for the [BANK] and each consolidated subsidiary (U.S. and foreign-based) of the [BANK] with respect to all portfolios and exposures of the [BANK] and each of its consolidated subsidiaries;

(ii) Justify and support any proposed temporary or permanent exclusion of business lines, portfolios, or exposures from the application of the advanced approaches in this subpart (which business lines, portfolios, and exposures must be, in the aggregate, immaterial to the [BANK]);

(iii) Include the [BANK]'s self-assessment of:

(A) The [BANK]'s current status in meeting the qualification requirements in §____.122; and

(B) The consistency of the [BANK]'s current practices with the [AGENCY]'s supervisory guidance on the qualification requirements;

(iv) Based on the [BANK]'s self-assessment, identify and describe the areas in which the [BANK] proposes to undertake additional work to comply with the qualification requirements in §____.122 or to improve the consistency of the [BANK]'s current practices with the [AGENCY]'s supervisory guidance on the qualification requirements (gap analysis);

(v) Describe what specific actions the [BANK] will take to address the areas identified in the gap analysis required by paragraph (b)(1)(iv) of this section;

(vi) Identify objective, measurable milestones, including delivery dates and a date when the [BANK]'s implementation of the methodologies described in this subpart will be fully operational;

(vii) Describe resources that have been budgeted and are available to implement the plan; and

(viii) Receive approval of the [BANK]'s board of directors.

(2) The [BANK] must submit the implementation plan, together with a copy of the minutes of the board of directors' approval, to the [AGENCY] at least 60 days before the [BANK] proposes to begin its parallel run, unless the [AGENCY] waives prior notice.

(c) *Parallel run.* Before determining its risk-weighted assets under this subpart and following adoption of the implementation plan, the [BANK] must conduct a satisfactory parallel run. A satisfactory parallel run is a period of no less than four consecutive calendar quarters during which the [BANK] complies with the qualification requirements in §____.122 to the satisfaction of the [AGENCY]. During the parallel run, the [BANK] must report to the [AGENCY] on a calendar quarterly basis its risk-based capital ratios determined in accordance with §____.10(b)(1) through (3) and §____.(c)(1) through (3). During this period, the [BANK]'s minimum risk-based capital ratios are determined as set forth in subpart D of this part.

(d) *Approval to calculate risk-based capital requirements under this subpart.* The [AGENCY] will notify the [BANK] of the date that the [BANK] must begin to use this subpart for purposes of §____.10 if the [AGENCY] determines that:

(1) The [BANK] fully complies with all the qualification requirements in §____.122;

(2) The [BANK] has conducted a satisfactory parallel run under paragraph (c) of this section; and

(3) The [BANK] has an adequate process to ensure ongoing compliance with the qualification requirements in §____.122.

§ ___.122 Qualification requirements.

(a) *Process and systems requirements.* (1) A [BANK] must have a rigorous process for assessing its overall capital adequacy in relation to its risk profile and a comprehensive strategy for maintaining an appropriate level of capital.

(2) The systems and processes used by a [BANK] for risk-based capital purposes under this subpart must be consistent with the [BANK]'s internal risk management processes and management information reporting systems.

(3) Each [BANK] must have an appropriate infrastructure with risk measurement and management processes that meet the qualification requirements of this section and are appropriate given the [BANK]'s size and level of complexity. Regardless of whether the systems and models that generate the risk parameters necessary for calculating a [BANK]'s risk-based capital requirements are located at any affiliate of the [BANK], the [BANK] itself must ensure that the risk parameters and reference data used to determine its risk-based capital requirements are representative of its own credit risk and operational risk exposures.

(b) *Risk rating and segmentation systems for wholesale and retail exposures.* (1) A [BANK] must have an internal risk rating and segmentation system that accurately and reliably differentiates among degrees of credit risk for the [BANK]'s wholesale and retail exposures.

(2) For wholesale exposures:

(i) A [BANK] must have an internal risk rating system that accurately and reliably assigns each obligor to a single rating grade (reflecting the obligor's likelihood of default). A [BANK] may elect, however, not to assign to a rating grade an obligor to whom the [BANK] extends credit based solely on the financial strength of a guarantor, provided that all of the [BANK]'s exposures to the obligor are fully covered by eligible guarantees, the [BANK] applies the PD substitution approach in § ___.134(c)(1) to all exposures to that obligor, and the [BANK] immediately assigns the obligor to a rating grade if a guarantee can no longer be recognized under this subpart. The [BANK]'s wholesale obligor rating system must have at least seven discrete rating grades for non-defaulted obligors and at least one rating grade for defaulted obligors.

(ii) Unless the [BANK] has chosen to directly assign LGD estimates to each wholesale exposure, the [BANK] must have an internal risk rating system that

accurately and reliably assigns each wholesale exposure to a loss severity rating grade (reflecting the [BANK]'s estimate of the LGD of the exposure). A [BANK] employing loss severity rating grades must have a sufficiently granular loss severity grading system to avoid grouping together exposures with widely ranging LGDs.

(3) For retail exposures, a [BANK] must have an internal system that groups retail exposures into the appropriate retail exposure subcategory, groups the retail exposures in each retail exposure subcategory into separate segments with homogeneous risk characteristics, and assigns accurate and reliable PD and LGD estimates for each segment on a consistent basis. The [BANK]'s system must identify and group in separate segments by subcategories exposures identified in § ___.131(c)(2)(ii) and (iii).

(4) The [BANK]'s internal risk rating policy for wholesale exposures must describe the [BANK]'s rating philosophy (that is, must describe how wholesale obligor rating assignments are affected by the [BANK]'s choice of the range of economic, business, and industry conditions that are considered in the obligor rating process).

(5) The [BANK]'s internal risk rating system for wholesale exposures must provide for the review and update (as appropriate) of each obligor rating and (if applicable) each loss severity rating whenever the [BANK] receives new material information, but no less frequently than annually. The [BANK]'s retail exposure segmentation system must provide for the review and update (as appropriate) of assignments of retail exposures to segments whenever the [BANK] receives new material information, but generally no less frequently than quarterly.

(c) *Quantification of risk parameters for wholesale and retail exposures.* (1) The [BANK] must have a comprehensive risk parameter quantification process that produces accurate, timely, and reliable estimates of the risk parameters for the [BANK]'s wholesale and retail exposures.

(2) Data used to estimate the risk parameters must be relevant to the [BANK]'s actual wholesale and retail exposures, and of sufficient quality to support the determination of risk-based capital requirements for the exposures.

(3) The [BANK]'s risk parameter quantification process must produce appropriately conservative risk parameter estimates where the [BANK] has limited relevant data, and any adjustments that are part of the quantification process must not result in

a pattern of bias toward lower risk parameter estimates.

(4) The [BANK]'s risk parameter estimation process should not rely on the possibility of U.S. government financial assistance, except for the financial assistance that the U.S. government has a legally binding commitment to provide.

(5) Where the [BANK]'s quantifications of LGD directly or indirectly incorporate estimates of the effectiveness of its credit risk management practices in reducing its exposure to troubled obligors prior to default, the [BANK] must support such estimates with empirical analysis showing that the estimates are consistent with its historical experience in dealing with such exposures during economic downturn conditions.

(6) PD estimates for wholesale obligors and retail segments must be based on at least five years of default data. LGD estimates for wholesale exposures must be based on at least seven years of loss severity data, and LGD estimates for retail segments must be based on at least five years of loss severity data. EAD estimates for wholesale exposures must be based on at least seven years of exposure amount data, and EAD estimates for retail segments must be based on at least five years of exposure amount data.

(7) Default, loss severity, and exposure amount data must include periods of economic downturn conditions, or the [BANK] must adjust its estimates of risk parameters to compensate for the lack of data from periods of economic downturn conditions.

(8) The [BANK]'s PD, LGD, and EAD estimates must be based on the definition of default in § ___.101.

(9) The [BANK] must review and update (as appropriate) its risk parameters and its risk parameter quantification process at least annually.

(10) The [BANK] must, at least annually, conduct a comprehensive review and analysis of reference data to determine relevance of reference data to the [BANK]'s exposures, quality of reference data to support PD, LGD, and EAD estimates, and consistency of reference data to the definition of default in § ___.101.

(d) *Counterparty credit risk model.* A [BANK] must obtain the prior written approval of the [AGENCY] under § ___.132 to use the internal models methodology for counterparty credit risk and the advanced CVA approach for the CVA capital requirement.

(e) *Double default treatment.* A [BANK] must obtain the prior written approval of the [AGENCY] under

§ ____.135 to use the double default treatment.

(f) *Equity exposures model.* A [BANK] must obtain the prior written approval of the [AGENCY] under § ____.153 to use the internal models approach for equity exposures.

(g) *Operational risk.* (1) Operational risk management processes. A [BANK] must:

(i) Have an operational risk management function that:

(A) Is independent of business line management; and

(B) Is responsible for designing, implementing, and overseeing the [BANK]'s operational risk data and assessment systems, operational risk quantification systems, and related processes;

(ii) Have and document a process (which must capture business environment and internal control factors affecting the [BANK]'s operational risk profile) to identify, measure, monitor, and control operational risk in [BANK] products, activities, processes, and systems; and

(iii) Report operational risk exposures, operational loss events, and other relevant operational risk information to business unit management, senior management, and the board of directors (or a designated committee of the board).

(2) *Operational risk data and assessment systems.* A [BANK] must have operational risk data and assessment systems that capture operational risks to which the [BANK] is exposed. The [BANK]'s operational risk data and assessment systems must:

(i) Be structured in a manner consistent with the [BANK]'s current business activities, risk profile, technological processes, and risk management processes; and

(ii) Include credible, transparent, systematic, and verifiable processes that incorporate the following elements on an ongoing basis:

(A) *Internal operational loss event data.* The [BANK] must have a systematic process for capturing and using internal operational loss event data in its operational risk data and assessment systems.

(*1*) The [BANK]'s operational risk data and assessment systems must include a historical observation period of at least five years for internal operational loss event data (or such shorter period approved by the [AGENCY] to address transitional situations, such as integrating a new business line).

(*2*) The [BANK] must be able to map its internal operational loss event data into the seven operational loss event type categories.

(*3*) The [BANK] may refrain from collecting internal operational loss event data for individual operational losses below established dollar threshold amounts if the [BANK] can demonstrate to the satisfaction of the [AGENCY] that the thresholds are reasonable, do not exclude important internal operational loss event data, and permit the [BANK] to capture substantially all the dollar value of the [BANK]'s operational losses.

(B) *External operational loss event data.* The [BANK] must have a systematic process for determining its methodologies for incorporating external operational loss event data into its operational risk data and assessment systems.

(C) *Scenario analysis.* The [BANK] must have a systematic process for determining its methodologies for incorporating scenario analysis into its operational risk data and assessment systems.

(D) *Business environment and internal control factors.* The [BANK] must incorporate business environment and internal control factors into its operational risk data and assessment systems. The [BANK] must also periodically compare the results of its prior business environment and internal control factor assessments against its actual operational losses incurred in the intervening period.

(3) *Operational risk quantification systems.* (i) The [BANK]'s operational risk quantification systems:

(A) Must generate estimates of the [BANK]'s operational risk exposure using its operational risk data and assessment systems;

(B) Must employ a unit of measure that is appropriate for the [BANK]'s range of business activities and the variety of operational loss events to which it is exposed, and that does not combine business activities or operational loss events with demonstrably different risk profiles within the same loss distribution;

(C) Must include a credible, transparent, systematic, and verifiable approach for weighting each of the four elements, described in paragraph (g)(2)(ii) of this section, that a [BANK] is required to incorporate into its operational risk data and assessment systems;

(D) May use internal estimates of dependence among operational losses across and within units of measure if the [BANK] can demonstrate to the satisfaction of the [AGENCY] that its process for estimating dependence is sound, robust to a variety of scenarios, and implemented with integrity, and allows for uncertainty surrounding the

estimates. If the [BANK] has not made such a demonstration, it must sum operational risk exposure estimates across units of measure to calculate its total operational risk exposure; and

(E) Must be reviewed and updated (as appropriate) whenever the [BANK] becomes aware of information that may have a material effect on the [BANK]'s estimate of operational risk exposure, but the review and update must occur no less frequently than annually.

(ii) With the prior written approval of the [AGENCY], a [BANK] may generate an estimate of its operational risk exposure using an alternative approach to that specified in paragraph (g)(3)(i) of this section. A [BANK] proposing to use such an alternative operational risk quantification system must submit a proposal to the [AGENCY]. In determining whether to approve a [BANK]'s proposal to use an alternative operational risk quantification system, the [AGENCY] will consider the following principles:

(A) Use of the alternative operational risk quantification system will be allowed only on an exception basis, considering the size, complexity, and risk profile of the [BANK];

(B) The [BANK] must demonstrate that its estimate of its operational risk exposure generated under the alternative operational risk quantification system is appropriate and can be supported empirically; and

(C) A [BANK] must not use an allocation of operational risk capital requirements that includes entities other than depository institutions or the benefits of diversification across entities.

(h) *Data management and maintenance.* (1) A [BANK] must have data management and maintenance systems that adequately support all aspects of its advanced systems and the timely and accurate reporting of risk-based capital requirements.

(2) A [BANK] must retain data using an electronic format that allows timely retrieval of data for analysis, validation, reporting, and disclosure purposes.

(3) A [BANK] must retain sufficient data elements related to key risk drivers to permit adequate monitoring, validation, and refinement of its advanced systems.

(i) *Control, oversight, and validation mechanisms.* (1) The [BANK]'s senior management must ensure that all components of the [BANK]'s advanced systems function effectively and comply with the qualification requirements in this section.

(2) The [BANK]'s board of directors (or a designated committee of the board) must at least annually review the

effectiveness of, and approve, the [BANK]'s advanced systems.

(3) A [BANK] must have an effective system of controls and oversight that:

(i) Ensures ongoing compliance with the qualification requirements in this section;

(ii) Maintains the integrity, reliability, and accuracy of the [BANK]'s advanced systems; and

(iii) Includes adequate governance and project management processes.

(4) The [BANK] must validate, on an ongoing basis, its advanced systems. The [BANK]'s validation process must be independent of the advanced systems' development, implementation, and operation, or the validation process must be subjected to an independent review of its adequacy and effectiveness. Validation must include:

(i) An evaluation of the conceptual soundness of (including developmental evidence supporting) the advanced systems;

(ii) An ongoing monitoring process that includes verification of processes and benchmarking; and

(iii) An outcomes analysis process that includes backtesting.

(5) The [BANK] must have an internal audit function independent of business-line management that at least annually assesses the effectiveness of the controls supporting the [BANK]'s advanced systems and reports its findings to the [BANK]'s board of directors (or a committee thereof).

(6) The [BANK] must periodically stress test its advanced systems. The stress testing must include a consideration of how economic cycles, especially downturns, affect risk-based capital requirements (including migration across rating grades and segments and the credit risk mitigation benefits of double default treatment).

(j) *Documentation.* The [BANK] must adequately document all material aspects of its advanced systems.

§ ____.123 Ongoing qualification.

(a) *Changes to advanced systems.* A [BANK] must meet all the qualification requirements in § ____.122 on an ongoing basis. A [BANK] must notify the [AGENCY] when the [BANK] makes any change to an advanced system that would result in a material change in the [BANK]'s advanced approaches total risk-weighted asset amount for an exposure type or when the [BANK] makes any significant change to its modeling assumptions.

(b) *Failure to comply with qualification requirements.* (1) If the [AGENCY] determines that a [BANK] that uses this subpart and that has conducted a satisfactory parallel run

fails to comply with the qualification requirements in § ____.122, the [AGENCY] will notify the [BANK] in writing of the [BANK]'s failure to comply.

(2) The [BANK] must establish and submit a plan satisfactory to the [AGENCY] to return to compliance with the qualification requirements.

(3) In addition, if the [AGENCY] determines that the [BANK]'s advanced approaches total risk-weighted assets are not commensurate with the [BANK]'s credit, market, operational, or other risks, the [AGENCY] may require such a [BANK] to calculate its advanced approaches total risk-weighted assets with any modifications provided by the [AGENCY].

§ ____.124 Merger and acquisition transitional arrangements.

(a) *Mergers and acquisitions of companies without advanced systems.* If a [BANK] merges with or acquires a company that does not calculate its risk-based capital requirements using advanced systems, the [BANK] may use subpart D of this part to determine the risk-weighted asset amounts for the merged or acquired company's exposures for up to 24 months after the calendar quarter during which the merger or acquisition consummates. The [AGENCY] may extend this transition period for up to an additional 12 months. Within 90 days of consummating the merger or acquisition, the [BANK] must submit to the [AGENCY] an implementation plan for using its advanced systems for the acquired company. During the period when subpart D applies to the merged or acquired company, any ALLL, net of allocated transfer risk reserves established pursuant to 12 U.S.C. 3904, associated with the merged or acquired company's exposures may be included in the acquiring [BANK]'s tier 2 capital up to 1.25 percent of the acquired company's risk-weighted assets. All general allowances of the merged or acquired company must be excluded from the [BANK]'s eligible credit reserves. In addition, the risk-weighted assets of the merged or acquired company are not included in the [BANK]'s credit-risk-weighted assets but are included in total risk-weighted assets. If a [BANK] relies on this paragraph, the [BANK] must disclose publicly the amounts of risk-weighted assets and qualifying capital calculated under this subpart for the acquiring [BANK] and under subpart D of this part for the acquired company.

(b) *Mergers and acquisitions of companies with advanced systems.* (1) If a [BANK] merges with or acquires a

company that calculates its risk-based capital requirements using advanced systems, the [BANK] may use the acquired company's advanced systems to determine total risk-weighted assets for the merged or acquired company's exposures for up to 24 months after the calendar quarter during which the acquisition or merger consummates. The [AGENCY] may extend this transition period for up to an additional 12 months. Within 90 days of consummating the merger or acquisition, the [BANK] must submit to the [AGENCY] an implementation plan for using its advanced systems for the merged or acquired company.

(2) If the acquiring [BANK] is not subject to the advanced approaches in this subpart at the time of acquisition or merger, during the period when subpart D of this part applies to the acquiring [BANK], the ALLL associated with the exposures of the merged or acquired company may not be directly included in tier 2 capital. Rather, any excess eligible credit reserves associated with the merged or acquired company's exposures may be included in the [BANK]'s tier 2 capital up to 0.6 percent of the credit-risk-weighted assets associated with those exposures.

RISK-WEIGHTED ASSETS FOR GENERAL CREDIT RISK

§ ____.131 Mechanics for calculating total wholesale and retail risk-weighted assets.

(a) *Overview.* A [BANK] must calculate its total wholesale and retail risk-weighted asset amount in four distinct phases:

(1) Phase 1—categorization of exposures;

(2) Phase 2—assignment of wholesale obligors and exposures to rating grades and segmentation of retail exposures;

(3) Phase 3—assignment of risk parameters to wholesale exposures and segments of retail exposures; and

(4) Phase 4—calculation of risk-weighted asset amounts.

(b) *Phase 1—Categorization.* The [BANK] must determine which of its exposures are wholesale exposures, retail exposures, securitization exposures, or equity exposures. The [BANK] must categorize each retail exposure as a residential mortgage exposure, a QRE, or an other retail exposure. The [BANK] must identify which wholesale exposures are HVCRE exposures, sovereign exposures, OTC derivative contracts, repo-style transactions, eligible margin loans, eligible purchased wholesale exposures, cleared transactions, default fund contributions, unsettled transactions to which § ____.136 applies, and eligible

guarantees or eligible credit derivatives that are used as credit risk mitigants. The [BANK] must identify any on-balance sheet asset that does not meet the definition of a wholesale, retail, equity, or securitization exposure, as well as any non-material portfolio of exposures described in paragraph (e)(4) of this section.

(c) *Phase 2—Assignment of wholesale obligors and exposures to rating grades and retail exposures to segments.* (1) *Assignment of wholesale obligors and exposures to rating grades.*

(i) The [BANK] must assign each obligor of a wholesale exposure to a single obligor rating grade and must assign each wholesale exposure to which it does not directly assign an LGD estimate to a loss severity rating grade.

(ii) The [BANK] must identify which of its wholesale obligors are in default.

(2) *Segmentation of retail exposures.* (i) The [BANK] must group the retail exposures in each retail subcategory into segments that have homogeneous risk characteristics.

(ii) The [BANK] must identify which of its retail exposures are in default. The [BANK] must segment defaulted retail exposures separately from non-defaulted retail exposures.

(iii) If the [BANK] determines the EAD for eligible margin loans using the approach in § ____.132(b), the [BANK] must identify which of its retail exposures are eligible margin loans for which the [BANK] uses this EAD approach and must segment such eligible margin loans separately from other retail exposures.

(3) *Eligible purchased wholesale exposures.* A [BANK] may group its eligible purchased wholesale exposures into segments that have homogeneous risk characteristics. A [BANK] must use the wholesale exposure formula in Table 1 of this section to determine the risk-based capital requirement for each segment of eligible purchased wholesale exposures.

(d) *Phase 3—Assignment of risk parameters to wholesale exposures and segments of retail exposures.* (1) *Quantification process.* Subject to the limitations in this paragraph (d), the [BANK] must:

(i) Associate a PD with each wholesale obligor rating grade;

(ii) Associate an LGD with each wholesale loss severity rating grade or assign an LGD to each wholesale exposure;

(iii) Assign an EAD and M to each wholesale exposure; and

(iv) Assign a PD, LGD, and EAD to each segment of retail exposures.

(2) *Floor on PD assignment.* The PD for each wholesale obligor or retail

segment may not be less than 0.03 percent, except for exposures to or directly and unconditionally guaranteed by a sovereign entity, the Bank for International Settlements, the International Monetary Fund, the European Commission, the European Central Bank, or a multilateral development bank, to which the [BANK] assigns a rating grade associated with a PD of less than 0.03 percent.

(3) *Floor on LGD estimation.* The LGD for each segment of residential mortgage exposures (other than segments of residential mortgage exposures for which all or substantially all of the principal of each exposure is directly and unconditionally guaranteed by the full faith and credit of a sovereign entity) may not be less than 10 percent.

(4) *Eligible purchased wholesale exposures.* A [BANK] must assign a PD, LGD, EAD, and M to each segment of eligible purchased wholesale exposures. If the [BANK] can estimate ECL (but not PD or LGD) for a segment of eligible purchased wholesale exposures, the [BANK] must assume that the LGD of the segment equals 100 percent and that the PD of the segment equals ECL divided by EAD. The estimated ECL must be calculated for the exposures without regard to any assumption of recourse or guarantees from the seller or other parties.

(5) *Credit risk mitigation: credit derivatives, guarantees, and collateral.* (i) A [BANK] may take into account the risk reducing effects of eligible guarantees and eligible credit derivatives in support of a wholesale exposure by applying the PD substitution or LGD adjustment treatment to the exposure as provided in § ____.134 or, if applicable, applying double default treatment to the exposure as provided in § ____.135. A [BANK] may decide separately for each wholesale exposure that qualifies for the double default treatment under § ____.135 whether to apply the double default treatment or to use the PD substitution or LGD adjustment treatment without recognizing double default effects.

(ii) A [BANK] may take into account the risk reducing effects of guarantees and credit derivatives in support of retail exposures in a segment when quantifying the PD and LGD of the segment.

(iii) Except as provided in paragraph (d)(6) of this section, a [BANK] may take into account the risk reducing effects of collateral in support of a wholesale exposure when quantifying the LGD of the exposure, and may take into account the risk reducing effects of collateral in support of retail exposures when

quantifying the PD and LGD of the segment.

(6) *EAD for OTC derivative contracts, repo-style transactions, and eligible margin loans.* A [BANK] must calculate its EAD for an OTC derivative contract as provided in §§ ____.132 (c) and (d). A [BANK] may take into account the risk-reducing effects of financial collateral in support of a repo-style transaction or eligible margin loan and of any collateral in support of a repo-style transaction that is included in the [BANK]'s VaR-based measure under subpart F of this [PART] through an adjustment to EAD as provided in §§ ____.132(b) and (d). A [BANK] that takes collateral into account through such an adjustment to EAD under § ____.132 may not reflect such collateral in LGD.

(7) *Effective maturity.* An exposure's M must be no greater than five years and no less than one year, except that an exposure's M must be no less than one day if the exposure is a trade related letter of credit, or if the exposure has an original maturity of less than one year and is not part of a [BANK]'s ongoing financing of the obligor. An exposure is not part of a [BANK]'s ongoing financing of the obligor if the [BANK]:

(i) Has a legal and practical ability not to renew or roll over the exposure in the event of credit deterioration of the obligor;

(ii) Makes an independent credit decision at the inception of the exposure and at every renewal or roll over; and

(iii) Has no substantial commercial incentive to continue its credit relationship with the obligor in the event of credit deterioration of the obligor.

(8) *EAD for exposures to certain central counterparties.* A [BANK] may attribute an EAD of zero to exposures that arise from the settlement of cash transactions (such as equities, fixed income, spot foreign exchange, and spot commodities) with a central counterparty where there is no assumption of ongoing counterparty credit risk by the central counterparty after settlement of the trade and associated default fund contributions.

(e) *Phase 4—Calculation of risk-weighted assets.* (1) *Non-defaulted exposures.*

(i) A [BANK] must calculate the dollar risk-based capital requirement for each of its wholesale exposures to a non-defaulted obligor (except for eligible guarantees and eligible credit derivatives that hedge another wholesale exposure, IMM exposures, cleared transactions, default fund contributions, unsettled transactions,

and exposures to which the [BANK] applies the double default treatment in §____.135) and segments of non-defaulted retail exposures by inserting the assigned risk parameters for the wholesale obligor and exposure or retail segment into the appropriate risk-based capital formula specified in Table 1 and multiplying the output of the formula (K) by the EAD of the exposure or segment. Alternatively, a [BANK] may apply a 300 percent risk weight to the EAD of an eligible margin loan if the [BANK] is not able to meet the agencies' requirements for estimation of PD and LGD for the margin loan.

TABLE 1 – IRB RISK-BASED CAPITAL FORMULAS FOR WHOLESALE EXPOSURES TO NON-DEFAULTED OBLIGORS AND SEGMENTS OF NON-DEFAULTED RETAIL EXPOSURES[2]

Retail		
Capital Requirement (K) Non-Defaulted Exposures	$K = \left[LGD \times N\left(\dfrac{N^{-1}(PD) + \sqrt{R} \times N^{-1}(0.999)}{\sqrt{1-R}} \right) - (LGD \times PD) \right]$	
Correlation Factor (R)	For residential mortgage exposures: $R = 0.15$ For qualifying revolving exposures: $R = 0.04$ For other retail exposures: $R = 0.03 + 0.13 \times e^{-35 \times PD}$	

Wholesale		
Capital Requirement (K) Non-Defaulted Exposures	$K = \left[LGD \times N\left(\dfrac{N^{-1}(PD) + \sqrt{R} \times N^{-1}(0.999)}{\sqrt{1-R}} \right) - (LGD \times PD) \right] \times \left(\dfrac{1 + (M - 2.5) \times b}{1 - 1.5 \times b} \right)$	
Correlation Factor (R)	For HVCRE exposures: $$R = 0.12 + 0.18 \times e^{-50 \times PD}$$ For wholesale exposures to unregulated financial institutions: $$R = 1.25 \times \left(0.12 + 0.18 \times e^{-50 \times PD} \right)$$ For wholesale exposures to regulated financial institutions with total assets greater than or equal to $100 billion: $$R = 1.25 \times \left(0.12 + 0.18 \times e^{-50 \times PD} \right)$$ For wholesale exposures other than HVCRE exposures: $$R = 0.12 + 0.12 \times e^{-50 \times PD}$$	
Maturity Adjustment (b)	$b = (0.11852 - 0.05478 \times \ln(PD))^2$	

[2]N(.) means the cumulative distribution function for a standard normal random variable. N^{-1}(.) means the inverse cumulative distribution function for a standard normal random variable. The symbol e refers to the base of the natural logarithms, and the function ln(.) refers to the natural logarithm of the expression within parentheses. The formulas apply when PD is greater than zero. If PD equals zero, the capital requirement K is set equal to zero.

(ii) The sum of all the dollar risk-based capital requirements for each wholesale exposure to a non-defaulted obligor and segment of non-defaulted retail exposures calculated in paragraph (e)(1)(i) of this section and in §____.135(e) equals the total dollar risk-based capital requirement for those exposures and segments.

(iii) The aggregate risk-weighted asset amount for wholesale exposures to non-defaulted obligors and segments of non-defaulted retail exposures equals the total dollar risk-based capital

requirement in paragraph (e)(1)(ii) of this section multiplied by 12.5.

(2) *Wholesale exposures to defaulted obligors and segments of defaulted retail exposures.*

(i) The dollar risk-based capital requirement for each wholesale exposure to a defaulted obligor equals 0.08 multiplied by the EAD of the exposure.

(ii) The dollar risk-based capital requirement for a segment of defaulted retail exposures equals 0.08 multiplied by the EAD of the segment.

(iii) The sum of all the dollar risk-based capital requirements for each wholesale exposure to a defaulted obligor calculated in paragraph (e)(2)(i) of this section plus the dollar risk-based capital requirements for each segment of defaulted retail exposures calculated in paragraph (e)(2)(ii) of this section equals the total dollar risk-based capital requirement for those exposures and segments.

(iv) The aggregate risk-weighted asset amount for wholesale exposures to defaulted obligors and segments of defaulted retail exposures equals the total dollar risk-based capital requirement calculated in paragraph (e)(2)(iii) of this section multiplied by 12.5.

(3) *Assets not included in a defined exposure category.* (i) A [BANK] may assign a risk-weighted asset amount of zero to cash owned and held in all offices of the [BANK] or in transit and for gold bullion held in the [BANK]'s own vaults, or held in another [BANK]'s vaults on an allocated basis, to the extent the gold bullion assets are offset by gold bullion liabilities.

(ii) A [BANK] must assign a risk weighted asset amount equal to 20 percent of the carrying value of cash items in the process of collection.

(iii) The risk-weighted asset amount for the residual value of a retail lease exposure equals such residual value.

(iv) The risk-weighted asset amount for DTAs arising from temporary differences that the [BANK] could realize through net operating loss carrybacks equals the carrying value, netted in accordance with § ____.22.

(v) The risk-weighted asset amount for MSAs, DTAs arising from temporary timing differences that the [BANK] could not realize through net operating loss carrybacks, and significant investments in the capital of unconsolidated financial institutions in the form of common stock that are not deducted pursuant to § ____.22(a)(7) equals the amount not subject to deduction multiplied by 250 percent.

(vi) The risk-weighted asset amount for any other on-balance-sheet asset that

does not meet the definition of a wholesale, retail, securitization, IMM, or equity exposure, cleared transaction, or default fund contribution equals the carrying value of the asset.

(4) *Non-material portfolios of exposures.* The risk-weighted asset amount of a portfolio of exposures for which the [BANK] has demonstrated to the [AGENCY]'s satisfaction that the portfolio (when combined with all other portfolios of exposures that the [BANK] seeks to treat under this paragraph) is not material to the [BANK] is the sum of the carrying values of on-balance sheet exposures plus the notional amounts of off-balance sheet exposures in the portfolio. For purposes of this paragraph (e)(4), the notional amount of an OTC derivative contract that is not a credit derivative is the EAD of the derivative as calculated in § ____.132.

§ ____.132 Counterparty credit risk of repo-style transactions, eligible margin loans, and OTC derivative contracts.

(a) *Methodologies for collateral recognition.* (1) Instead of an LGD estimation methodology, a [BANK] may use the following methodologies to recognize the benefits of financial collateral in mitigating the counterparty credit risk of repo-style transactions, eligible margin loans, collateralized OTC derivative contracts and single product netting sets of such transactions, and to recognize the benefits of any collateral in mitigating the counterparty credit risk of repo-style transactions that are included in a [BANK]'s VaR-based measure under subpart F:

(i) The collateral haircut approach set forth in paragraph (b)(2) of this section;

(ii) The internal models methodology set forth in paragraph (d) of this section; and

(iii) For single product netting sets of repo-style transactions and eligible margin loans, the simple VaR methodology set forth in paragraph (b)(3) of this section.

(2) A [BANK] may use any combination of the three methodologies for collateral recognition; however, it must use the same methodology for transactions in the same category.

(3) A [BANK] must use the methodology in paragraph (c) of this section, or with prior [AGENCY] approval, the internal model methodology in paragraph (d) of this section, to calculate EAD for an OTC derivative contract or a set of OTC derivative contracts subject to a qualifying master netting agreement. To estimate EAD for qualifying cross-product master netting agreements, a [BANK] may only use the internal

models methodology in paragraph (d) of this section.

(4) A [BANK] must also use the methodology in paragraph (e) of this section for calculating the risk-weighted asset amounts for CVA for OTC derivatives.

(b) *EAD for eligible margin loans and repo-style transactions.* (1) *General.* A [BANK] may recognize the credit risk mitigation benefits of financial collateral that secures an eligible margin loan, repo-style transaction, or single-product netting set of such transactions by factoring the collateral into its LGD estimates for the exposure. Alternatively, a [BANK] may estimate an unsecured LGD for the exposure, as well as for any repo-style transaction that is included in the [BANK]'s VaR-based measure under subpart F of this part, and determine the EAD of the exposure using:

(i) The collateral haircut approach described in paragraph (b)(2) of this section;

(ii) For netting sets only, the simple VaR methodology described in paragraph (b)(3) of this section; or

(iii) The internal models methodology described in paragraph (d) of this section.

(2) *Collateral haircut approach.* (i) *EAD equation.* A [BANK] may determine EAD for an eligible margin loan, repo-style transaction, or netting set by setting EAD equal to max $\{0, [(\Sigma E - \Sigma C) + \Sigma(E_S \times H_S) + \Sigma(E_{fx} \times H_{fx})]\}$, where:

(A) ΣE equals the value of the exposure (the sum of the current market values of all instruments, gold, and cash the [BANK] has lent, sold subject to repurchase, or posted as collateral to the counterparty under the transaction (or netting set));

(B) ΣC equals the value of the collateral (the sum of the current market values of all instruments, gold, and cash the [BANK] has borrowed, purchased subject to resale, or taken as collateral from the counterparty under the transaction (or netting set));

(C) E_s equals the absolute value of the net position in a given instrument or in gold (where the net position in a given instrument or in gold equals the sum of the current market values of the instrument or gold the [BANK] has lent, sold subject to repurchase, or posted as collateral to the counterparty minus the sum of the current market values of that same instrument or gold the [BANK] has borrowed, purchased subject to resale, or taken as collateral from the counterparty);

(D) H_s equals the market price volatility haircut appropriate to the instrument or gold referenced in E_S;

(E) E_{fx} equals the absolute value of the net position of instruments and cash in a currency that is different from the settlement currency (where the net position in a given currency equals the sum of the current market values of any instruments or cash in the currency the [BANK] has lent, sold subject to repurchase, or posted as collateral to the

counterparty minus the sum of the current market values of any instruments or cash in the currency the [BANK] has borrowed, purchased subject to resale, or taken as collateral from the counterparty); and

(F) H_{fx} equals the haircut appropriate to the mismatch between the currency referenced in E_{fx} and the settlement currency.

(ii) *Standard supervisory haircuts.* (A) Under the standard supervisory haircuts approach:

(*1*) A [BANK] must use the haircuts for market price volatility (H_s) in Table 2, as adjusted in certain circumstances as provided in paragraphs (b)(2)(ii)(A)(*3*) and (*4*) of this section;

TABLE 2—STANDARD SUPERVISORY MARKET PRICE VOLATILITY HAIRCUTS [1]

Residual maturity	Haircut (in percents) assigned based on:						Investment grade securitization exposures (in percent)
	Sovereign issuers risk weight under this section [2]			Non-sovereign issuers risk weight under this section			
	Zero %	20% or 50%	100%	20%	50%	100%	
Less than or equal to 1 year	0.5	1.0	15.0	1.0	2.0	25.0	4.0
Greater than 1 year and less than or equal to 5 years	2.0	3.0	15.0	4.0	6.0	25.0	12.0
Greater than 5 years	4.0	6.0	15.0	8.0	12.0	25.0	24.0
Main index equities (including convertible bonds) and gold	15.0						
Other publicly-traded equities (including convertible bonds)	25.0						
Mutual funds	Highest haircut applicable to any security in which the fund can invest.						
Cash collateral held	Zero.						

[1] The market price volatility haircuts in Table 2 are based on a 10-business-day holding period.
[2] Includes a foreign PSE that receives a zero percent risk weight.

(*2*) For currency mismatches, a [BANK] must use a haircut for foreign exchange rate volatility (H_{fx}) of 8 percent, as adjusted in certain circumstances as provided in paragraphs (b)(2)(ii)(A)(*3*) and (*4*) of this section.

(*3*) For repo-style transactions, a [BANK] may multiply the supervisory haircuts provided in paragraphs (b)(2)(ii)(A)(*1*) and (*2*) of this section by the square root of ½ (which equals 0.707107).

(*4*) A [BANK] must adjust the supervisory haircuts upward on the basis of a holding period longer than ten business days (for eligible margin loans) or five business days (for repo-style transactions) where the following conditions apply. If the number of trades in a netting set exceeds 5,000 at any time during a quarter, a [BANK] must adjust the supervisory haircuts upward on the basis of a holding period of twenty business days for the following quarter (except when a [BANK] is calculating EAD for a cleared transaction under §____.133). If a netting set contains one or more trades involving illiquid collateral or an OTC derivative that cannot be easily replaced, a [BANK] must adjust the supervisory haircuts upward on the basis of a holding period of twenty

business days. If over the two previous quarters more than two margin disputes on a netting set have occurred that lasted more than the holding period, then the [BANK] must adjust the supervisory haircuts upward for that netting set on the basis of a holding period that is at least two times the minimum holding period for that netting set. A [BANK] must adjust the standard supervisory haircuts upward using the following formula:

$$H_A = H_S \sqrt{\frac{T_M}{T_S}}$$

Where,
(*i*) T_M equals a holding period of longer than 10 business days for eligible margin loans and derivative contracts or longer than 5 business days for repo-style transactions;
(*ii*) H_S equals the standard supervisory haircut; and
(*iii*) T_S equals 10 business days for eligible margin loans and derivative contracts or 5 business days for repo-style transactions.

(*5*) If the instrument a [BANK] has lent, sold subject to repurchase, or posted as collateral does not meet the definition of financial collateral, the [BANK] must use a 25.0 percent haircut for market price volatility (H_S).

(iii) *Own internal estimates for haircuts.* With the prior written approval of the [AGENCY], a [BANK] may calculate haircuts (H_s and H_{fx}) using its own internal estimates of the volatilities of market prices and foreign exchange rates.

(A) To receive [AGENCY] approval to use its own internal estimates, a [BANK] must satisfy the following minimum quantitative standards:

(*1*) A [BANK] must use a 99th percentile one-tailed confidence interval.

(*2*) The minimum holding period for a repo-style transaction is five business days and for an eligible margin loan is ten business days except for transactions or netting sets for which paragraph (b)(2)(iii)(A)(*3*) of this section applies. When a [BANK] calculates an own-estimates haircut on a T_N-day holding period, which is different from the minimum holding period for the transaction type, the applicable haircut (H_M) is calculated using the following square root of time formula:

$$H_M = H_N \sqrt{\frac{T_M}{T_N}}$$

Where,

(*i*) T_M equals 5 for repo-style transactions and 10 for eligible margin loans;

(*ii*) T_N equals the holding period used by the [BANK] to derive H_N; and

(*iii*) H_N equals the haircut based on the holding period T_N.

(*3*) If the number of trades in a netting set exceeds 5,000 at any time during a quarter, a [BANK] must calculate the haircut using a minimum holding period of twenty business days for the following quarter (except when a [BANK] is calculating EAD for a cleared transaction under § ____.133). If a netting set contains one or more trades involving illiquid collateral or an OTC derivative that cannot be easily replaced, a [BANK] must calculate the haircut using a minimum holding period of twenty business days. If over the two previous quarters more than two margin disputes on a netting set have occurred that lasted more than the holding period, then the [BANK] must calculate the haircut for transactions in that netting set on the basis of a holding period that is at least two times the minimum holding period for that netting set.

(*4*) A [BANK] is required to calculate its own internal estimates with inputs calibrated to historical data from a continuous 12-month period that reflects a period of significant financial stress appropriate to the security or category of securities.

(*5*) A [BANK] must have policies and procedures that describe how it determines the period of significant financial stress used to calculate the [BANK]'s own internal estimates for haircuts under this section and must be able to provide empirical support for the period used. The [BANK] must obtain the prior approval of the [AGENCY] for, and notify the [AGENCY] if the [BANK] makes any material changes to, these policies and procedures.

(*6*) Nothing in this section prevents the [AGENCY] from requiring a [BANK] to use a different period of significant financial stress in the calculation of own internal estimates for haircuts.

(*7*) A [BANK] must update its data sets and calculate haircuts no less frequently than quarterly and must also reassess data sets and haircuts whenever market prices change materially.

(B) With respect to debt securities that are investment grade, a [BANK] may calculate haircuts for categories of securities. For a category of securities, the [BANK] must calculate the haircut on the basis of internal volatility estimates for securities in that category that are representative of the securities in that category that the [BANK] has lent, sold subject to repurchase, posted as collateral, borrowed, purchased

subject to resale, or taken as collateral. In determining relevant categories, the [BANK] must at a minimum take into account:

(*1*) The type of issuer of the security;

(*2*) The credit quality of the security;

(*3*) The maturity of the security; and

(*4*) The interest rate sensitivity of the security.

(C) With respect to debt securities that are not investment grade and equity securities, a [BANK] must calculate a separate haircut for each individual security.

(D) Where an exposure or collateral (whether in the form of cash or securities) is denominated in a currency that differs from the settlement currency, the [BANK] must calculate a separate currency mismatch haircut for its net position in each mismatched currency based on estimated volatilities of foreign exchange rates between the mismatched currency and the settlement currency.

(E) A [BANK]'s own estimates of market price and foreign exchange rate volatilities may not take into account the correlations among securities and foreign exchange rates on either the exposure or collateral side of a transaction (or netting set) or the correlations among securities and foreign exchange rates between the exposure and collateral sides of the transaction (or netting set).

(3) *Simple VaR methodology.* With the prior written approval of the [AGENCY], a [BANK] may estimate EAD for a netting set using a VaR model that meets the requirements in paragraph (b)(3)(iii) of this section. In such event, the [BANK] must set EAD equal to max $\{0, [(\Sigma E - \Sigma C) + PFE]\}$, where:

(i) ΣE equals the value of the exposure (the sum of the current market values of all instruments, gold, and cash the [BANK] has lent, sold subject to repurchase, or posted as collateral to the counterparty under the netting set);

(ii) ΣC equals the value of the collateral (the sum of the current market values of all instruments, gold, and cash the [BANK] has borrowed, purchased subject to resale, or taken as collateral from the counterparty under the netting set); and

(iii) PFE (potential future exposure) equals the [BANK]'s empirically based best estimate of the 99th percentile, one-tailed confidence interval for an increase in the value of $(\Sigma E - \Sigma C)$ over a five-business-day holding period for repo-style transactions, or over a ten-business-day holding period for eligible margin loans except for netting sets for which paragraph (b)(3)(iv) of this section applies using a minimum one-year historical observation period of

price data representing the instruments that the [BANK] has lent, sold subject to repurchase, posted as collateral, borrowed, purchased subject to resale, or taken as collateral. The [BANK] must validate its VaR model by establishing and maintaining a rigorous and regular backtesting regime.

(iv) If the number of trades in a netting set exceeds 5,000 at any time during a quarter, a [BANK] must use a twenty-business-day holding period for the following quarter (except when a [BANK] is calculating EAD for a cleared transaction under § ____.133). If a netting set contains one or more trades involving illiquid collateral, a [BANK] must use a twenty-business-day holding period. If over the two previous quarters more than two margin disputes on a netting set have occurred that lasted more than the holding period, then the [BANK] must set its PFE for that netting set equal to an estimate over a holding period that is at least two times the minimum holding period for that netting set.

(c) *EAD for OTC derivative contracts.* (1) A [BANK] must determine the EAD for an OTC derivative contract that is not subject to a qualifying master netting agreement using the current exposure methodology in paragraph (c)(5) of this section or using the internal models methodology described in paragraph (d) of this section.

(2) A [BANK] must determine the EAD for multiple OTC derivative contracts that are subject to a qualifying master netting agreement using the current exposure methodology in § ____.132(c)(6) or using the internal models methodology described in paragraph (d) of this section.

(3) *Counterparty credit risk for credit derivatives.* Notwithstanding paragraphs (c) (1) and (c)(2) of this section:

(i) A [BANK] that purchases a credit derivative that is recognized under § ____.134 or § ____.135 as a credit risk mitigant for an exposure that is not a covered position under subpart F of this part is not required to calculate a separate counterparty credit risk capital requirement under this section so long as the [BANK] does so consistently for all such credit derivatives and either includes or excludes all such credit derivatives that are subject to a master netting agreement from any measure used to determine counterparty credit risk exposure to all relevant counterparties for risk-based capital purposes.

(ii) A [BANK] that is the protection provider in a credit derivative must treat the credit derivative as a wholesale exposure to the reference obligor and is not required to calculate a counterparty

credit risk capital requirement for the credit derivative under this section, so long as it does so consistently for all such credit derivatives and either includes all or excludes all such credit derivatives that are subject to a master netting agreement from any measure used to determine counterparty credit risk exposure to all relevant counterparties for risk-based capital purposes (unless the [BANK] is treating the credit derivative as a covered position under subpart F of this part, in which case the [BANK] must calculate a supplemental counterparty credit risk capital requirement under this section).

(4) *Counterparty credit risk for equity derivatives.* A [BANK] must treat an equity derivative contract as an equity exposure and compute a risk-weighted asset amount for the equity derivative contract under §§____.151–____.155 (unless the [BANK] is treating the contract as a covered position under subpart F of this part). In addition, if the [BANK] is treating the contract as a covered position under subpart F of this

part, and under certain other circumstances described in §____.155, the [BANK] must also calculate a risk-based capital requirement for the counterparty credit risk of an equity derivative contract under this section.

(5) *Single OTC derivative contract.* Except as modified by paragraph (c)(7) of this section, the EAD for a single OTC derivative contract that is not subject to a qualifying master netting agreement is equal to the sum of the [BANK]'s current credit exposure and potential future credit exposure (PFE) on the derivative contract.

(i) *Current credit exposure.* The current credit exposure for a single OTC derivative contract is the greater of the mark-to-market value of the derivative contract or zero.

(ii) *PFE.* The PFE for a single OTC derivative contract, including an OTC derivative contract with a negative mark-to-market value, is calculated by multiplying the notional principal amount of the derivative contract by the appropriate conversion factor in Table

3. For purposes of calculating either the PFE under paragraph (c)(5) of this section or the gross PFE under paragraph (c)(6) of this section for exchange rate contracts and other similar contracts in which the notional principal amount is equivalent to the cash flows, the notional principal amount is the net receipts to each party falling due on each value date in each currency. For any OTC derivative contract that does not fall within one of the specified categories in Table 3, the PFE must be calculated using the "other" conversion factors. A [BANK] must use an OTC derivative contract's effective notional principal amount (that is, its apparent or stated notional principal amount multiplied by any multiplier in the OTC derivative contract) rather than its apparent or stated notional principal amount in calculating PFE. PFE of the protection provider of a credit derivative is capped at the net present value of the amount of unpaid premiums.

TABLE 3—CONVERSION FACTOR MATRIX FOR OTC DERIVATIVE CONTRACTS [1]

Remaining maturity [2]	Interest rate	Foreign exchange rate and gold	Credit (investment-grade reference asset) [3]	Credit (non-invest-ment-grade reference asset)	Equity	Precious metals (except gold)	Other
One year or less	0.00	0.01	0.05	0.10	0.06	0.07	0.10
Over one to five years	0.005	0.05	0.05	0.10	0.08	0.07	0.12
Over five years	0.015	0.075	0.05	0.10	0.10	0.08	0.15

[1] For an OTC derivative contract with multiple exchanges of principal, the conversion factor is multiplied by the number of remaining payments in the derivative contract.

[2] For an OTC derivative contract that is structured such that on specified dates any outstanding exposure is settled and the terms are reset so that the market value of the contract is zero, the remaining maturity equals the time until the next reset date. For an interest rate derivative contract with a remaining maturity of greater than one year that meets these criteria, the minimum conversion factor is 0.005.

[3] A [BANK] must use the column labeled "Credit (investment-grade reference asset)" for a credit derivative whose reference asset is an outstanding unsecured long-term debt security without credit enhancement that is investment grade. A [BANK] must use the column labeled "Credit (non-investment-grade reference asset)" for all other credit derivatives.

(6) *Multiple OTC derivative contracts subject to a qualifying master netting agreement.* Except as modified by paragraph (c)(7) of this section, the EAD for multiple OTC derivative contracts subject to a qualifying master netting agreement is equal to the sum of the net current credit exposure and the adjusted sum of the PFE exposure for all OTC derivative contracts subject to the qualifying master netting agreement.

(i) *Net current credit exposure.* The net current credit exposure is the greater of:

(A) The net sum of all positive and negative mark-to-market values of the individual OTC derivative contracts subject to the qualifying master netting agreement; or

(B) Zero.

(ii) *Adjusted sum of the PFE.* The adjusted sum of the PFE, A_{net}, is

calculated as $A_{net} = (0.4 \times A_{gross}) + (0.6 \times NGR \times A_{gross})$, where:

(A) A_{gross} = the gross PFE (that is, the sum of the PFE amounts (as determined under paragraph (c)(5)(ii) of this section) for each individual derivative contract subject to the qualifying master netting agreement); and

(B) NGR = the net to gross ratio (that is, the ratio of the net current credit exposure to the gross current credit exposure). In calculating the NGR, the gross current credit exposure equals the sum of the positive current credit exposures (as determined under paragraph (c)(6)(i) of this section) of all individual derivative contracts subject to the qualifying master netting agreement.

(7) *Collateralized OTC derivative contracts.* A [BANK] may recognize the credit risk mitigation benefits of financial collateral that secures an OTC

derivative contract or single-product netting set of OTC derivatives by factoring the collateral into its LGD estimates for the contract or netting set. Alternatively, a [BANK] may recognize the credit risk mitigation benefits of financial collateral that secures such a contract or netting set that is marked-to-market on a daily basis and subject to a daily margin maintenance requirement by estimating an unsecured LGD for the contract or netting set and adjusting the EAD calculated under paragraph (c)(5) or (c)(6) of this section using the collateral haircut approach in paragraph (b)(2) of this section. The [BANK] must substitute the EAD calculated under paragraph (c)(5) or (c)(6) of this section for ΣE in the equation in paragraph (b)(2)(i) of this section and must use a ten-business day minimum holding period ($T_M = 10$) unless a longer holding

period is required by paragraph (b)(2)(iii)(A)(*3*) of this section.

(d) *Internal models methodology.* (1) With prior written approval from the [AGENCY], a [BANK] may use the internal models methodology in this paragraph (d) to determine EAD for counterparty credit risk for derivative contracts (collateralized or uncollateralized) and single-product netting sets thereof, for eligible margin loans and single-product netting sets thereof, and for repo-style transactions and single-product netting sets thereof. A [BANK] that uses the internal models methodology for a particular transaction type (derivative contracts, eligible margin loans, or repo-style transactions) must use the internal models methodology for all transactions of that transaction type. A [BANK] may choose to use the internal models methodology for one or two of these three types of exposures and not the other types. A [BANK] may also use the internal models methodology for derivative contracts, eligible margin loans, and repo-style transactions subject to a

qualifying cross-product netting agreement if:

(i) The [BANK] effectively integrates the risk mitigating effects of cross-product netting into its risk management and other information technology systems; and

(ii) The [BANK] obtains the prior written approval of the [AGENCY]. A [BANK] that uses the internal models methodology for a transaction type must receive approval from the [AGENCY] to cease using the methodology for that transaction type or to make a material change to its internal model.

(2) *Risk-weighted assets using IMM.* Under the IMM, a [BANK] uses an internal model to estimate the expected exposure (EE) for a netting set and then calculates EAD based on that EE. A [BANK] must calculate two EEs and two EADs (one stressed and one unstressed) for each netting set as follows:

(i) EAD_unstressed is calculated using an EE estimate based on the most recent data meeting the requirements of paragraph (d)(3)(vii) of this section.

(ii) EAD_stressed is calculated using an EE estimate based on a historical period

that includes a period of stress to the credit default spreads of the [BANK]'s counterparties according to paragraph (d)(3)(viii) of this section.

(iii) The [BANK] must use its internal model's probability distribution for changes in the market value of a netting set that are attributable to changes in market variables to determine EE.

(iv) Under the internal models methodology, EAD = Max (0, $\alpha \times$ effective EPE $-$ CVA), or, subject to [AGENCY] approval as provided in paragraph (d)(10) of this section, a more conservative measure of EAD.

(A) CVA equals the credit valuation adjustment that the [BANK] has recognized in its balance sheet valuation of any OTC derivative contracts in the netting set. For purposes of this paragraph, CVA does not include any adjustments to common equity tier 1 capital attributable to changes in the fair value of the [BANK]'s liabilities that are due to changes in its own credit risk since the inception of the transaction with the counterparty.

$$(B) \quad \textit{Effective} \quad EPE_k = \sum_{k=1}^{n} \textit{Effective} \quad EE_k \, x \, \Delta t_k \quad \text{(that is, effective EPE is the time-}$$

weighted average of effective EE where the weights are the proportion that an individual

effective EE represents in a one-year time interval) where:

(*1*) *EffectiveE E*$_{n_k}$ = max (*EffectiveE E*$_{n_{k-1}}$, *EE*$_{n_k}$) (that is, for a specific date t_k, effective EE is the greater of EE at that date or the effective EE at the previous date); and

(*2*) t_k represents the kth future time period in the model and there are n time periods represented in the model over the first year, and

(C) α = 1.4 except as provided in paragraph (d)(5) of this section, or when the [AGENCY] has determined that the [BANK] must set α higher based on the [BANK]'s specific characteristics of counterparty credit risk or model performance.

(v) A [BANK] may include financial collateral currently posted by the counterparty as collateral (but may not include other forms of collateral) when calculating EE.

(vi) If a [BANK] hedges some or all of the counterparty credit risk associated with a netting set using an eligible credit derivative, the [BANK] may take the reduction in exposure to the counterparty into account when estimating EE. If the [BANK] recognizes this reduction in exposure to the counterparty in its estimate of EE, it must also use its internal model to estimate a separate EAD for the

[BANK]'s exposure to the protection provider of the credit derivative.

(3) To obtain [AGENCY] approval to calculate the distributions of exposures upon which the EAD calculation is based, the [BANK] must demonstrate to the satisfaction of the [AGENCY] that it has been using for at least one year an internal model that broadly meets the following minimum standards, with which the [BANK] must maintain compliance:

(i) The model must have the systems capability to estimate the expected exposure to the counterparty on a daily basis (but is not expected to estimate or report expected exposure on a daily basis).

(ii) The model must estimate expected exposure at enough future dates to reflect accurately all the future cash flows of contracts in the netting set.

(iii) The model must account for the possible non-normality of the exposure distribution, where appropriate.

(iv) The [BANK] must measure, monitor, and control current counterparty exposure and the exposure

to the counterparty over the whole life of all contracts in the netting set.

(v) The [BANK] must be able to measure and manage current exposures gross and net of collateral held, where appropriate. The [BANK] must estimate expected exposures for OTC derivative contracts both with and without the effect of collateral agreements.

(vi) The [BANK] must have procedures to identify, monitor, and control wrong-way risk throughout the life of an exposure. The procedures must include stress testing and scenario analysis.

(vii) The model must use current market data to compute current exposures. The [BANK] must estimate model parameters using historical data from the most recent three-year period and update the data quarterly or more frequently if market conditions warrant. The [BANK] should consider using model parameters based on forward-looking measures, where appropriate.

(viii) When estimating model parameters based on a stress period, the [BANK] must use at least three years of historical data that include a period of

stress to the credit default spreads of the [BANK]'s counterparties. The [BANK] must review the data set and update the data as necessary, particularly for any material changes in its counterparties. The [BANK] must demonstrate at least quarterly that the stress period coincides with increased CDS or other credit spreads of the [BANK]'s counterparties. The [BANK] must have procedures to evaluate the effectiveness of its stress calibration that include a process for using benchmark portfolios that are vulnerable to the same risk factors as the [BANK]'s portfolio. The [AGENCY] may require the [BANK] to modify its stress calibration to better reflect actual historic losses of the portfolio.

(ix) A [BANK] must subject its internal model to an initial validation and annual model review process. The model review should consider whether the inputs and risk factors, as well as the model outputs, are appropriate. As part of the model review process, the [BANK] must have a backtesting program for its model that includes a process by which unacceptable model performance will be determined and remedied.

(x) A [BANK] must have policies for the measurement, management and control of collateral and margin amounts.

(xi) A [BANK] must have a comprehensive stress testing program that captures all credit exposures to counterparties, and incorporates stress testing of principal market risk factors and creditworthiness of counterparties.

(4) *Maturity.* (i) If the remaining maturity of the exposure or the longest-dated contract in the netting set is greater than one year, the [BANK] must set M for the exposure or netting set equal to the lower of five years or M(EPE), where:

$$
\text{(A)} \quad M(EPE) = 1 + \frac{\sum\limits_{t_k > 1\,year}^{maturity} EE_k \times \Delta t_k \times df_k}{\sum\limits_{k=1}^{t_k \le 1\,year} effectiveE\,E_k \times \Delta t_k \times df_k} \quad ;
$$

(B) df_k is the risk-free discount factor for future time period t_k; and

(C) $\Delta t_k = t_k - 1$.

(ii) If the remaining maturity of the exposure or the longest-dated contract in the netting set is one year or less, the [BANK] must set M for the exposure or netting set equal to one year, except as provided in section§____.131(d)(7).

(iii) Alternatively, a [BANK] that uses an internal model to calculate a one-sided credit valuation adjustment may use the effective credit duration estimated by the model as M(EPE) in place of the formula in paragraph (d)(4)(i) of this section.

(5) *Collateral agreements.* A [BANK] may capture the effect on EAD of a collateral agreement that requires receipt of collateral when exposure to the counterparty increases, but may not capture the effect on EAD of a collateral agreement that requires receipt of collateral when counterparty credit quality deteriorates. Two methods are available to capture the effect of a collateral agreement:

(i) With prior written approval from the [AGENCY], a [BANK] may include the effect of a collateral agreement within its internal model used to calculate EAD. The [BANK] may set EAD equal to the expected exposure at the end of the margin period of risk. The margin period of risk means, with respect to a netting set subject to a collateral agreement, the time period from the most recent exchange of collateral with a counterparty until the next required exchange of collateral, plus the period of time required to sell and realize the proceeds of the least liquid collateral that can be delivered under the terms of the collateral agreement and, where applicable, the period of time required to re-hedge the resulting market risk upon the default of the counterparty. The minimum margin period of risk is set according to paragraph (d)(5)(iii) of this section.

(ii) A [BANK] that can model EPE without collateral agreements but cannot achieve the higher level of modeling sophistication to model EPE with collateral agreements can set effective EPE for a collateralized netting set equal to the lesser of:

(A) An add-on that reflects the potential increase in exposure of the netting set over the margin period of risk, plus the larger of:

(*1*) The current exposure of the netting set reflecting all collateral held or posted by the [BANK] excluding any collateral called or in dispute; or

(*2*) The largest net exposure including all collateral held or posted under the margin agreement that would not trigger a collateral call. For purposes of this section, the add-on is computed as the largest expected increase in the netting set's exposure over any margin period of risk in the next year (set in accordance with paragraph (d)(5)(iii) of this section); or

(B) Effective EPE without a collateral agreement plus any collateral the [BANK] posts to the counterparty that exceeds the required margin amount.

(iii) The margin period of risk for a netting set subject to a collateral agreement is:

(A) Five business days for repo-style transactions subject to daily remargining and daily marking-to-market, and ten business days for other transactions when liquid financial collateral is posted under a daily margin maintenance requirement, or

(B) Twenty business days if the number of trades in a netting set exceeds 5,000 at any time during the previous quarter or contains one or more trades involving illiquid collateral or any derivative contract that cannot be easily replaced (except if the [BANK] is calculating EAD for a cleared transaction under § ____.133). If over the two previous quarters more than two margin disputes on a netting set have occurred that lasted more than the margin period of risk, then the [BANK] must use a margin period of risk for that netting set that is at least two times the minimum margin period of risk for that netting set. If the periodicity of the receipt of collateral is N-days, the minimum margin period of risk is the minimum margin period of risk under this paragraph plus N minus 1. This period should be extended to cover any impediments to prompt re-hedging of any market risk.

(6) *Own estimate of alpha.* With prior written approval of the [AGENCY], a [BANK] may calculate alpha as the ratio of economic capital from a full simulation of counterparty exposure across counterparties that incorporates a joint simulation of market and credit risk factors (numerator) and economic capital based on EPE (denominator), subject to a floor of 1.2. For purposes of this calculation, economic capital is the unexpected losses for all counterparty credit risks measured at a 99.9 percent

confidence level over a one-year horizon. To receive approval, the [BANK] must meet the following minimum standards to the satisfaction of the [AGENCY]:

(i) The [BANK]'s own estimate of alpha must capture in the numerator the effects of:

(A) The material sources of stochastic dependency of distributions of market values of transactions or portfolios of transactions across counterparties;

(B) Volatilities and correlations of market risk factors used in the joint simulation, which must be related to the credit risk factor used in the simulation to reflect potential increases in volatility or correlation in an economic downturn, where appropriate; and

(C) The granularity of exposures (that is, the effect of a concentration in the proportion of each counterparty's exposure that is driven by a particular risk factor).

(ii) The [BANK] must assess the potential model uncertainty in its estimates of alpha.

(iii) The [BANK] must calculate the numerator and denominator of alpha in a consistent fashion with respect to modeling methodology, parameter specifications, and portfolio composition.

(iv) The [BANK] must review and adjust as appropriate its estimates of the numerator and denominator of alpha on at least a quarterly basis and more frequently when the composition of the portfolio varies over time.

(7) *Risk-based capital requirements for transactions with specific wrong-way risk.* A [BANK] must determine if a repo-style transaction, eligible margin loan, bond option, or equity derivative contract or purchased credit derivative to which the [BANK] applies the internal models methodology has specific wrong-way risk. If a transaction has specific wrong-way risk, the [BANK] must exclude it from the model described in 132(d)(2) and instead calculate the risk-based capital requirement for the transaction as follows:

(i) For an equity derivative contract, by multiplying:

(A) K, calculated using the appropriate risk-based capital formula specified in Table 1 of § ____.131 using the PD of the counterparty and LGD equal to 100 percent, by

(B) The maximum amount the [BANK] could lose on the equity derivative.

(ii) For a purchased credit derivative by multiplying:

(A) K, calculated using the appropriate risk-based capital formula specified in Table 1 of § ____.131 using

the PD of the counterparty and LGD equal to 100 percent, by

(B) The fair value of the reference asset of the credit derivative.

(iii) For a bond option, by multiplying:

(A) K, calculated using the appropriate risk-based capital formula specified in Table 1 of § ____.131 using the PD of the counterparty and LGD equal to 100 percent, by

(B) The smaller of the notional amount of the underlying reference asset and the maximum potential loss under the bond option contract.

(iv) For a repo-style transaction or eligible margin loan by multiplying:

(A) K, calculated using the appropriate risk-based capital formula specified in Table 1 of § ____.131 using the PD of the counterparty and LGD equal to 100 percent, by

(B) The EAD of the transaction determined according to the EAD equation in § ____.131(b)(2), substituting the estimated value of the collateral assuming a default of the counterparty for the value of the collateral in ΣC of the equation.

(8) *Risk-weighted asset amount for IMM exposures with specific wrong-way risk.* The aggregate risk-weighted asset amount for IMM exposures with specific wrong-way risk is the sum of a [BANK]'s risk-based capital requirement for purchased credit derivatives that are not bond options with specific wrong-way risk as calculated under paragraph (d)(7)(ii) of this section, a [BANK]'s risk-based capital requirement for equity derivatives with specific wrong-way risk as calculated under paragraph (d)(7)(i) of this section, a [BANK]'s risk-based capital requirement for bond options with specific wrong-way risk as calculated under paragraph (d)(7)(iii) of this section, and a [BANK]'s risk-based capital requirement for repo-style transactions and eligible margin loans with specific wrong-way risk as calculated under paragraph (d)(7)(iv) of this section, multiplied by 12.5.

(9) *Risk-weighted assets for IMM exposures.* (i) The [BANK] must insert the assigned risk parameters for each counterparty and netting set into the appropriate formula specified in Table 1 of § ____.131 and multiply the output of the formula by the EAD$_{unstressed}$ of the netting set to obtain the unstressed capital requirement for each netting set. A [BANK] that uses an advanced CVA approach that captures migrations in credit spreads under paragraph (e)(3) of this section must set the maturity adjustment (b) in the formula equal to zero. The sum of the unstressed capital requirement calculated for each netting set equals K$_{unstressed}$.

(ii) The [BANK] must insert the assigned risk parameters for each wholesale obligor and netting set into the appropriate formula specified in Table 1 of § ____.131 and multiply the output of the formula by the EAD$_{stressed}$ of the netting set to obtain the stressed capital requirement for each netting set. A [BANK] that uses an advanced CVA approach that captures migrations in credit spreads under paragraph (e)(3) of this section must set the maturity adjustment (b) in the formula equal to zero. The sum of the stressed capital requirement calculated for each netting set equals K$_{stressed}$.

(iii) The [BANK]'s dollar risk-based capital requirement under the internal models methodology equals the larger of K$_{unstressed}$ and K$_{stressed}$. A [BANK]'s risk-weighted assets amount for IMM exposures is equal to the capital requirement multiplied by 12.5, plus risk weighted assets for IMM exposures with specific wrong-way risk in paragraph (d)(8) of this section and those in paragraph (d)(10) of this section.

(10) *Other measures of counterparty exposure.* (i) With prior written approval of the [AGENCY], a [BANK] may set EAD equal to a measure of counterparty credit risk exposure, such as peak EAD, that is more conservative than an alpha of 1.4 (or higher under the terms of paragraph (d)(7)(iv)(C) of this section) times the larger of EPE$_{unstressed}$ and EPE$_{stressed}$ for every counterparty whose EAD will be measured under the alternative measure of counterparty exposure. The [BANK] must demonstrate the conservatism of the measure of counterparty credit risk exposure used for EAD.

(A) For material portfolios of new OTC derivative products, the [BANK] may assume that the current exposure methodology in paragraphs (c)(5) and (c)(6) of this section meets the conservatism requirement of this section for a period not to exceed 180 days.

(B) For immaterial portfolios of OTC derivative contracts, the [BANK] generally may assume that the current exposure methodology in paragraphs (c)(5) and (c)(6) of this section meets the conservatism requirement of this section.

(ii) To calculate risk-weighted assets under this approach, the [BANK] must insert the assigned risk parameters for each counterparty and netting set into the appropriate formula specified in Table 1 of § ____.131, multiply the output of the formula by the EAD for the exposure as specified above, and multiply by 12.5.

(e) *Credit Valuation Adjustment (CVA) Risk-Weighted Assets.* (1) *In*

general. With respect to its OTC derivative contracts, a [BANK] must calculate a CVA risk-weighted asset amount for each counterparty using the simple CVA approach described in paragraph (e)(5) of this section or, with prior written approval of the [AGENCY], the advanced CVA approach described in paragraph (e)(6) of this section. A [BANK] that receives prior [AGENCY] approval to calculate its CVA risk-weighted asset amounts for a class of counterparties using the advanced CVA approach must continue to use that approach for that class of counterparties until it notifies the [AGENCY] in writing that the [BANK] expects to begin calculating its CVA risk-weighted asset amount using the simple CVA approach. Such notice must include an explanation of the [BANK]'s rationale and the date upon which the [BANK]

will begin to calculate its CVA risk-weighted asset amount using the simple CVA approach.

(2) *Market risk [BANK]s.* Notwithstanding the prior approval requirement in paragraph (e)(1) of this section, a market risk [BANK] may calculate its CVA risk-weighted asset amount for a counterparty using the advanced CVA approach if the [BANK] has [AGENCY] approval to:

(i) Determine EAD for OTC derivative contracts using the internal models methodology described in paragraph (d) of this section; and

(ii) Determine its specific risk add-on for debt positions issued by the counterparty using a specific risk model described in § ___.207(b) of subpart F of this part.

(3) *Recognition of Hedges.* (i) A [BANK] may recognize a single name CDS, single name contingent CDS, any

other equivalent hedging instrument that references the counterparty directly, and index credit default swaps (CDS$_{ind}$) as a CVA hedge under paragraph (e)(5)(ii) of this section or paragraph (e)(6) of this section, provided that the position is managed as a CVA hedge in accordance with the [BANK]'s hedging policies.

(ii) A [BANK] shall not recognize as a CVA hedge any tranched or nth-to-default credit derivative.

(4) *Total CVA risk-weighted assets.* Total CVA risk-weighted assets is the sum of the CVA capital requirement, K$_{CVA,}$ calculated for each of a [BANK]'s OTC derivative counterparties, multiplied by 12.5.

(5) *Simple CVA approach.* (i) Under the simple CVA approach, the CVA capital requirement, K$_{CVA}$, is calculated according to the following formula:

$$K_{CVA} = 2.33 \times \sqrt{\left(\sum_i 0.5 \times w_i \times \left(M_i \times EAD_i^{total} - M_i^{hedge} \times B_i \right) - \sum_{ind} w_{ind} \times M_{ind} \times B_{ind} \right)^2 + A} \quad \text{Where:}$$

$$A = \sum_i 0.75 \times w_i^2 \times \left(M_i \times EAD_i^{total} - M_i^{hedge} \times B_i \right)^2$$

(A) w_i = the weight applicable to counterparty i under Table 4;

(B) M_i = the EAD-weighted average of the effective maturity of each netting set with counterparty i (where each netting set's M can be no less than one year.)

(C) EAD_i^{total} = the sum of the EAD for all netting sets of OTC derivative contracts with counterparty i calculated using the current exposure methodology described in paragraph (c) of this section or the internal models methodology described in paragraph (d) of this section. When the [BANK] calculates EAD under paragraph (c) of this section, such EAD may be adjusted for purposes of calculating EAD_i^{total} by multiplying EAD by (1-exp(-0.05 x M_i))/(0.05 x M_i).[2] When the [BANK] calculates EAD under paragraph (d) of this section, EAD_i^{total} equals $EAD_{unstressed}$.

(D) M_i^{hedge} = the notional weighted average maturity of the hedge instrument.

(E) B_i = the sum of the notional amounts of any purchased single name CDS referencing counterparty i that is used to hedge CVA risk to counterparty i multiplied by (1-exp(-0.05 x M_i^{hedge}))/(0.05 x M_i^{hedge}).

(F) M_{ind} = the maturity of the CDS$_{ind}$ or the notional weighted average maturity of any CDS$_{ind}$ purchased to hedge CVA risk of counterparty i.

(G) B_{ind} = the notional amount of one or more CDS$_{ind}$ purchased to hedge CVA

risk for counterparty i multiplied by (1-exp(−0.05 × M$_{ind}$))/(0.05 × M$_{ind}$).

(H) w_{ind} = the weight applicable to the CDS$_{ind}$ based on the average weight of the underlying reference names that comprise the index under Table 4.

(ii) The [BANK] may treat the notional amount of the index attributable to a counterparty as a single name hedge of counterparty i (B$_i$,) when calculating K$_{CVA}$, and subtract the notional amount of B$_i$ from the notional amount of the CDS$_{ind}$. The [BANK] must calculate its capital requirement for the remaining notional amount of the CDS$_{ind}$ as a stand alone position.

TABLE 4—ASSIGNMENT OF COUNTERPARTY WEIGHT

Internal PD (in percent)	Weight Wi (in percent)
0.00–0.07	0.70
>0.070–0.15	0.80
>0.15–0.40	1.00
>0.40–2.00	2.00
>2.00–6.00	3.00
>6.00	10.00

(6) *Advanced CVA Approach.* (i) A [BANK] may use the VaR model it uses to determine specific risk under

§ ___.207(b) or another VaR model that meets the quantitative requirements of § ___.205(b) and § ___.207(b)(1) to calculate its CVA capital requirement for a counterparty by modeling the impact of changes in the counterparty's credit spreads, together with any recognized CVA hedges, on the CVA for the counterparty.

(A) The VaR model must incorporate only changes in the counterparty's credit spreads, not changes in other risk factors. It is not required that the VaR model capture jump-to-default risk.

(B) A [BANK] that qualifies to use the advanced CVA approach must include in that approach any immaterial OTC derivative portfolios for which it uses the current exposure methodology in paragraph (c) of this section according to paragraph (e)(6)(viii) of this section.

(C) A [BANK] must have the systems capability to calculate the CVA capital requirement for a counterparty on a daily basis (but is not required to calculate the CVA capital requirement on a daily basis).

(ii) Under the advanced CVA approach, the CVA capital requirement, K$_{CVA}$, is calculated according to the following formulas:

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[2] The term "exp" is the exponential function.

$$K_{CVA} = 3 \times \left(CVA_{Unstressed\ VAR} + CVA_{StressedVA\ R} \right)$$

$$CVA_j = \left(LGD_{MKT} \right) \times \sum_{i=1}^{T} Max\left[0; \exp\left(-\frac{s_{i-1} \times t_{i-1}}{LGD_{MKT}} \right) - \exp\left(-\frac{s_i \times t_i}{LGD_{MKT}} \right) \right] \times \left(\frac{EE_{i-1} \times D_{i-1} + EE_i \times D_i}{2} \right)$$

Where:

(A) t_i = the time of the i-th revaluation time bucket starting from $t_0 = 0$.

(B) t_T = the longest contractual maturity across the OTC derivative contracts with the counterparty.

(C) s_i = the CDS spread for the counterparty at tenor t_i used to calculate the CVA for the counterparty. If a CDS spread is not available, the [BANK] must use a proxy spread based on the credit quality, industry and region of the counterparty.

(D) LGD_{MKT} = the loss given default of the counterparty based on the spread of a publicly-traded debt instrument of the counterparty, or, where a publicly-traded debt instrument spread is not available, a proxy spread based on the credit quality, industry, and region of the counterparty.

(E) EE_i = the sum of the expected exposures for all netting sets with the counterparty at revaluation time t_i, calculated above.

(F) D_i = the risk-free discount factor at time t_i, where $D_0 = 1$.

(G) Exp is the exponential function.

(iii) A [BANK] must use the formulas in paragraph (e)(6)(iii)(A) or (e)(6)(iii)(B) of this section to calculate credit spread sensitivities if its VaR model is not based on full repricing.

(A) If the VaR model is based on credit spread sensitivities for specific tenors, the [BANK] must calculate each credit spread sensitivity according to the following formula:

$$\text{Regulatory CS01}_i = 0.0001 \times t_i \times exp\left(-\frac{s_i \times t_i}{LGD_{MKT}} \right) \times \left(\frac{EE_{i-1} \times D_{i-1} - EE_{i+1} \times D_{i+1}}{2} \right)$$

Note that for the final time bucket,[3] the formula would be adjusted as follows such that:

$$\text{Regulatory CS01} = 0.0001 \times t_i \times \exp\left(-\frac{s_i \times t_i}{LGD_{MKT}} \right) \times \left(\frac{EE_{i-1} \times D_{i-1} + EE_T \times D_T}{2} \right)$$

(B) If the VaR model uses credit spread sensitivities to parallel shifts in credit spreads, the [BANK] must calculate each credit spread sensitivity according to the following formula:

$$\text{Regulatory CS01} = 0.0001 \times \sum_{i=1}^{T} \left(t_i \times \exp\left(-\frac{s_i \times t_i}{LGD_{MKT}} \right) - t_{i-1} \times \exp\left(-\frac{s_{i-1} \times t_{i-1}}{LGD_{MKT}} \right) \right) \times \left(\frac{EE_{i-1} \times D_{i-1} + EE_i \times D_i}{2} \right)$$

(iv) To calculate the $CVA_{UnstressedVaR}$ measure for purposes of paragraph (e)(6)(ii) of this section, the [BANK] must:

(A) Use the EE_i calculated using the calibration of paragraph (d)(3)(vii) of this section, except as provided in § ___.132 (e)(6)(vi), and

(B) Use the historical observation period required under § ___.205(b)(2) of subpart F.

(v) To calculate the $CVA_{StressedVaR}$ measure for purposes of paragraph (e)(6)(ii) of this section, the [BANK] must:

(A) Use the EE_i calculated using the stress calibration in paragraph

(d)(3)(viii) of this section except as provided in § ___.132(e)(6)(vi) of this section.

(B) Calibrate VaR model inputs to historical data from the most severe twelve-month stress period contained within the three-year stress period used to calculate EE_i. The [AGENCY] may require a [BANK] to use a different period of significant financial stress in the calculation of the $CVA_{StressedVaR}$ measure.

(vi) If a [BANK] captures the effect of a collateral agreement on EAD using the method described in paragraph (d)(5)(ii) of this section, for purposes of

paragraph (e)(6)(ii) of this section, the [BANK] must calculate EE_i using the method in paragraph (d)(5)(ii) of this section and keep that EE constant with the maturity equal to the maximum of:

(A) Half of the longest maturity of a transaction in the netting set, and

(B) The notional weighted average maturity of all transactions in the netting set.

(vii) The [BANK]'s VaR model must capture the basis between the spreads of any CDS_{ind} that is used as the hedging instrument and the hedged counterparty exposure over various time periods, including benign and stressed

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[3] For the final time bucket, i = T.

environments. If the VaR model does not capture that basis, the [BANK] must reflect only 50 percent of the notional amount of the CDS_{ind} hedge in the VaR model. The remaining 50 percent of the notional amount of the CDS_{ind} hedge is a covered position under subpart F.

(viii) If a [BANK] uses the current exposure methodology described in paragraphs (c)(5) and (c)(6) of this section to calculate the EAD for any immaterial portfolios of OTC derivative contracts, the [BANK] must use that EAD as a constant EE in the formula for the calculation of CVA with the maturity equal to the maximum of:

(A) Half of the longest maturity of a transaction in the netting set, and

(B) The notional weighted average maturity of all transactions in the netting set.

§ ____.133   Cleared transactions.

(a) *General requirements.* (1) A [BANK] that is a clearing member client must use the methodologies set forth in paragraph (b) of this section to calculate risk-weighted assets for a cleared transaction.

(2) A [BANK] that is a clearing member must use the methodologies set forth in paragraph (c) of this section to calculate its risk-weighted assets for cleared transactions and paragraph (d) of this section to calculate its risk-weighted assets for its default fund contribution to a CCP.

(b) *Clearing member client [BANK]s.* (1) *Risk-weighted assets for cleared transactions.*

(i) To determine the risk-weighted asset amount for a cleared transaction, a clearing member client [BANK] must multiply the trade exposure amount for the cleared transaction, calculated in accordance with paragraph (b)(2) of this section, by the risk weight appropriate for the cleared transaction, determined in accordance with paragraph (b)(3) of this section .

(ii) A clearing member client [BANK]'s total risk-weighted assets for cleared transactions is the sum of the risk-weighted asset amounts for all of its cleared transactions.

(2) *Trade exposure amount.* (i) For a cleared transaction that is a derivative contract or netting set of derivative contracts, trade exposure amount equals the EAD for the derivative contract or netting set calculated using the methodology used to calculate EAD for OTC derivative contracts set forth in § ____.132(c) or § ____.132(d), plus the fair value of the collateral posted by the clearing member client [BANK] and held by the CCP or a clearing member in a manner that is not bankruptcy remote. When the [BANK] calculates

EAD for the cleared transaction using the methodology in § ____.132(d), EAD equals $EAD_{unstressed}$.

(ii) For a cleared transaction that is a repo-style transaction, trade exposure amount equals the EAD for the repo-style transaction calculated using the methodology set forth in § ____.132(b)(2), (b)(3), or (d), plus the fair value of the collateral posted by the clearing member client [BANK] and held by the CCP or a clearing member in a manner that is not bankruptcy remote. When the [BANK] calculates EAD for the cleared transaction under § ____.132(d), EAD equals $EAD_{unstressed}$.

(3) *Cleared transaction risk weights.* (i) For a cleared transaction with a QCCP, a clearing member client [BANK] must apply a risk weight of:

(A) Two percent if the collateral posted by the [BANK] to the QCCP or clearing member is subject to an arrangement that prevents any loss to the clearing member client [BANK] due to the joint default or a concurrent insolvency, liquidation, or receivership proceeding of the clearing member and any other clients of the clearing member; and the clearing member client [BANK] has conducted sufficient legal review to conclude with a well-founded basis (and maintains sufficient written documentation of that legal review) that in the event of a legal challenge (including one resulting from default or from liquidation, insolvency, receivership or similar proceeding) the relevant court and administrative authorities would find the arrangements to be legal, valid, binding and enforceable under the law of the relevant jurisdictions.

(B) Four percent, if the requirements of § ____.132(b)(3)(i)(A) are not met.

(ii) For a cleared transaction with a CCP that is not a QCCP, a clearing member client [BANK] must apply the risk weight applicable to the CCP under § ____.32.

(iii) Notwithstanding any other requirement of this section, collateral posted by a clearing member client [BANK] that is held by a custodian in a manner that is bankruptcy remote from the CCP, clearing member, and other clearing member clients of the clearing member, is not subject to a capital requirement under this section. A [BANK] must calculate a risk-weighted asset amount for any collateral provided to a CCP, clearing member or a custodian in connection with a cleared transaction according to § ____.131.

(c) *Clearing member banks.* (1) *Risk-weighted assets for cleared transactions.* (i) To determine the risk-weighted asset amount for a cleared transaction, a clearing member [BANK] must multiply

the trade exposure amount for the cleared transaction, calculated in accordance with paragraph (c)(2) of this section by the risk weight appropriate for the cleared transaction, determined in accordance with paragraph (c)(3) of this section.

(ii) A clearing member [BANK]'s total risk-weighted assets for cleared transactions is the sum of the risk-weighted asset amounts for all of its cleared transactions.

(2) *Trade exposure amount.* A clearing member [BANK] must calculate its trade exposure amount for a cleared transaction as follows:

(i) For a cleared transaction that is a derivative contract, trade exposure amount equals the EAD calculated using the methodology used to calculate EAD for OTC derivative contracts set forth in § ____.132(c) or § ____.132(d), plus the fair value of the collateral posted by the [BANK] and held by the CCP in a manner that is not bankruptcy remote. When the [BANK] calculates EAD for the cleared transaction using the methodology in § ____.132(d), EAD equals $EAD_{unstressed}$.

(ii) For a cleared transaction that is a repo-style transaction, trade exposure amount equals the EAD calculated under sections § ____.132(b)(2), § ____.132(b)(3), or § ____.132(d), plus the fair value of the collateral posted by the clearing member [BANK] and held by the CCP in a manner that is not bankruptcy remote. When the [BANK] calculates EAD for the cleared transaction under § ____.132(d), EAD equals $EAD_{unstressed}$.

(3) *Cleared transaction risk weights.* (i) For a cleared transaction with a QCCP, a clearing member [BANK] must apply a risk weight of 2 percent.

(ii) For a cleared transaction with a CCP that is not a QCCP, a clearing member [BANK] must apply the risk weight applicable to the CCP according to § ____.32 of subpart D of this part.

(iii) Notwithstanding any other requirement of this section, collateral posted by a clearing member [BANK] that is held by a custodian in a manner that is bankruptcy remote from the CCP is not subject to a capital requirement under this section. A [BANK] must calculate a risk-weighted asset amount for any collateral provided to a CCP or a custodian in connection with a cleared transaction according to § ____.131.

(d) *Default fund contributions.* (1) *General requirement.* A clearing member [BANK] must determine the risk-weighted asset amount for a default fund contribution to a CCP at least quarterly, or more frequently if there is a material change in the financial condition of the CCP.

(2) *Risk-weighted asset amount for default fund contributions to non-qualifying CCPs.* A clearing member [BANK]'s risk-weighted asset amount for default fund contributions to CCPs that are not QCCPs equals the sum of

such default fund contributions multiplied by 1,250 percent.

(3) *Risk-weighted asset amount for default fund contributions to QCCPs.* A clearing member [BANK]'s risk-weighted asset amount for default fund contributions to QCCPs equals the sum

of its capital requirement, K_{CM} for each QCCP, as calculated under this paragraph (d)(3), multiplied by 1,250 percent.

(i) The hypothetical capital requirement of a QCCP (K_{CCP}) equals:

$$K_{CCP} = \sum_{\text{clearing member } i} \max\left(EBRM_i - VM_i - IM_i - DF_i; 0\right) \times RW \times 0.08$$

Where:

(A) $EBRM_i$ = the EAD for each transaction cleared through the QCCP by clearing member i, calculated using the methodology used to calculate EAD for OTC derivative contracts set forth in § ____.132(c)(5) and § ____.132.(c)(6) or the methodology used to calculate EAD for repo-style transactions set forth in § ____.132(b)(2) for repo-style transactions, provided that:

(*1*) For purposes of this section, when calculating the EAD, the [BANK] may replace the formula provided in § ____.132 (c)(6)(ii) with the following formula:

Anet = $(0.3 \times A_{gross}) + (0.7 \times NGR \times A_{gross})$; or

(*2*) If the [BANK] cannot calculate NGR, it may use a value of 0.30 until March 31, 2013; and

(*3*) For cleared transactions that are option derivative contracts, the PFE set forth in § ____.132(c)(5) must be adjusted by multiplying the notional principal amount of the derivative contract by the appropriate conversion factor in Table 3 and the absolute value of the option's delta, that is, the ratio of the change in the value of the derivative contract to the corresponding change in the price of the underlying asset.

(B) VM_i = any collateral posted by clearing member i to the QCCP that it is entitled to receive from the QCCP but has not yet received, and any collateral that the QCCP is entitled to receive from clearing member i but has not yet received;

(C) IM_i = the collateral posted as initial margin by clearing member i to the QCCP;

(D) DF_i = the funded portion of clearing member i's default fund contribution that will be applied to reduce the QCCP's loss upon a default by clearing member i; and

(E) RW = 20 percent, except when the [AGENCY] has determined that a higher risk weight is more appropriate based on the specific characteristics of the QCCP and its clearing members.

(ii) For a [BANK] that is a clearing member of a QCCP with a default fund supported by funded commitments, K_{CM} equals:

$$K_{CM_i} = \left((1+\beta) \cdot \frac{N}{N-2}\right) \cdot \frac{DF_i}{DF_{CM}} \cdot K_{CM}^*$$

$$K_{CM}^* = \begin{cases} c_2 \cdot \mu \cdot \left(K_{CCP} - DF'\right) + c_2 \cdot DF_{CM}' & if & DF' < K_{CCP} & (i) \\ c_2 \cdot (K_{CCP} - DF_{CCP}) + c_1 \cdot \left(DF' - K_{CCP}\right) & if & DF_{CCP} < K_{CCP} \leq DF' & (ii) \\ c_1 \cdot DF_{CM}' & if & K_{CCP} \leq DF_{CCP} & (iii) \end{cases}$$

Where:

(A) $\beta = \dfrac{A_{Net,1} + A_{Net,2}}{\sum_i A_{Net,i}}$

Subscripts 1 and 2 denote the clearing members with the two largest A_{Net} values. For purposes of this section, for cleared transactions that are derivatives, A_{Net} is defined using the definition set

forth in § ____.132(c)(6)(ii) and for cleared transactions that are repo-style transactions, A_{Net} is the EAD equation max {0, [($\Sigma E - \Sigma C$) + $\Sigma(E_s \times H_s)$ + $\Sigma(Efx)$] from § ____.132(b)(2(i));

(B) N = the number of clearing members in the QCCP;

(C) DF_{CCP} = the QCCP's own funds and other financial resources that would be used to cover its losses before clearing members'

default fund contributions are used to cover losses;

(D) DF_{CM} = Funded default fund contributions from all clearing members and any other clearing member contributed financial resources that are available to absorb mutualized QCCP losses;

(E) DF = DF_{CCP} + DF_{CM} (that is, the total funded default fund contribution);

(F) $\overline{DF_i}$ = Average $\overline{DF_i}$ = the average funded default fund contribution from an individual clearing member;

(G) $DF_{CM}^i = DF_{CM} - 2 \cdot \overline{DF_i} = \sum_i DF_i - 2 \cdot \overline{DF_i}$ (that is, the funded default fund contribution from surviving clearing members assuming that two average clearing members have defaulted and their default fund contributions and initial margins have been used to absorb the resulting losses);

(H) $DF' = DF_{CCP} + DF_{CM}^i = DF - 2 \cdot \overline{DF_i}$ (that is, the total funded default fund contributions from the QCCP and the surviving clearing members that are available to mutualize losses, assuming that two average clearing members have defaulted);

(I) ; $c_1 = Max\left\{ \dfrac{1.6\%}{\left(DF'/K_{CCP}\right)^{0.3}} ; 0.16\% \right\}$ (that is, a decreasing capital factor, between .16 percent and 1.6 percent, applied to the excess funded default funds provided by clearing members);

(J) c_2 = 100 percent; and
(K) μ= 1.2;

(iii) For a [BANK] that is a clearing member of a QCCP with a default fund supported by unfunded commitments, K_{CM} equals:

$$K_{CM_i} = \frac{DF_i}{DF_{CM}} \cdot K_{CM}^*$$

Where:
(A) DF_i = the [BANK]'s unfunded commitment to the default fund;
(B) DF_{CM} = the total of all clearing members' unfunded commitments to the default fund; and
(C) K^*_{CM} as defined in § ____.133(d)(3)(ii).

(D) For a [BANK] that is a clearing member of a QCCP with a default fund supported by unfunded commitments and that is unable to calculate K_{CM} using the methodology described above in this paragraph (d)(3)(iii), K_{CM} equals:

$$K_{CM_i} = \frac{IM_i}{IM_{CM}} \cdot K_{CM}^*$$

Where:

(*1*) IM_i = the [BANK]'s initial margin posted to the QCCP;
(*2*) IM_{CM} = the total of initial margin posted to the QCCP; and
(*3*) K^*_{CM} as defined above in this paragraph (d)(3)(iii).

(iv) *Total risk-weighted assets for default fund contributions.* Total risk-weighted assets for default fund contributions is the sum of a clearing member [BANK]'s risk-weighted assets for all of its default fund contributions to all CCPs of which the [BANK] is a clearing member.

§ ____.134 Guarantees and credit derivatives: PD substitution and LGD adjustment approaches.

(a) *Scope.* (1) This section applies to wholesale exposures for which:

(i) Credit risk is fully covered by an eligible guarantee or eligible credit derivative; or

(ii) Credit risk is covered on a pro rata basis (that is, on a basis in which the [BANK] and the protection provider share losses proportionately) by an eligible guarantee or eligible credit derivative.

(2) Wholesale exposures on which there is a tranching of credit risk (reflecting at least two different levels of seniority) are securitization exposures subject to § ____.141 through § ____.145.

(3) A [BANK] may elect to recognize the credit risk mitigation benefits of an eligible guarantee or eligible credit derivative covering an exposure described in paragraph (a)(1) of this section by using the PD substitution approach or the LGD adjustment approach in paragraph (c) of this section or, if the transaction qualifies, using the double default treatment in § ____.135. A [BANK]'s PD and LGD for the hedged exposure may not be lower than the PD and LGD floors described in § ____.131(d)(2) and (d)(3).

(4) If multiple eligible guarantees or eligible credit derivatives cover a single exposure described in paragraph (a)(1) of this section, a [BANK] may treat the hedged exposure as multiple separate exposures each covered by a single eligible guarantee or eligible credit

derivative and may calculate a separate risk-based capital requirement for each separate exposure as described paragraph (a)(3) of this section.

(5) If a single eligible guarantee or eligible credit derivative covers multiple hedged wholesale exposures described in paragraph (a)(1) of this section, a [BANK] must treat each hedged exposure as covered by a separate eligible guarantee or eligible credit derivative and must calculate a separate risk-based capital requirement for each exposure as described in paragraph (a)(3) of this section.

(6) A [BANK] must use the same risk parameters for calculating ECL as it uses for calculating the risk-based capital requirement for the exposure.

(b) *Rules of recognition.* (1) A [BANK] may only recognize the credit risk mitigation benefits of eligible guarantees and eligible credit derivatives.

(2) A [BANK] may only recognize the credit risk mitigation benefits of an eligible credit derivative to hedge an exposure that is different from the credit derivative's reference exposure used for determining the derivative's cash settlement value, deliverable obligation, or occurrence of a credit event if:

(i) The reference exposure ranks *pari passu* (that is, equally) with or is junior to the hedged exposure; and

(ii) The reference exposure and the hedged exposure are exposures to the same legal entity, and legally enforceable cross-default or cross-acceleration clauses are in place to assure payments under the credit derivative are triggered when the obligor fails to pay under the terms of the hedged exposure.

(c) *Risk parameters for hedged exposures.*

(1) *PD substitution approach.* (i) *Full coverage.* If an eligible guarantee or eligible credit derivative meets the conditions in paragraphs (a) and (b) of this section and the protection amount (P) of the guarantee or credit derivative is greater than or equal to the EAD of the hedged exposure, a [BANK] may recognize the guarantee or credit derivative in determining the [BANK]'s risk-based capital requirement for the hedged exposure by substituting the PD associated with the rating grade of the protection provider for the PD associated with the rating grade of the obligor in the risk-based capital formula applicable to the guarantee or credit derivative in Table 1 of § ____.131 and using the appropriate LGD as described in paragraph (c)(1)(iii) of this section. If the [BANK] determines that full substitution of the protection provider's PD leads to an inappropriate degree of risk mitigation, the [BANK] may

substitute a higher PD than that of the protection provider.

(ii) *Partial coverage.* If an eligible guarantee or eligible credit derivative meets the conditions in paragraphs (a) and (b) of this section and P of the guarantee or credit derivative is less than the EAD of the hedged exposure, the [BANK] must treat the hedged exposure as two separate exposures (protected and unprotected) in order to recognize the credit risk mitigation benefit of the guarantee or credit derivative.

(A) The [BANK] must calculate its risk-based capital requirement for the protected exposure under § ____.131, where PD is the protection provider's PD, LGD is determined under paragraph (c)(1)(iii) of this section, and EAD is P. If the [BANK] determines that full substitution leads to an inappropriate degree of risk mitigation, the [BANK] may use a higher PD than that of the protection provider.

(B) The [BANK] must calculate its risk-based capital requirement for the unprotected exposure under § ____.131, where PD is the obligor's PD, LGD is the hedged exposure's LGD (not adjusted to reflect the guarantee or credit derivative), and EAD is the EAD of the original hedged exposure minus P.

(C) The treatment in paragraph (c)(1)(ii) is applicable when the credit risk of a wholesale exposure is covered on a partial pro rata basis or when an adjustment is made to the effective notional amount of the guarantee or credit derivative under paragraphs (d), (e), or (f) of this section.

(iii) *LGD of hedged exposures.* The LGD of a hedged exposure under the PD substitution approach is equal to:

(A) The lower of the LGD of the hedged exposure (not adjusted to reflect the guarantee or credit derivative) and the LGD of the guarantee or credit derivative, if the guarantee or credit derivative provides the [BANK] with the option to receive immediate payout upon triggering the protection; or

(B) The LGD of the guarantee or credit derivative, if the guarantee or credit derivative does not provide the [BANK] with the option to receive immediate payout upon triggering the protection.

(2) *LGD adjustment approach.* (i) *Full coverage.* If an eligible guarantee or eligible credit derivative meets the conditions in paragraphs (a) and (b) of this section and the protection amount (P) of the guarantee or credit derivative is greater than or equal to the EAD of the hedged exposure, the [BANK]'s risk-based capital requirement for the hedged exposure is the greater of:

(A) The risk-based capital requirement for the exposure as

calculated under § ____.131, with the LGD of the exposure adjusted to reflect the guarantee or credit derivative; or

(B) The risk-based capital requirement for a direct exposure to the protection provider as calculated under § ____.131, using the PD for the protection provider, the LGD for the guarantee or credit derivative, and an EAD equal to the EAD of the hedged exposure.

(ii) *Partial coverage.* If an eligible guarantee or eligible credit derivative meets the conditions in paragraphs (a) and (b) of this section and the protection amount (P) of the guarantee or credit derivative is less than the EAD of the hedged exposure, the [BANK] must treat the hedged exposure as two separate exposures (protected and unprotected) in order to recognize the credit risk mitigation benefit of the guarantee or credit derivative.

(A) The [BANK]'s risk-based capital requirement for the protected exposure would be the greater of:

(*1*) The risk-based capital requirement for the protected exposure as calculated under § ____.131, with the LGD of the exposure adjusted to reflect the guarantee or credit derivative and EAD set equal to P; or

(*2*) The risk-based capital requirement for a direct exposure to the guarantor as calculated under § ____.131, using the PD for the protection provider, the LGD for the guarantee or credit derivative, and an EAD set equal to P.

(B) The [BANK] must calculate its risk-based capital requirement for the unprotected exposure under § ____.131, where PD is the obligor's PD, LGD is the hedged exposure's LGD (not adjusted to reflect the guarantee or credit derivative), and EAD is the EAD of the original hedged exposure minus P.

(3) *M of hedged exposures.* The M of the hedged exposure is the same as the M of the exposure if it were unhedged.

(d) *Maturity mismatch.* (1) A [BANK] that recognizes an eligible guarantee or eligible credit derivative in determining its risk-based capital requirement for a hedged exposure must adjust the effective notional amount of the credit risk mitigant to reflect any maturity mismatch between the hedged exposure and the credit risk mitigant.

(2) A maturity mismatch occurs when the residual maturity of a credit risk mitigant is less than that of the hedged exposure(s).

(3) The residual maturity of a hedged exposure is the longest possible remaining time before the obligor is scheduled to fulfil its obligation on the exposure. If a credit risk mitigant has embedded options that may reduce its term, the [BANK] (protection purchaser) must use the shortest possible residual

maturity for the credit risk mitigant. If a call is at the discretion of the protection provider, the residual maturity of the credit risk mitigant is at the first call date. If the call is at the discretion of the [BANK] (protection purchaser), but the terms of the arrangement at origination of the credit risk mitigant contain a positive incentive for the [BANK] to call the transaction before contractual maturity, the remaining time to the first call date is the residual maturity of the credit risk mitigant.[4]

(4) A credit risk mitigant with a maturity mismatch may be recognized only if its original maturity is greater than or equal to one year and its residual maturity is greater than three months.

(5) When a maturity mismatch exists, the [BANK] must apply the following adjustment to the effective notional amount of the credit risk mitigant: $P_m = E \times (t - 0.25)/(T - 0.25)$, where:

(i) P_m = effective notional amount of the credit risk mitigant, adjusted for maturity mismatch;

(ii) E = effective notional amount of the credit risk mitigant;

(iii) t = the lesser of T or the residual maturity of the credit risk mitigant, expressed in years; and

(iv) T = the lesser of five or the residual maturity of the hedged exposure, expressed in years.

(e) *Credit derivatives without restructuring as a credit event.* If a [BANK] recognizes an eligible credit derivative that does not include as a credit event a restructuring of the hedged exposure involving forgiveness or postponement of principal, interest, or fees that results in a credit loss event (that is, a charge-off, specific provision, or other similar debit to the profit and loss account), the [BANK] must apply the following adjustment to the effective notional amount of the credit derivative: $P_r = P_m \times 0.60$, where:

(1) P_r = effective notional amount of the credit risk mitigant, adjusted for lack of restructuring event (and maturity mismatch, if applicable); and

(2) P_m = effective notional amount of the credit risk mitigant adjusted for maturity mismatch (if applicable).

(f) *Currency mismatch.* (1) If a [BANK] recognizes an eligible guarantee or eligible credit derivative that is denominated in a currency different from that in which the hedged exposure is denominated, the [BANK] must apply the following formula to the effective

notional amount of the guarantee or credit derivative: $P_c = P_r \times (1 - H_{FX})$, where:

(i) P_c = effective notional amount of the credit risk mitigant, adjusted for currency mismatch (and maturity mismatch and lack of restructuring event, if applicable);

(ii) P_r = effective notional amount of the credit risk mitigant (adjusted for maturity mismatch and lack of restructuring event, if applicable); and

(iii) H_{FX} = haircut appropriate for the currency mismatch between the credit risk mitigant and the hedged exposure.

(2) A [BANK] must set H_{FX} equal to 8 percent unless it qualifies for the use of and uses its own internal estimates of foreign exchange volatility based on a ten-business-day holding period and daily marking-to-market and remarging. A [BANK] qualifies for the use of its own internal estimates of foreign exchange volatility if it qualifies for:

(i) The own-estimates haircuts in § ____.132(b)(2)(iii);

(ii) The simple VaR methodology in § ____.132(b)(3); or

(iii) The internal models methodology in § ____.132(d).

(3) A [BANK] must adjust H_{FX} calculated in paragraph (f)(2) of this section upward if the [BANK] revalues the guarantee or credit derivative less frequently than once every ten business days using the square root of time formula provided in § ____.132(b)(2)(iii)(A)(*2*).

§ ____.135   Guarantees and credit derivatives: Double default treatment.

(a) *Eligibility and operational criteria for double default treatment.* A [BANK] may recognize the credit risk mitigation benefits of a guarantee or credit derivative covering an exposure described in § ____.134(a)(1) by applying the double default treatment in this section if all the following criteria are satisfied:

(1) The hedged exposure is fully covered or covered on a pro rata basis by:

(i) An eligible guarantee issued by an eligible double default guarantor; or

(ii) An eligible credit derivative that meets the requirements of § ____.134(b)(2) and that is issued by an eligible double default guarantor.

(2) The guarantee or credit derivative is:

(i) An uncollateralized guarantee or uncollateralized credit derivative (for example, a credit default swap) that provides protection with respect to a single reference obligor; or

(ii) An nth-to-default credit derivative (subject to the requirements of § ____.142(m)).

(3) The hedged exposure is a wholesale exposure (other than a sovereign exposure).

(4) The obligor of the hedged exposure is not:

(i) An eligible double default guarantor or an affiliate of an eligible double default guarantor; or

(ii) An affiliate of the guarantor.

(5) The [BANK] does not recognize any credit risk mitigation benefits of the guarantee or credit derivative for the hedged exposure other than through application of the double default treatment as provided in this section.

(6) The [BANK] has implemented a process (which has received the prior, written approval of the [AGENCY]) to detect excessive correlation between the creditworthiness of the obligor of the hedged exposure and the protection provider. If excessive correlation is present, the [BANK] may not use the double default treatment for the hedged exposure.

(b) *Full coverage.* If the transaction meets the criteria in paragraph (a) of this section.and the protection amount (P) of the guarantee or credit derivative is at least equal to the EAD of the hedged exposure, the [BANK] may determine its risk-weighted asset amount for the hedged exposure under paragraph (e) of this section.

(c) *Partial coverage.* If the transaction meets the criteria in paragraph (a) of this section and the protection amount (P) of the guarantee or credit derivative is less than the EAD of the hedged exposure, the [BANK] must treat the hedged exposure as two separate exposures (protected and unprotected) in order to recognize double default treatment on the protected portion of the exposure.

(1) For the protected exposure, the [BANK] must set EAD equal to P and calculate its risk-weighted asset amount as provided in paragraph (e) of this section.

(2) For the unprotected exposure, the [BANK] must set EAD equal to the EAD of the original exposure minus P and then calculate its risk-weighted asset amount as provided in § ____.131.

(d) *Mismatches.* For any hedged exposure to which a [BANK] applies double default treatment, the [BANK] must make applicable adjustments to the protection amount as required in § ____.134(d), (e), and (f).

(e) *The double default dollar risk-based capital requirement.* The dollar risk-based capital requirement for a hedged exposure to which a [BANK] has applied double default treatment is K_{DD} multiplied by the EAD of the exposure. K_{DD} is calculated according to the following formula: $K_{DD} = K_o \times (0.15 + 160 \times PD_g)$,

Where:

(1)

$$K_O = LGD_g \times \left[N\left(\frac{N^{-1}(PD_o) + N^{-1}(0.999)\sqrt{\rho_{os}}}{\sqrt{1-\rho_{os}}} \right) - PD_o \right] \times \left[\frac{1 + (M - 2.5) \times b}{1 - 1.5 \times b} \right]$$

(2) PD_g = PD of the protection provider.

(3) PD_o = PD of the obligor of the hedged exposure.

(4) LGD_g = (i) The lower of the LGD of the hedged exposure (not adjusted to reflect the guarantee or credit derivative) and the LGD of the guarantee or credit derivative, if the guarantee or credit derivative provides the [BANK] with the option to receive immediate payout on triggering the protection; or

(ii) The LGD of the guarantee or credit derivative, if the guarantee or credit derivative does not provide the [BANK] with the option to receive immediate payout on triggering the protection.

(5) ρ_{os} (asset value correlation of the obligor) is calculated according to the appropriate formula for (R) provided in Table 1 in §____.131, with PD equal to PD_o.

(6) b (maturity adjustment coefficient) is calculated according to the formula for b provided in Table 1 in §____.131, with PD equal to the lesser of PD_o and PD_g.

(7) M (maturity) is the effective maturity of the guarantee or credit derivative, which may not be less than one year or greater than five years.

§ ____.136 Unsettled transactions.

(a) *Definitions.* For purposes of this section:

(1) Delivery-versus-payment (DvP) transaction means a securities or commodities transaction in which the buyer is obligated to make payment only if the seller has made delivery of the securities or commodities and the seller is obligated to deliver the securities or commodities only if the buyer has made payment.

(2) Payment-versus-payment (PvP) transaction means a foreign exchange transaction in which each counterparty is obligated to make a final transfer of one or more currencies only if the other counterparty has made a final transfer of one or more currencies.

(3) Normal settlement period. A transaction has a normal settlement period if the contractual settlement period for the transaction is equal to or less than the market standard for the instrument underlying the transaction and equal to or less than five business days.

(4) Positive current exposure. The positive current exposure of a [BANK] for a transaction is the difference

between the transaction value at the agreed settlement price and the current market price of the transaction, if the difference results in a credit exposure of the [BANK] to the counterparty.

(b) *Scope.* This section applies to all transactions involving securities, foreign exchange instruments, and commodities that have a risk of delayed settlement or delivery. This section does not apply to:

(1) Cleared transactions that are subject to daily marking-to-market and daily receipt and payment of variation margin;

(2) Repo-style transactions, including unsettled repo-style transactions (which are addressed in §§____.131 and 132);

(3) One-way cash payments on OTC derivative contracts (which are addressed in §§____.131 and 132); or

(4) Transactions with a contractual settlement period that is longer than the normal settlement period (which are treated as OTC derivative contracts and addressed in §§____.131 and 132).

(c) *System-wide failures.* In the case of a system-wide failure of a settlement or clearing system, or a central counterparty, the [AGENCY] may waive risk-based capital requirements for unsettled and failed transactions until the situation is rectified.

(d) *Delivery-versus-payment (DvP) and payment-versus-payment (PvP) transactions.* A [BANK] must hold risk-based capital against any DvP or PvP transaction with a normal settlement period if the [BANK]'s counterparty has not made delivery or payment within five business days after the settlement date. The [BANK] must determine its risk-weighted asset amount for such a transaction by multiplying the positive current exposure of the transaction for the [BANK] by the appropriate risk weight in Table 5.

TABLE 5—RISK WEIGHTS FOR UNSETTLED DvP AND PvP TRANSACTIONS

Number of business days after contractual settlement date	Risk weight to be applied to positive current exposure (in percent)
From 5 to 15	100
From 16 to 30	625

TABLE 5—RISK WEIGHTS FOR UNSETTLED DvP AND PvP TRANSACTIONS—Continued

Number of business days after contractual settlement date	Risk weight to be applied to positive current exposure (in percent)
From 31 to 45	937.5
46 or more	1,250

(e) *Non-DvP/non-PvP (non-delivery-versus-payment/non-payment-versus-payment) transactions.* (1) A [BANK] must hold risk-based capital against any non-DvP/non-PvP transaction with a normal settlement period if the [BANK] has delivered cash, securities, commodities, or currencies to its counterparty but has not received its corresponding deliverables by the end of the same business day. The [BANK] must continue to hold risk-based capital against the transaction until the [BANK] has received its corresponding deliverables.

(2) From the business day after the [BANK] has made its delivery until five business days after the counterparty delivery is due, the [BANK] must calculate its risk-based capital requirement for the transaction by treating the current market value of the deliverables owed to the [BANK] as a wholesale exposure.

(i) A [BANK] may use a 45 percent LGD for the transaction rather than estimating LGD for the transaction provided the [BANK] uses the 45 percent LGD for all transactions described in §____.135(e)(1) and (e)(2).

(ii) A [BANK] may use a 100 percent risk weight for the transaction provided the [BANK] uses this risk weight for all transactions described in sections 135(e)(1) and (e)(2).

(3) If the [BANK] has not received its deliverables by the fifth business day after the counterparty delivery was due, the [BANK] must apply a 1,250 percent risk weight to the current market value of the deliverables owed to the [BANK].

(f) *Total risk-weighted assets for unsettled transactions.* Total risk-weighted assets for unsettled transactions is the sum of the risk-

weighted asset amounts of all DvP, PvP, and non-DvP/non-PvP transactions.

RISK-WEIGHTED ASSETS FOR SECURITIZATION EXPOSURES

§ ___.141 Operational criteria for recognizing the transfer of risk.

(a) *Operational criteria for traditional securitizations.* A [BANK] that transfers exposures it has originated or purchased to a securitization SPE or other third party in connection with a traditional securitization may exclude the exposures from the calculation of its risk-weighted assets only if each of the conditions in this paragraph (a) is satisfied. A [BANK] that meets these conditions must hold risk-based capital against any securitization exposures it retains in connection with the securitization. A [BANK] that fails to meet these conditions must hold risk-based capital against the transferred exposures as if they had not been securitized and must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from the transaction. The conditions are:

(1) The exposures are not reported on the [BANK]'s balance sheet under GAAP;

(2) The [BANK] has transferred to third parties credit risk associated with the underlying exposures;

(3) Any clean-up calls relating to the securitization are eligible clean-up calls; and

(4) The securitization does not:

(i) Include one or more underlying exposures in which the borrower is permitted to vary the drawn amount within an agreed limit under a line of credit; and

(ii) Contain an early amortization provision.

(b) *Operational criteria for synthetic securitizations.* For synthetic securitizations, a [BANK] may recognize for risk-based capital purposes the use of a credit risk mitigant to hedge underlying exposures only if each of the conditions in this section is satisfied. A [BANK] that meets these conditions must hold risk-based capital against any credit risk of the exposures it retains in connection with the synthetic securitization. A [BANK] that fails to meet these conditions must hold risk-based capital against the underlying exposures as if they had not been synthetically securitized. The conditions are:

(1) The credit risk mitigant is financial collateral, an eligible credit derivative from an eligible guarantor or an eligible guarantee from an eligible guarantor;

(2) The [BANK] transfers credit risk associated with the underlying exposures to third parties, and the terms and conditions in the credit risk mitigants employed do not include provisions that:

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

(ii) Require the [BANK] to alter or replace the underlying exposures to improve the credit quality of the pool of underlying exposures;

(iii) Increase the [BANK]'s cost of credit protection in response to deterioration in the credit quality of the underlying exposures;

(iv) Increase the yield payable to parties other than the [BANK] in response to a deterioration in the credit quality of the underlying exposures; or

(v) Provide for increases in a retained first loss position or credit enhancement provided by the [BANK] after the inception of the securitization;

(3) The [BANK] obtains a well-reasoned opinion from legal counsel that confirms the enforceability of the credit risk mitigant in all relevant jurisdictions; and

(4) Any clean-up calls relating to the securitization are eligible clean-up calls.

(c) *Due diligence requirements for securitization exposures.* (1) Except for exposures that are deducted from common equity tier 1 capital and exposures subject to § ___.142(k), if a [BANK] is unable to demonstrate to the satisfaction of the [AGENCY] a comprehensive understanding of a feature of a securitization exposure that would materially affect the performance of the position, the [BANK] must assign a 1,250 percent risk weight to the securitization exposure. The [BANK]'s analysis must be commensurate with the complexity of the securitization exposure and the materiality of the position in relation to capital.

(2) A [BANK] must demonstrate its comprehensive understanding of a securitization exposure under paragraph (c)(1) of this section, for each securitization exposure by:

(i) Conduct an analysis of the risk characteristics of a securitization exposure prior to acquiring the exposure and document such analysis within three business days after acquiring the exposure, considering:

(A) Structural features of the securitization that would materially impact the performance of the exposure, for example, the contractual cash flow waterfall, waterfall-related triggers, credit enhancements, liquidity enhancements, market value triggers, the performance of organizations that service the position, and deal-specific definitions of default;

(B) Relevant information regarding the performance of the underlying credit exposure(s), for example, the percentage of loans 30, 60, and 90 days past due; default rates; prepayment rates; loans in foreclosure; property types; occupancy; average credit score or other measures of creditworthiness; average loan-to-value ratio; and industry and geographic diversification data on the underlying exposure(s);

(C) Relevant market data of the securitization, for example, bid-ask spreads, most recent sales price and historical price volatility, trading volume, implied market rating, and size, depth and concentration level of the market for the securitization; and

(D) For resecuritization exposures—

(*1*) Performance information on the underlying securitization exposures, for example, the issuer name and credit quality, and the characteristics and performance of the exposures underlying the securitization exposures; and

(*2*) On an on-going basis (no less frequently than quarterly), evaluate, review, and update as appropriate the analysis required under this section for each securitization exposure.

§ ___.142 Risk-weighted assets for securitization exposures.

(a) *Hierarchy of approaches.* Except as provided elsewhere in this section and in § ___.141:

(1) A [BANK] must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from a securitization and must apply a 1,250 percent risk weight to the portion of any CEIO that does not constitute after tax gain-on-sale.

(2) If a securitization exposure does not require deduction or a 1,250 percent risk weight under paragraph (a)(1) of this section, the [BANK] must apply the supervisory formula approach in § ___.143 to the exposure if the [BANK] and the exposure qualify for the supervisory formula approach according to § ___.143(a).

(3) If a securitization exposure does not require deduction or a 1,250 percent risk weight under paragraph (a)(1) of this section and does not qualify for the supervisory formula approach, the [BANK] may apply the simplified supervisory formula approach under § ___.144.

(4) If a securitization exposure does not require deduction or a 1,250 percent risk weight under paragraph (a)(1) of this section, does not qualify for the supervisory formula approach, and the [BANK] does not apply the simplified supervisory formula approach, the

[BANK] must apply a 1,250 percent risk weight to the exposure.

(5) If a securitization exposure is a derivative contract (other than a credit derivative) that has a first priority claim on the cash flows from the underlying exposures (notwithstanding amounts due under interest rate or currency derivative contracts, fees due, or other similar payments), with approval of the [AGENCY], a [BANK] may choose to set the risk-weighted asset amount of the exposure equal to the amount of the exposure as determined in paragraph (e) of this section rather than apply the hierarchy of approaches described in paragraphs (a)(1) through (4) of this section.

(b) *Total risk-weighted assets for securitization exposures.* A [BANK]'s total risk-weighted assets for securitization exposures is equal to the sum of its risk-weighted assets calculated using §§ ____.142 through 146.

(c) *Deductions.* A [BANK] may calculate any deduction from common equity tier 1 capital for a securitization exposure net of any DTLs associated with the securitization exposure.

(d) *Maximum risk-based capital requirement.* Except as provided in § ____.141(c), unless one or more underlying exposures does not meet the definition of a wholesale, retail, securitization, or equity exposure, the total risk-based capital requirement for all securitization exposures held by a single [BANK] associated with a single securitization (excluding any risk-based capital requirements that relate to the [BANK]'s gain-on-sale or CEIOs associated with the securitization) may not exceed the sum of:

(1) The [BANK]'s total risk-based capital requirement for the underlying exposures calculated under this subpart as if the [BANK] directly held the underlying exposures; and

(2) The total ECL of the underlying exposures calculated under this subpart.

(e) *Amount of a securitization exposure.* (1) The amount of an 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 the [BANK]'s carrying value.

(2) The amount of an off-balance sheet securitization exposure that is not an OTC derivative contract or cleared transaction (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 an eligible ABCP 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).

(3) The amount of a securitization exposure that is a repo-style transaction, eligible margin loan, or OTC derivative contract or cleared transaction (other than a credit derivative) is the EAD of the exposure as calculated in § ____.132 or § ____.133.

(f) *Overlapping exposures.* If a [BANK] has multiple securitization exposures that provide duplicative coverage of the underlying exposures of a securitization (such as when a [BANK] provides a program-wide credit enhancement and multiple pool-specific liquidity facilities to an ABCP program), the [BANK] is not required to hold duplicative risk-based capital against the overlapping position. Instead, the [BANK] may assign to the overlapping securitization exposure the applicable risk-based capital treatment that results in the highest risk-based capital requirement.

(g) *Securitizations of non-IRB exposures.* Except as provided in § ____.141(c), if a [BANK] has a securitization exposure where any underlying exposure is not a wholesale exposure, retail exposure, securitization exposure, or equity exposure, the [BANK]:

(1) Must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from the securitization and apply a 1,250 percent risk weight to the portion of any CEIO that does not constitute gain-on-sale, if the [BANK] is an originating [BANK];

(2) May apply the simplified supervisory formula approach in § ____.144 to the exposure, if the securitization exposure does not require deduction or a 1,250 percent risk weight under paragraph (g)(1) of this section;

(3) Must assign a 1,250 percent risk weight to the exposure if the securitization exposure does not require deduction or a 1,250 percent risk weight under paragraph (g)(1) of this section, does not qualify for the supervisory formula approach, and the [BANK] does not apply the simplified supervisory formula approach to the exposure.

(h) *Implicit support.* If a [BANK] provides support to a securitization in excess of the [BANK]'s contractual obligation to provide credit support to the securitization (implicit support):

(1) The [BANK] must calculate a risk-weighted asset amount for underlying exposures associated with the securitization as if the exposures had not been securitized and must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from the securitization; and

(2) The [BANK] must disclose publicly:

(i) That it has provided implicit support to the securitization; and

(ii) The regulatory capital impact to the [BANK] of providing such implicit support.

(i) *Eligible servicer cash advance facilities.* Regardless of any other provisions of subpart E, a [BANK] is not required to hold risk-based capital against the undrawn portion of an eligible servicer cash advance facility.

(j) *Interest-only mortgage-backed securities.* Except as provided in § ____.141(c), the risk weight for a non-credit-enhancing interest-only mortgage-backed security may not be less than 100 percent.

(k) *Small-business loans and leases on personal property transferred with recourse.* (1) Notwithstanding any other provisions of this subpart E, a [BANK] that has transferred small-business loans and leases on personal property (small-business obligations) with recourse must include in risk-weighted assets only the contractual amount of retained recourse if all the following conditions are met:

(i) The transaction is a sale under GAAP.

(ii) The [BANK] establishes and maintains, pursuant to GAAP, a non-capital reserve sufficient to meet the [BANK]'s reasonably estimated liability under the recourse arrangement.

(iii) The loans and leases are to businesses that meet the criteria for a small-business concern established by the Small Business Administration under section 3(a) of the Small Business Act.

(iv) The [BANK] is well capitalized, as defined in[the [AGENCY]'s [prompt corrective action regulation]—12 CFR part 6 (for national banks), 12 CFR part 208, subpart D (for state member banks or bank holding companies), 12 CFR part 325, subpart B (for state nonmember banks), and 12 CFR part 165 (for savings associations)]. For purposes of determining whether a [BANK] is well capitalized for purposes of this paragraph, the [BANK]'s capital ratios must be calculated without regard to the capital treatment for transfers of small-business obligations with recourse specified in paragraph (k)(1) of this section.

(2) The total outstanding amount of recourse retained by a [BANK] on transfers of small-business obligations receiving the capital treatment specified in paragraph (k)(1) of this section cannot exceed 15 percent of the [BANK]'s total capital.

(3) If a [BANK] ceases to be well capitalized or exceeds the 15 percent capital limitation, the preferential capital treatment specified in paragraph (k)(1) of this section will continue to apply to any transfers of small-business obligations with recourse that occurred during the time that the [BANK] was well capitalized and did not exceed the capital limit.

(4) The risk-based capital ratios of the [BANK] must be calculated without regard to the capital treatment for transfers of small-business obligations with recourse specified in paragraph (k)(1) of this section .

(l) *Nth-to-default credit derivatives.* (1) *Protection provider.* A [BANK] must determine a risk weight using the SFA or the SSFA for an nth-to-default credit derivative in accordance with this paragraph. In the case of credit protection sold, a [BANK] must determine its exposure in the nth-to-default credit derivative as the largest notional dollar amount of all the underlying exposures

(2) For purposes of determining the risk weight for an nth-to-default credit derivative using the SFA or the SSFA, the [BANK] must calculate the attachment point and detachment point of its exposure as follows:

(i) The attachment point (parameter A) is the ratio of the sum of the notional amounts of all underlying exposures that are subordinated to the [BANK]'s exposure to the total notional amount of all underlying exposures. For purposes of using the SFA to calculate the risk weight for its exposure in an nth-to-default credit derivative, parameter A must be set equal to the credit enhancement level (L) input to the SFA formula. In the case of a first-to-default credit derivative, there are no underlying exposures that are subordinated to the [BANK]'s exposure. In the case of a second-or-subsequent-to-default credit derivative, the smallest (n-1) risk-weighted asset amounts of the underlying exposure(s) are subordinated to the [BANK]'s exposure.

(ii) The detachment point (parameter D) equals the sum of parameter A plus the ratio of the notional amount of the [BANK]'s exposure in the nth-to-default credit derivative to the total notional amount of all underlying exposures. For purposes of using the SFA to calculate the risk weight for its exposure in an nth-to-default credit derivative, parameter D must be set to equal L plus

the thickness of tranche T input to the SFA formula.

(3) A [BANK] that does not use the SFA or the SSFA to determine a risk weight for its exposure in an nth-to-default credit derivative must assign a risk weight of 1,250 percent to the exposure.

(4) *Protection purchaser.* (i) *First-to-default credit derivatives.* A [BANK] that obtains credit protection on a group of underlying exposures through a first-to-default credit derivative that meets the rules of recognition of § ___.134(b) must determine its risk-based capital requirement for the underlying exposures as if the [BANK] synthetically securitized the underlying exposure with the lowest risk-based capital requirement and had obtained no credit risk mitigant on the other underlying exposures. A [BANK] must calculate a risk-based capital requirement for counterparty credit risk according to § ___.132 for a first-to-default credit derivative that does not meet the rules of recognition of § ___.134(b).

(ii) *Second-or-subsequent-to-default credit derivatives.* (A) A [BANK] that obtains credit protection on a group of underlying exposures through a nth -to-default credit derivative that meets the rules of recognition of § ___.134(b) (other than a first-to-default credit derivative) may recognize the credit risk mitigation benefits of the derivative only if:

(*1*) The [BANK] also has obtained credit protection on the same underlying exposures in the form of first-through-(n-1)-to-default credit derivatives; or

(*2*) If n-1 of the underlying exposures have already defaulted.

(B) If a [BANK] satisfies the requirements of paragraph (l)(3)(ii)(A) of this section, the [BANK] must determine its risk-based capital requirement for the underlying exposures as if the bank had only synthetically securitized the underlying exposure with the nth lowest risk-based capital requirement and had obtained no credit risk mitigant on the other underlying exposures.

(C) A [BANK] must calculate a risk-based capital requirement for counterparty credit risk according to § ___.132 for a nth-to-default credit derivative that does not meet the rules of recognition of § ___.134(b).

(m) *Guarantees and credit derivatives other than nth-to-default credit derivatives.* (1) *Protection provider.* For a guarantee or credit derivative (other

than an nth-to-default credit derivative) provided by a [BANK] that covers the full amount or a pro rata share of a securitization exposure's principal and interest, the [BANK] must risk weight the guarantee or credit derivative as if it holds the portion of the reference exposure covered by the guarantee or credit derivative.

(2) *Protection purchaser.* (i) If a [BANK] chooses (and is able) to recognize a guarantee or credit derivative (other than an nth-to-default credit derivative) that references a securitization exposure as a credit risk mitigant, where applicable, the [BANK] must apply § ___.145.

(ii) If a [BANK] cannot, or chooses not to, recognize a credit derivative that references a securitization exposure as a credit risk mitigant under § ___.145, the [BANK] must determine its capital requirement only for counterparty credit risk in accordance with § ___.131.

§ ___.143 Supervisory formula approach (SFA).

(a) *Eligibility requirements.* A [BANK] must use the SFA to determine its risk-weighted asset amount for a securitization exposure if the [BANK] can calculate on an ongoing basis each of the SFA parameters in paragraph (e) of this section.

(b) *Mechanics.* The risk-weighted asset amount for the securitization exposure equals the SFA risk-based capital requirement for the exposure multiplied by 12.5.

(c) *The SFA risk-based capital requirement.* (1) If K_{IRB} is greater than or equal to L + T, the capital requirement equals the exposure amount.

(2) If K_{IRB} is less than or equal to L, the exposure's SFA risk-based capital requirement is UE multiplied by TP multiplied by the greater of:

(i) $F \times T$ (where F is 0.016 for all securitization exposures); or

(ii) $S[L + + T] - S[L]$.

(3) If K_{IRB} is greater than L and less than L + T, the [BANK] must apply a 1,250 percent risk weight to an amount equal to UE * TP * ($K_{IRB} - L$), and the exposure's SFA risk-based capital requirement is UE multiplied by TP multiplied by the greater of:

(i) $F \times (T - (K_{IRB} - L)$ (where F is 0.016for all other securitization exposures); or

(ii) $S[L + + T] - S[K_{IRB}]$.

(d) *The supervisory formula:*

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

$$(2)\ K[Y] = (1-h) \cdot \left[(1 - \beta[Y; a, b]) \cdot Y + \beta[Y; a+1, b] \cdot c \right]$$

$$(3)\ h = \left(1 - \frac{K_{IRB}}{EWALGD} \right)^N$$

$$(4)\ a = g \cdot c$$

$$(5)\ b = g \cdot (1 - c)$$

$$(6)\ c = \frac{K_{IRB}}{1 - h}$$

$$(7)\ g = \frac{(1 - c) \cdot c}{f} - 1$$

$$(8)\ f = \frac{v + K_{IRB}^2}{1 - h} - c^2 + \frac{(1 - K_{IRB}) \cdot K_{IRB} - v}{(1 - h) \cdot 1000}$$

$$(9)\ v = K_{IRB} \cdot \frac{(EWALGD - K_{IRB}) + .25 \cdot (1 - EWALGD)}{N}$$

$$(10)\ d = 1 - (1 - h) \cdot (1 - \beta[K_{IRB}; a, b]).$$

(11) In these expressions, $\beta[Y; a, b]$ 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}.

(e) *SFA parameters.* (1) *Amount of the underlying exposures (UE).* UE is the EAD of any underlying exposures that are wholesale and retail exposures (including the amount of any funded spread accounts, cash collateral accounts, and other similar funded credit enhancements) plus the amount of any underlying exposures that are securitization exposures (as defined in § ____.142(e)) plus the adjusted carrying value of any underlying exposures that are equity exposures (as defined in § ____.151(b)).

(2) *Tranche percentage (TP).* TP is the ratio of the amount of the [BANK]'s securitization exposure to the amount of the tranche that contains the securitization exposure.

(3) *Capital requirement on underlying exposures (K_{IRB}).*

(i) K_{IRB} is the ratio of:

(A) The sum of the risk-based capital requirements for the underlying exposures plus the expected credit losses of the underlying exposures (as determined under this subpart E as if the underlying exposures were directly held by the [BANK]); to

(B) UE.

(ii) The calculation of K_{IRB} must reflect the effects of any credit risk mitigant applied to the underlying exposures (either to an individual underlying exposure, to a group of underlying exposures, or to the entire pool of underlying exposures).

(iii) All assets related to the securitization are treated as underlying exposures, including assets in a reserve account (such as a cash collateral account).

(4) *Credit enhancement level (L).* (i) L is the ratio of:

(A) The amount of all securitization exposures subordinated to the tranche that contains the [BANK]'s securitization exposure; to

(B) UE.

(ii) A [BANK] must determine L before considering the effects of any tranche-specific credit enhancements.

(iii) Any gain-on-sale or CEIO associated with the securitization may not be included in L.

(iv) Any reserve account funded by accumulated cash flows from the underlying exposures that is subordinated to the tranche that contains the [BANK]'s securitization exposure may be included in the numerator and denominator of L to the extent cash has accumulated in the account. Unfunded reserve accounts (that is, reserve accounts that are to be funded from future cash flows from the underlying exposures) may not be included in the calculation of L.

(v) In some cases, the purchase price of receivables will reflect a discount that provides credit enhancement (for example, first loss protection) for all or certain tranches of the securitization.

When this arises, L should be calculated inclusive of this discount if the discount provides credit enhancement for the securitization exposure.

(5) *Thickness of tranche (T).* T is the ratio of:

(i) The amount of the tranche that contains the [BANK]'s securitization exposure; to

(ii) UE.

(6) *Effective number of exposures (N).* (i) Unless the [BANK] elects to use the formula provided in paragraph (f) of this section,

$$N = \frac{\left(\sum_i EAD_i\right)^2}{\sum_i EAD_i^2}$$

where EAD_i represents the EAD associated with the ith instrument in the pool of underlying exposures.

(ii) Multiple exposures to one obligor must be treated as a single underlying exposure.

(iii) In the case of a re-securitization, the [BANK] must treat each underlying exposure as a single underlying exposure and must not look through to the originally securitized underlying exposures.

(7) *Exposure-weighted average loss given default (EWALGD).* EWALGD is calculated as:

$$EWALGD = \frac{\sum_i LGD_i \cdot EAD_i}{\sum_i EAD_i}$$

where LGD_i represents the average LGD associated with all exposures to the ith obligor. In the case of a re-securitization, an LGD of 100 percent must be assumed for the

underlying exposures that are themselves securitization exposures.

(f) *Simplified method for computing N and EWALGD.* (1) If all underlying exposures of a securitization are retail exposures, a [BANK] may apply the SFA using the following simplifications:

(i) h = 0; and

(ii) v = 0.

(2) Under the conditions in sections 143(f)(3) and (f)(4), a [BANK] may employ a simplified method for calculating N and EWALGD.

(3) If C_1 is no more than 0.03, a [BANK] may set EWALGD = 0.50 if none of the underlying exposures is a securitization exposure, or may set EWALGD = 1 if one or more of the underlying exposures is a securitization exposure, and may set N equal to the following amount:

$$N = \frac{1}{C_1 C_m + \left(\frac{C_m - C_1}{m - 1}\right) \max\left(1 - m C_1, 0\right)}$$

where:

(i) C_m is the ratio of the sum of the amounts of the 'm' largest underlying exposures to UE; and

(ii) The level of m is to be selected by the [BANK].

(4) Alternatively, if only C_1 is available and C_1 is no more than 0.03, the [BANK] may set EWALGD = 0.50 if none of the underlying exposures is a securitization exposure, or may set EWALGD = 1 if one or more of the underlying exposures is a securitization exposure and may set N = $1/C_1$.

§___.144 Simplified supervisory formula approach (SSFA).

(a) *General requirements.* To use the SSFA to determine the risk weight for a securitization exposure, a [BANK] must have data that enables it to assign accurately the parameters described in paragraph (b) of this section. Data used to assign the parameters described in paragraph (b) of this section must be the most currently available data and no more than 91 calendar days old. A [BANK] that does not have the appropriate data to assign the parameters described in paragraph (b) of this section must assign a risk weight of 1,250 percent to the exposure.

(b) *SSFA parameters.* To calculate the risk weight for a securitization exposure using the SSFA, a [BANK] must have accurate information on the five inputs to the SSFA calculation described and defined, for purposes of this section, in

paragraphs (b)(1) through (b)(5) of this section:

(1) K_G is the weighted-average (with unpaid principal used as the weight for each exposure) total capital requirement of the underlying exposures calculated using this subpart. K_G is expressed as a decimal value between zero and 1 (that is, an average risk weight of 100 percent represents a value of K_G equal to .08).

(2) Parameter W is expressed as a decimal value between zero and one. Parameter W is the ratio of the sum of the dollar amounts of any underlying exposures within the securitized pool that meet any of the criteria as set forth in paragraphs (b)(2)(i) through (vi) of this section to the ending balance, measured in dollars, of underlying exposures.

(i) Ninety days or more past due;

(ii) Subject to a bankruptcy or insolvency proceeding;

(iii) In the process of foreclosure;

(iv) Held as real estate owned;

(v) Has contractually deferred interest payments for 90 days or more; or

(vi) Is in default.

(3) Parameter A is the attachment point for the exposure, which represents the threshold at which credit losses will first be allocated to the exposure. Parameter A equals the ratio of the current dollar amount of underlying exposures that are subordinated to the exposure of the [BANK] to the current dollar amount of underlying exposures. Any reserve account funded by the

accumulated cash flows from the underlying exposures that is subordinated to the [BANK]'s securitization exposure may be included in the calculation of parameter A to the extent that cash is present in the account. Parameter A is expressed as a decimal value between zero and one.

(4) Parameter D is the detachment point for the exposure, which represents the threshold at which credit losses of principal allocated to the exposure would result in a total loss of principal. Parameter D equals parameter A plus the ratio of the current dollar amount of the securitization exposures that are *pari passu* with the exposure (that is, have equal seniority with respect to credit risk) to the current dollar amount of the underlying exposures. Parameter D is expressed as a decimal value between zero and one.

(5) A supervisory calibration parameter, p, is equal to 0.5 for securitization exposures that are not resecuritization exposures and equal to 1.5 for resecuritization exposures.

(c) *Mechanics of the SSFA.* K_G and W are used to calculate K_A, the augmented value of K_G, which reflects the observed credit quality of the underlying pool of exposures. K_A is defined in paragraph (d) of this section. The values of parameters A and D, relative to K_A determine the risk weight assigned to a securitization exposure as described in paragraph (d) of this section. The risk weight assigned to a securitization

exposure, or portion of an exposure, as appropriate, is the larger of the risk weight determined in accordance with this paragraph and paragraph (d) of this section and a risk weight of 20 percent.

(1) When the detachment point, parameter D, for a securitization exposure is less than or equal to K_A, the

exposure must be assigned a risk weight of 1,250 percent.

(2) When the attachment point, parameter A, for a securitization exposure is greater than or equal to K_A, the [BANK] must calculate the risk weight in accordance with paragraph (d) of this section.

(3) When A is less than K_A and D is greater than K_A, the risk weight is a weighted-average of 1,250 percent and 1,250 percent times K_{SSFA} calculated in accordance with paragraph (d) of this section, but with the parameter A revised to be set equal to K_A. For the purpose of this weighted-average calculation:

(i) The weight assigned to 1,250 percent equals $\dfrac{K_A - A}{D - A}$.

(ii) The weight assigned to 1,250 percent times K_{SSFA} equals $\dfrac{D - K_A}{D - A}$. The risk weight will be set equal to:

$$Risk\ Weight = \left[\left(\frac{K_A - A}{D - A}\right) \times 1{,}250\ percent\right] + \left[\left(\frac{D - K_A}{D - A}\right) \times 1{,}250\ percent \times K_{SSFA}\right]$$

(d) <u>SSFA equation.</u> (1) The [BANK] must define the following parameters:

$$K_A = (1 - W) \cdot K_G + (.5 \cdot W)$$

$$a = -\frac{1}{p \cdot K_A}$$

$$u = D - K_A$$

$$l = A - K_A$$

$e = 2.71828$, the base of the natural logarithms.

(2) Then the [BANK] must calculate K_{SSFA} according to the following equation:

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

(3) The risk weight for the exposure (expressed as a percent) is equal to $K_{SSFA} \times 1{,}250$.

§ ____ .145 Recognition of credit risk mitigants for securitization exposures.

(a) *General.* An originating [BANK] that has obtained a credit risk mitigant to hedge its securitization exposure to a synthetic or traditional securitization that satisfies the operational criteria in § ____ .141 may recognize the credit risk mitigant, but only as provided in this section. An investing [BANK] that has obtained a credit risk mitigant to hedge a securitization exposure may recognize

the credit risk mitigant, but only as provided in this section.

(b) *Collateral.* (1) *Rules of recognition.* A [BANK] may recognize financial collateral in determining the [BANK]'s risk-weighted asset amount for a securitization exposure (other than a repo-style transaction, an eligible margin loan, or an OTC derivative contract for which the [BANK] has reflected collateral in its determination of exposure amount under § ____ .132) as follows. The [BANK]'s risk-weighted

asset amount for the collateralized securitization exposure is equal to the risk-weighted asset amount for the securitization exposure as calculated under the SSFA in § ____ .144 or under the SFA in § ____ .143 multiplied by the ratio of adjusted exposure amount (SE*) to original exposure amount (SE), where:

(i) SE* = max {0, [SE − C × (1 − Hs − Hfx)]};

(ii) SE = the amount of the securitization exposure calculated under § ____ .142(e);

(iii) C = the current market value of the collateral;

(iv) Hs = the haircut appropriate to the collateral type; and

(v) Hfx = the haircut appropriate for any currency mismatch between the collateral and the exposure.

(2) *Mixed collateral.* Where the collateral is a basket of different asset types or a basket of assets denominated in different currencies, the haircut on the basket will be

$$H = \sum_i a_i H_i,$$

where a_i is the current market value of the asset in the basket divided by the current market value of all assets in the basket and H_i is the haircut applicable to that asset.

(3) *Standard supervisory haircuts.* Unless a [BANK] qualifies for use of and uses own-estimates haircuts in paragraph (b)(4) of this section:

(i) A [BANK] must use the collateral type haircuts (Hs) in Table 2;

(ii) A [BANK] must use a currency mismatch haircut (Hfx) of 8 percent if the exposure and the collateral are denominated in different currencies;

(iii) A [BANK] must multiply the supervisory haircuts obtained in paragraphs (b)(3)(i) and (ii) of this section by the square root of 6.5 (which equals 2.549510); and

(iv) A [BANK] must adjust the supervisory haircuts upward on the basis of a holding period longer than 65 business days where and as appropriate to take into account the illiquidity of the collateral.

(4) *Own estimates for haircuts.* With the prior written approval of the [AGENCY], a [BANK] may calculate haircuts using its own internal estimates of market price volatility and foreign exchange volatility, subject to § ____.132(b)(2)(iii). The minimum holding period (T_M) for securitization exposures is 65 business days.

(c) *Guarantees and credit derivatives.* (1) *Limitations on recognition.* A [BANK] may only recognize an eligible guarantee or eligible credit derivative provided by an eligible guarantor in determining the [BANK]'s risk-weighted asset amount for a securitization exposure.

(2) *ECL for securitization exposures.* When a [BANK] recognizes an eligible guarantee or eligible credit derivative provided by an eligible guarantor in determining the [BANK]'s risk-weighted asset amount for a securitization exposure, the [BANK] must also:

(i) Calculate ECL for the protected portion of the exposure using the same risk parameters that it uses for calculating the risk-weighted asset amount of the exposure as described in paragraph (c)(3) of this section; and

(ii) Add the exposure's ECL to the [BANK]'s total ECL.

(3) *Rules of recognition.* A [BANK] may recognize an eligible guarantee or eligible credit derivative provided by an eligible guarantor in determining the [BANK]'s risk-weighted asset amount for the securitization exposure as follows:

(i) *Full coverage.* If the protection amount of the eligible guarantee or eligible credit derivative equals or exceeds the amount of the securitization exposure, the [BANK] may set the risk-weighted asset amount for the securitization exposure equal to the risk-weighted asset amount for a direct exposure to the eligible guarantor (as determined in the wholesale risk weight function described in § ____.131), using the [BANK]'s PD for the guarantor, the [BANK]'s LGD for the guarantee or credit derivative, and an EAD equal to the amount of the securitization exposure (as determined in § ____.142(e)).

(ii) *Partial coverage.* If the protection amount of the eligible guarantee or eligible credit derivative is less than the amount of the securitization exposure, the [BANK] may set the risk-weighted asset amount for the securitization exposure equal to the sum of:

(A) *Covered portion.* The risk-weighted asset amount for a direct exposure to the eligible guarantor (as determined in the wholesale risk weight function described in § ____.131 of this subpart), using the [BANK]'s PD for the guarantor, the [BANK]'s LGD for the guarantee or credit derivative, and an EAD equal to the protection amount of the credit risk mitigant; and

(B) *Uncovered portion.* (*1*) 1.0 minus the ratio of the protection amount of the eligible guarantee or eligible credit derivative to the amount of the securitization exposure); multiplied by

(*2*) The risk-weighted asset amount for the securitization exposure without the credit risk mitigant (as determined in §§ ____.142 through 146).

(4) *Mismatches.* The [BANK] must make applicable adjustments to the protection amount as required in § ____.134(d), (e), and (f) for any hedged securitization exposure and any more senior securitization exposure that benefits from the hedge. In the context of a synthetic securitization, when an eligible guarantee or eligible credit derivative covers multiple hedged exposures that have different residual maturities, the [BANK] must use the longest residual maturity of any of the hedged exposures as the residual maturity of all the hedged exposures.

Risk-Weighted Assets for Equity Exposures

§ ____.151 Introduction and exposure measurement.

(a) *General.* To calculate its risk-weighted asset amounts for equity exposures that are not equity exposures to investment funds, a [BANK] may apply either the Simple Risk Weight Approach (SRWA) in § ____.152 or, if it qualifies to do so, the Internal Models Approach (IMA) in § ____.153. A [BANK] must use the look-through approaches in § ____.154 to calculate its risk-weighted asset amounts for equity exposures to investment funds.

(b) *Adjusted carrying value.* For purposes of this [PART], the adjusted carrying value of an equity exposure is:

(1) For the on-balance sheet component of an equity exposure, the [BANK]'s carrying value of the exposure; and

(2) For the off-balance sheet component of an equity exposure, the effective notional principal amount of the exposure, the size of which is equivalent to a hypothetical on-balance sheet position in the underlying equity instrument that would evidence the same change in fair value (measured in dollars) for a given small change in the price of the underlying equity instrument, minus the adjusted carrying value of the on-balance sheet component of the exposure as calculated in paragraph (b)(1) of this section. For unfunded equity commitments that are unconditional, the effective notional principal amount is the notional amount of the commitment. For unfunded equity commitments that are conditional, the effective notional principal amount is the [BANK]'s best estimate of the amount that would be funded under economic downturn conditions.

§ ____.152 Simple risk weight approach (SRWA).

(a) *General.* Under the SRWA, a [BANK]'s aggregate risk-weighted asset amount for its equity exposures is equal to the sum of the risk-weighted asset amounts for each of the [BANK]'s individual equity exposures (other than equity exposures to an investment fund) as determined in this section and the risk-weighted asset amounts for each of the [BANK]'s individual equity exposures to an investment fund as determined in § ____.154.

(b) *SRWA computation for individual equity exposures.* A [BANK] must determine the risk-weighted asset amount for an individual equity exposure (other than an equity exposure to an investment fund) by multiplying

the adjusted carrying value of the equity exposure or the effective portion and ineffective portion of a hedge pair (as defined in paragraph (c) of this section) by the lowest applicable risk weight in this section.

(1) *Zero percent risk weight equity exposures.* An equity exposure to an entity whose credit exposures are exempt from the 0.03 percent PD floor in § ___.131(d)(2) is assigned a zero percent risk weight.

(2) *20 percent risk weight equity exposures.* An equity exposure to a Federal Home Loan Bank or the Federal Agricultural Mortgage Corporation (Farmer Mac) is assigned a 20 percent risk weight.

(3) *100 percent risk weight equity exposures.* The following equity exposures are assigned a 100 percent risk weight:

(i) *Community development equity exposures.* An equity exposure that qualifies as a community development investment under section 24 (Eleventh) of the National Bank Act, excluding equity exposures to an unconsolidated small business investment company and equity exposures held through a consolidated small business investment company described in section 302 of the Small Business Investment Act.

(ii) *Effective portion of hedge pairs.* The effective portion of a hedge pair.

(iii) *Non-significant equity exposures.* Equity exposures, excluding exposures to an investment firm that would meet the definition of a traditional securitization were it not for the [AGENCY]'s application of paragraph (8) of that definition in § ___.2 and has greater than immaterial leverage, to the extent that the aggregate adjusted carrying value of the exposures does not exceed 10 percent of the [BANK]'s total capital.

(A) To compute the aggregate adjusted carrying value of a [BANK]'s equity exposures for purposes of this section, the [BANK] may exclude equity exposures described in paragraphs (b)(1), (b)(2), (b)(3)(i), and (b)(3)(ii) of this section, the equity exposure in a hedge pair with the smaller adjusted carrying value, and a proportion of each

equity exposure to an investment fund equal to the proportion of the assets of the investment fund that are not equity exposures or that meet the criterion of paragraph (b)(3)(i) of this section. If a [BANK] does not know the actual holdings of the investment fund, the [BANK] may calculate the proportion of the assets of the fund that are not equity exposures based on the terms of the prospectus, partnership agreement, or similar contract that defines the fund's permissible investments. If the sum of the investment limits for all exposure classes within the fund exceeds 100 percent, the [BANK] must assume for purposes of this section that the investment fund invests to the maximum extent possible in equity exposures.

(B) When determining which of a [BANK]'s equity exposures qualifies for a 100 percent risk weight under this section, a [BANK] first must include equity exposures to unconsolidated small business investment companies or held through consolidated small business investment companies described in section 302 of the Small Business Investment Act, then must include publicly-traded equity exposures (including those held indirectly through investment funds), and then must include non-publicly-traded equity exposures (including those held indirectly through investment funds).

(4) *250 percent risk weight equity exposures.* Significant investments in the capital of unconsolidated financial institutions that are not deducted from capital pursuant to § ___.22(b)(4) of subpart B are assigned a 250 percent risk weight.

(5) *300 percent risk weight equity exposures.* A publicly-traded equity exposure (other than an equity exposure described in paragraph (b)(6) of this section and including the ineffective portion of a hedge pair) is assigned a 300 percent risk weight.

(6) *400 percent risk weight equity exposures.* An equity exposure (other than an equity exposure described in paragraph (b)(6) of this section) that is

not publicly-traded is assigned a 400 percent risk weight.

(7) *600 percent risk weight equity exposures.* An equity exposure to an investment firm that:

(i) Would meet the definition of a traditional securitization were it not for the [AGENCY]'s application of paragraph (8) of that definition in § ___.2; and

(ii) Has greater than immaterial leverage is assigned a 600 percent risk weight.

(c) *Hedge transactions.* (1) *Hedge pair.* A hedge pair is two equity exposures that form an effective hedge so long as each equity exposure is publicly-traded or has a return that is primarily based on a publicly-traded equity exposure.

(2) *Effective hedge.* Two equity exposures form an effective hedge if the exposures either have the same remaining maturity or each has a remaining maturity of at least three months; the hedge relationship is formally documented in a prospective manner (that is, before the [BANK] acquires at least one of the equity exposures); the documentation specifies the measure of effectiveness (E) the [BANK] will use for the hedge relationship throughout the life of the transaction; and the hedge relationship has an E greater than or equal to 0.8. A [BANK] must measure E at least quarterly and must use one of three alternative measures of E:

(i) Under the dollar-offset method of measuring effectiveness, the [BANK] must determine the ratio of value change (RVC). The RVC is the ratio of the cumulative sum of the periodic changes in value of one equity exposure to the cumulative sum of the periodic changes in the value of the other equity exposure. If RVC is positive, the hedge is not effective and E equals zero. If RVC is negative and greater than or equal to -1 (that is, between zero and -1), then E equals the absolute value of RVC. If RVC is negative and less than -1, then E equals 2 plus RVC.

(ii) Under the variability-reduction method of measuring effectiveness:

$$E = 1 - \frac{\sum_{t=1}^{T}\left(X_t - X_{t-1}\right)^2}{\sum_{t=1}^{T}\left(A_t - A_{t-1}\right)^2},$$

where

(A) $X_t = A_t - B_t$;

(B) A_t = the value at time t of one exposure in a hedge pair; and

(C) B_t = the value at time t of the other exposure in a hedge pair.

(iii) Under the regression method of measuring effectiveness, E equals the coefficient of determination of a regression in which the change in value of one exposure in a hedge pair is the dependent variable and the change in value of the other exposure in a hedge pair is the independent variable. However, if the estimated regression coefficient is positive, then the value of E is zero.

(3) The effective portion of a hedge pair is E multiplied by the greater of the adjusted carrying values of the equity exposures forming a hedge pair.

(4) The ineffective portion of a hedge pair is (1–E) multiplied by the greater of the adjusted carrying values of the equity exposures forming a hedge pair.

§ ____.153   Internal models approach (IMA).

(a) *General.* A [BANK] may calculate its risk-weighted asset amount for equity exposures using the IMA by modeling publicly-traded and non-publicly-traded equity exposures (in accordance with paragraph (c) of this section) or by modeling only publicly-traded equity exposures (in accordance with paragraphs (c) and (d) of this section).

(b) *Qualifying criteria.* To qualify to use the IMA to calculate risk-weighted assets for equity exposures, a [BANK] must receive prior written approval from the [AGENCY]. To receive such approval, the [BANK] must demonstrate to the [AGENCY]'s satisfaction that the [BANK] meets the following criteria:

(1) The [BANK] must have one or more models that:

(i) Assess the potential decline in value of its modeled equity exposures;

(ii) Are commensurate with the size, complexity, and composition of the [BANK]'s modeled equity exposures; and

(iii) Adequately capture both general market risk and idiosyncratic risk.

(2) The [BANK]'s model must produce an estimate of potential losses for its modeled equity exposures that is no less than the estimate of potential losses produced by a VaR methodology employing a 99.0 percent, one-tailed confidence interval of the distribution of quarterly returns for a benchmark portfolio of equity exposures comparable to the [BANK]'s modeled equity exposures using a long-term sample period.

(3) The number of risk factors and exposures in the sample and the data period used for quantification in the [BANK]'s model and benchmarking exercise must be sufficient to provide confidence in the accuracy and robustness of the [BANK]'s estimates.

(4) The [BANK]'s model and benchmarking process must incorporate

data that are relevant in representing the risk profile of the [BANK]'s modeled equity exposures, and must include data from at least one equity market cycle containing adverse market movements relevant to the risk profile of the [BANK]'s modeled equity exposures. In addition, the [BANK]'s benchmarking exercise must be based on daily market prices for the benchmark portfolio. If the [BANK]'s model uses a scenario methodology, the [BANK] must demonstrate that the model produces a conservative estimate of potential losses on the [BANK]'s modeled equity exposures over a relevant long-term market cycle. If the [BANK] employs risk factor models, the [BANK] must demonstrate through empirical analysis the appropriateness of the risk factors used.

(5) The [BANK] must be able to demonstrate, using theoretical arguments and empirical evidence, that any proxies used in the modeling process are comparable to the [BANK]'s modeled equity exposures and that the [BANK] has made appropriate adjustments for differences. The [BANK] must derive any proxies for its modeled equity exposures and benchmark portfolio using historical market data that are relevant to the [BANK]'s modeled equity exposures and benchmark portfolio (or, where not, must use appropriately adjusted data), and such proxies must be robust estimates of the risk of the [BANK]'s modeled equity exposures.

(c) *Risk-weighted assets calculation for a [BANK] modeling publicly-traded and non-publicly-traded equity exposures.* If a [BANK] models publicly-traded and non-publicly-traded equity exposures, the [BANK]'s aggregate risk-weighted asset amount for its equity exposures is equal to the sum of:

(1) The risk-weighted asset amount of each equity exposure that qualifies for a 0 percent, 20 percent, or 100 percent risk weight under §§ ____.152(b)(1) through (b)(3)(i) (as determined under § ____.152) and each equity exposure to an investment fund (as determined under § ____.154); and

(2) The greater of:

(i) The estimate of potential losses on the [BANK]'s equity exposures (other than equity exposures referenced in paragraph (c)(1) of this section) generated by the [BANK]'s internal equity exposure model multiplied by 12.5; or

(ii) The sum of:

(A) 200 percent multiplied by the aggregate adjusted carrying value of the [BANK]'s publicly-traded equity exposures that do not belong to a hedge pair, do not qualify for a 0 percent, 20

percent, or 100 percent risk weight under §§ ____.152(b)(1) through (b)(3)(i), and are not equity exposures to an investment fund;

(B) 200 percent multiplied by the aggregate ineffective portion of all hedge pairs; and

(C) 300 percent multiplied by the aggregate adjusted carrying value of the [BANK]'s equity exposures that are not publicly-traded, do not qualify for a 0 percent, 20 percent, or 100 percent risk weight under §§ ____.152(b)(1) through (b)(3)(i), and are not equity exposures to an investment fund.

(d) *Risk-weighted assets calculation for a [BANK] using the IMA only for publicly-traded equity exposures.* If a [BANK] models only publicly-traded equity exposures, the [BANK]'s aggregate risk-weighted asset amount for its equity exposures is equal to the sum of:

(1) The risk-weighted asset amount of each equity exposure that qualifies for a 0 percent, 20 percent, or 100 percent risk weight under §§ ____.152(b)(1) through (b)(3)(i) (as determined under § ____.152), each equity exposure that qualifies for a 400 percent risk weight under § ____.152(b)(5) or a 600 percent risk weight under § ____.152(b)(6) (as determined under § ____.152), and each equity exposure to an investment fund (as determined under § ____.154); and

(2) The greater of:

(i) The estimate of potential losses on the [BANK]'s equity exposures (other than equity exposures referenced in paragraph (d)(1) of this section) generated by the [BANK]'s internal equity exposure model multiplied by 12.5; or

(ii) The sum of:

(A) 200 percent multiplied by the aggregate adjusted carrying value of the [BANK]'s publicly-traded equity exposures that do not belong to a hedge pair, do not qualify for a 0 percent, 20 percent, or 100 percent risk weight under §§ ____.152(b)(1) through (b)(3)(i), and are not equity exposures to an investment fund; and

(B) 200 percent multiplied by the aggregate ineffective portion of all hedge pairs.

§ ____.154   Equity exposures to investment funds.

(a) *Available approaches.* (1) Unless the exposure meets the requirements for a community development equity exposure in § ____.152(b)(3)(i), a [BANK] must determine the risk-weighted asset amount of an equity exposure to an investment fund under the Full Look-Through Approach in paragraph (b) of this section, the Simple Modified Look-Through Approach in

paragraph (c) of this section, or the Alternative Modified Look-Through Approach in paragraph (d) of this section.

(2) The risk-weighted asset amount of an equity exposure to an investment fund that meets the requirements for a community development equity exposure in § ____.152(b)(3)(i) is its adjusted carrying value.

(3) If an equity exposure to an investment fund is part of a hedge pair and the [BANK] does not use the Full Look-Through Approach, the [BANK] may use the ineffective portion of the hedge pair as determined under § ____.152(c) as the adjusted carrying value for the equity exposure to the investment fund. The risk-weighted asset amount of the effective portion of the hedge pair is equal to its adjusted carrying value.

(b) *Full Look-Through Approach.* A [BANK] that is able to calculate a risk-weighted asset amount for its proportional ownership share of each exposure held by the investment fund (as calculated under this subpart E as if the proportional ownership share of each exposure were held directly by the [BANK]) may either:

(1) Set the risk-weighted asset amount of the [BANK]'s exposure to the fund equal to the product of:

(i) The aggregate risk-weighted asset amounts of the exposures held by the fund as if they were held directly by the [BANK]; and

(ii) The [BANK]'s proportional ownership share of the fund; or

(2) Include the [BANK]'s proportional ownership share of each exposure held by the fund in the [BANK]'s IMA.

(c) *Simple Modified Look-Through Approach.* Under this approach, the risk-weighted asset amount for a [BANK]'s equity exposure to an investment fund equals the adjusted carrying value of the equity exposure multiplied by the highest risk weight assigned according to subpart D that applies to any exposure the fund is permitted to hold under its prospectus, partnership agreement, or similar contract that defines the fund's permissible investments (excluding derivative contracts that are used for hedging rather than speculative purposes and that do not constitute a material portion of the fund's exposures).

(d) *Alternative Modified Look-Through Approach.* Under this approach, a [BANK] may assign the adjusted carrying value of an equity exposure to an investment fund on a pro rata basis to different risk weight categories assigned according to subpart D of this part based on the investment

limits in the fund's prospectus, partnership agreement, or similar contract that defines the fund's permissible investments. The risk-weighted asset amount for the [BANK]'s equity exposure to the investment fund equals the sum of each portion of the adjusted carrying value assigned to an exposure class multiplied by the applicable risk weight. If the sum of the investment limits for all exposure types within the fund exceeds 100 percent, the [BANK] must assume that the fund invests to the maximum extent permitted under its investment limits in the exposure type with the highest risk weight under subpart D of this part, and continues to make investments in order of the exposure type with the next highest risk weight under subpart D until the maximum total investment level is reached. If more than one exposure type applies to an exposure, the [BANK] must use the highest applicable risk weight. A [BANK] may exclude derivative contracts held by the fund that are used for hedging rather than for speculative purposes and do not constitute a material portion of the fund's exposures.

§ ____.155   Equity derivative contracts.

(a) Under the IMA, in addition to holding risk-based capital against an equity derivative contract under this [PART], a [BANK] must hold risk-based capital against the counterparty credit risk in the equity derivative contract by also treating the equity derivative contract as a wholesale exposure and computing a supplemental risk-weighted asset amount for the contract under § ____.132.

(b) Under the SRWA, a [BANK] may choose not to hold risk-based capital against the counterparty credit risk of equity derivative contracts, as long as it does so for all such contracts. Where the equity derivative contracts are subject to a qualified master netting agreement, a [BANK] using the SRWA must either include all or exclude all of the contracts from any measure used to determine counterparty credit risk exposure.

Risk-Weighted Assets for Operational Risk

§ ____.161   Qualification requirements for incorporation of operational risk mitigants.

(a) *Qualification to use operational risk mitigants.* A [BANK] may adjust its estimate of operational risk exposure to reflect qualifying operational risk mitigants if:

(1) The [BANK]'s operational risk quantification system is able to generate an estimate of the [BANK]'s operational risk exposure (which does not

incorporate qualifying operational risk mitigants) and an estimate of the [BANK]'s operational risk exposure adjusted to incorporate qualifying operational risk mitigants; and

(2) The [BANK]'s methodology for incorporating the effects of insurance, if the [BANK] uses insurance as an operational risk mitigant, captures through appropriate discounts to the amount of risk mitigation:

(i) The residual term of the policy, where less than one year;

(ii) The cancellation terms of the policy, where less than one year;

(iii) The policy's timeliness of payment;

(iv) The uncertainty of payment by the provider of the policy; and

(v) Mismatches in coverage between the policy and the hedged operational loss event.

(b) *Qualifying operational risk mitigants.* Qualifying operational risk mitigants are:

(1) Insurance that:

(i) Is provided by an unaffiliated company that the [BANK] deems to have strong capacity to meet its claims payment obligations and the obligor rating category to which the [BANK] assigns the company is assigned a PD equal to or less than 10 basis points;

(ii) Has an initial term of at least one year and a residual term of more than 90 days;

(iii) Has a minimum notice period for cancellation by the provider of 90 days;

(iv) Has no exclusions or limitations based upon regulatory action or for the receiver or liquidator of a failed depository institution; and

(v) Is explicitly mapped to a potential operational loss event;

(2) Operational risk mitigants other than insurance for which the [AGENCY] has given prior written approval. In evaluating an operational risk mitigant other than insurance, the [AGENCY] will consider whether the operational risk mitigant covers potential operational losses in a manner equivalent to holding total capital.

§ ____.162   Mechanics of risk-weighted asset calculation.

(a) If a [BANK] does not qualify to use or does not have qualifying operational risk mitigants, the [BANK]'s dollar risk-based capital requirement for operational risk is its operational risk exposure minus eligible operational risk offsets (if any).

(b) If a [BANK] qualifies to use operational risk mitigants and has qualifying operational risk mitigants, the [BANK]'s dollar risk-based capital requirement for operational risk is the greater of:

(1) The [BANK]'s operational risk exposure adjusted for qualifying operational risk mitigants minus eligible operational risk offsets (if any); or

(2) 0.8 multiplied by the difference between:

(i) The [BANK]'s operational risk exposure; and

(ii) Eligible operational risk offsets (if any).

(c) The [BANK]'s risk-weighted asset amount for operational risk equals the [BANK]'s dollar risk-based capital requirement for operational risk determined under sections 162(a) or (b) multiplied by 12.5.

Disclosures

§ ___.171 Purpose and scope.

Sections ___.171 through ___.173 establish public disclosure requirements related to the capital requirements of a [BANK] that is an advanced approaches bank.

§ ___.172 Disclosure requirements.

(a) A [BANK] that is an advanced approaches bank must publicly disclose each quarter its total and tier 1 risk-based capital ratios and their components as calculated under this subpart (that is, common equity tier 1 capital, additional tier 1 capital, tier 2 capital, total qualifying capital, and total risk-weighted assets).

(b) A [BANK] that is an advanced approaches bank must comply with paragraph (c) of this section unless it is a consolidated subsidiary of a bank holding company, savings and loan holding company, or depository institution that is subject to these disclosure requirements or a subsidiary of a non-U.S. banking organization that is subject to comparable public disclosure requirements in its home jurisdiction.

(c)(1) A [BANK] described in paragraph (b) of this section and that has successfully completed its parallel run must provide timely public disclosures each calendar quarter of the information in the applicable tables in § ___.173. If a significant change occurs, such that the most recent reported amounts are no longer reflective of the [BANK]'s capital adequacy and risk profile, then a brief discussion of this change and its likely impact must be disclosed as soon as practicable thereafter. Qualitative disclosures that typically do not change each quarter (for example, a general summary of the [BANK]'s risk management objectives and policies, reporting system, and definitions) may be disclosed annually, provided that any significant changes to these are disclosed in the interim. Management is encouraged to provide all of the disclosures required by this subpart in one place on the [BANK]'s public Web site.[5]

(2) A [BANK] described in paragraph (b) of this section must have a formal disclosure policy approved by the board of directors that addresses its approach for determining the disclosures it makes. The policy must address the associated internal controls and disclosure controls and procedures. The board of directors and senior management are responsible for establishing and maintaining an effective internal control structure over financial reporting, including the disclosures required by this subpart, and must ensure that appropriate review of the disclosures takes place. One or more senior officers of the [BANK] must attest that the disclosures meet the requirements of this subpart.

(3) If a [BANK] described in paragraph (b) of this section believes that disclosure of specific commercial or financial information would prejudice seriously its position by making public information that is either proprietary or confidential in nature, the [BANK] is not required to disclose those specific items, but must disclose more general information about the subject matter of the requirement, together with the fact that, and the reason why, the specific items of information have not been disclosed.

§ ___.173 Disclosures by certain advanced approaches [BANKS].

Except as provided in § ___.172(b), a [BANK] that is an advanced approaches bank must make the disclosures described in Tables 11.1 through 11.12 below. The [BANK] must make these disclosures publicly available for each of the last three years (that is, twelve quarters) or such shorter period beginning on the effective date of this subpart E.

TABLE 11.1—SCOPE OF APPLICATION

Qualitative disclosures	(a) The name of the top corporate entity in the group to which subpart E of this [PART] applies.
	 (b) A brief description of the differences in the basis for consolidating entities[6] for accounting and regulatory purposes, with a description of those entities:
	     (1) That are fully consolidated;
	     (2) That are deconsolidated and deducted from total capital;
	     (3) For which the total capital requirement is deducted; and
	     (4) That are neither consolidated nor deducted (for example, where the investment in the entity is assigned a risk weight in accordance with this subpart).
	 (c) Any restrictions, or other major impediments, on transfer of funds or total capital within the group.

Quantitative disclosures	(d) The aggregate amount of surplus capital of insurance subsidiaries included in the total capital of the consolidated group. (e) The aggregate amount by which actual total capital is less than the minimum total capital requirement in all subsidiaries, with total capital requirements and the name(s) of the subsidiaries with such deficiencies.

TABLE 11.2—CAPITAL STRUCTURE

Qualitative disclosures ....
 Quantitative disclosures ....
	(a) Summary information on the terms and conditions of the main features of all regulatory capital instruments.
	 (b) The amount of common equity tier 1 capital, with separate disclosure of:
	     (1) Common stock and related surplus;
	     (2) Retained earnings;
	     (3) Common equity minority interest;

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[5] Alternatively, a [BANK] may provide the disclosures in more than one place, as some of them may be included in public financial reports (for example, in Management's Discussion and Analysis included in SEC filings) or other regulatory reports.

The [BANK] must publicly provide a summary table that specifically indicates where all the disclosures may be found (for example, regulatory report schedules, page numbers in annual reports).

[6] Such entities include securities, insurance and other financial subsidiaries, commercial subsidiaries (where permitted), and significant minority equity investments in insurance, financial and commercial entities.

TABLE 11.2—CAPITAL STRUCTURE—Continued

	(4) AOCI (net of tax) and other reserves; and
	(5) Regulatory deductions and adjustments made to common equity tier 1 capital.
	(c) The amount of tier 1 capital, with separate disclosure of:
	(1) Additional tier 1 capital elements, including additional tier 1 capital instruments and tier 1 minority interest not included in common equity tier 1 capital; and
	(2) Regulatory deductions and adjustments made to tier 1 capital.
	(d) The amount of total capital, with separate disclosure of:
	(1) Tier 2 capital elements, including tier 2 capital instruments and total capital minority interest not included in tier 1 capital; and
	(2) Regulatory deductions and adjustments made to total capital.

TABLE 11.3—CAPITAL ADEQUACY

Qualitative disclosures	(a) A summary discussion of the [BANK]'s approach to assessing the adequacy of its capital to support current and future activities.
Quantitative disclosures	(b) Risk-weighted assets for credit risk from:
	(1) Wholesale exposures;
	(2) Residential mortgage exposures;
	(3) Qualifying revolving exposures;
	(4) Other retail exposures;
	(5) Securitization exposures;
	(6) Equity exposures:
	(7) Equity exposures subject to the simple risk weight approach; and
	(8) Equity exposures subject to the internal models approach.
	(c) Standardized market risk-weighted assets and advanced market risk-weighted assets as calculated under subpart F of this [PART]: [7]
	(1) Standardized approach for specific risk; and
	(2) Internal models approach for specific risk.
	(d) Risk-weighted assets for operational risk.
	(e) Common equity tier 1, tier 1 and total risk-based capital ratios:
	(1) For the top consolidated group; and
	(2) For each depository institution subsidiary.
	(f) Total risk-weighted assets.

TABLE 11.4—CAPITAL CONSERVATION AND COUNTERCYCLICAL BUFFERS

Qualitative disclosures	(a) The [BANK] must publicly disclose the geographic breakdown of its private sector credit exposures used in the calculation of the countercyclical capital buffer.
Quantitative disclosures	(b) At least quarterly, the [BANK] must calculate and publicly disclose the capital conservation buffer and the countercyclical capital buffer as described under §____.11 of subpart B.
	(c) At least quarterly, the [BANK] must calculate and publicly disclose the buffer retained income of the [BANK], as described under §____.11 of subpart B.
	(d) At least quarterly, the [BANK] must calculate and publicly disclose any limitations it has on capital distributions and discretionary bonus payments resulting from the capital conservation buffer and the countercyclical buffer framework described under §____.11 of subpart B, including the maximum payout amount for the quarter.

General Qualitative Disclosure Requirement

For each separate risk area described in Tables 11.5 through 11.12, the [BANK] must describe its risk management objectives and policies, including:

• Strategies and processes;

• The structure and organization of the relevant risk management function;

• The scope and nature of risk reporting and/or measurement systems; and

• Policies for hedging and/or mitigating risk and strategies and processes for monitoring the continuing effectiveness of hedges/mitigants.

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[7] Standardized market risk-weighted assets and advanced market risk-weighted assets as calculated under this subpart are to be disclosed only with respect to an approach that is used by a [BANK].

[8] Table 11.5 does not cover equity exposures.

[9] *See,* for example, ASC Topic 815–10 and 210–20 (formerly FASB Interpretation Numbers 37 and 41).

[10] Geographical areas may comprise individual countries, groups of countries, or regions within countries. A [BANK] might choose to define the geographical areas based on the way the company's portfolio is geographically managed. The criteria used to allocate the loans to geographical areas must be specified.

[11] A [BANK] is encouraged also to provide an analysis of the aging of past-due loans.

[12] The portion of the general allowance that is not allocated to a geographical area should be disclosed separately.

[13] The reconciliation should include the following: A description of the allowance; the opening balance of the allowance; charge-offs taken against the allowance during the period; amounts provided (or reversed) for estimated probable loan losses during the period; any other adjustments (for example, exchange rate differences, business combinations, acquisitions and disposals of subsidiaries), including transfers between allowances; and the closing balance of the allowance. Charge-offs and recoveries that have been recorded directly to the income statement should be disclosed separately.

TABLE 11.5 [8]—CREDIT RISK: GENERAL DISCLOSURES

Qualitative disclosures	(a) The general qualitative disclosure requirement with respect to credit risk (excluding counterparty credit risk disclosed in accordance with Table 11.7), including: (1) Policy for determining past due or delinquency status; (2) Policy for placing loans on nonaccrual; (3) Policy for returning loans to accrual status; (4) Definition of and policy for identifying impaired loans (for financial accounting purposes). (5) Description of the methodology that the entity uses to estimate its allowance for loan losses, including statistical methods used where applicable; (6) Policy for charging-off uncollectible amounts; and (7) Discussion of the [BANK]'s credit risk management policy
Quantitative disclosures	(b) Total credit risk exposures and average credit risk exposures, after accounting offsets in accordance with GAAP,[9] without taking into account the effects of credit risk mitigation techniques (for example, collateral and netting not permitted under GAAP), over the period categorized by major types of credit exposure. For example, [BANK]s could use categories similar to that used for financial statement purposes. Such categories might include, for instance: (1) Loans, off-balance sheet commitments, and other non-derivative off-balance sheet exposures; (2) Debt securities; and (3) OTC derivatives. (c) Geographic[10] distribution of exposures, categorized in significant areas by major types of credit exposure. (d) Industry or counterparty type distribution of exposures, categorized by major types of credit exposure. (e) By major industry or counterparty type: (1) Amount of impaired loans for which there was a related allowance under GAAP; (2) Amount of impaired loans for which there was no related allowance under GAAP; (3) Amount of loans past due 90 days and on nonaccrual; (4) Amount of loans past due 90 days and still accruing;[11] (5) The balance in the allowance for credit losses at the end of each period, disaggregated on the basis of the entity's impairment method. To disaggregate the information required on the basis of impairment methodology, an entity shall separately disclose the amounts based on the requirements in GAAP; and (6) Charge-offs during the period. (f) Amount of impaired loans and, if available, the amount of past due loans categorized by significant geographic areas including, if practical, the amounts of allowances related to each geographical area,[12] further categorized as required by GAAP. (g) Reconciliation of changes in ALLL.[13] (h) Remaining contractual maturity breakdown (for example, one year or less) of the whole portfolio, categorized by credit exposure.

TABLE 11.6—CREDIT RISK: DISCLOSURES FOR PORTFOLIOS SUBJECT TO IRB RISK-BASED CAPITAL FORMULAS

Qualitative disclosures	(a) Explanation and review of the: (1) Structure of internal rating systems and relation between internal and external ratings; (2) Use of risk parameter estimates other than for regulatory capital purposes; (3) Process for managing and recognizing credit risk mitigation (see Table 11.8); and (4) Control mechanisms for the rating system, including discussion of independence, accountability, and rating systems review. (b)(1) Description of the internal ratings process, provided separately for the following: (i) Wholesale category; (ii) Retail subcategories— (A) Residential mortgage exposures; (B) Qualifying revolving exposures; and (C) Other retail exposures. (2) For each category and subcategory above the description should include: (i) The types of exposure included in the category/subcategories; and (ii) The definitions, methods and data for estimation and validation of PD, LGD, and EAD, including assumptions employed in the derivation of these variables.[14]
Quantitative disclosures: Risk assessment.	(c)(1) For wholesale exposures, present the following information across a sufficient number of PD grades (including default) to allow for a meaningful differentiation of credit risk:[15] (i) Total EAD;[16] (ii) Exposure-weighted average LGD (percentage); (iii) Exposure-weighted average risk weight; and (iv) Amount of undrawn commitments and exposure-weighted average EAD including average drawdowns prior to default for wholesale exposures. (2) For each retail subcategory, present the disclosures outlined above across a sufficient number of segments to allow for a meaningful differentiation of credit risk.
Quantitative disclosures: Historical results.	(d) Actual losses in the preceding period for each category and subcategory and how this differs from past experience. A discussion of the factors that impacted the loss experience in the preceding period—for example, has the [BANK] experienced higher than average default rates, loss rates or EADs. (e) [BANK]'s estimates compared against actual outcomes over a longer period.[17] At a minimum, this should include information on estimates of losses against actual losses in the wholesale category and each retail subcategory over a period sufficient to allow for a meaningful assessment of the performance of the internal rating processes for each category/subcategory.[18] Where appropriate, the [BANK] should further decompose this to provide analysis of PD, LGD, and EAD outcomes against estimates provided in the quantitative risk assessment disclosures above.[19]

TABLE 11.7—GENERAL DISCLOSURE FOR COUNTERPARTY CREDIT RISK OF OTC DERIVATIVE CONTRACTS, REPO-STYLE TRANSACTIONS, AND ELIGIBLE MARGIN LOANS

Qualitative disclosures	(a) The general qualitative disclosure requirement with respect to OTC derivatives, eligible margin loans, and repo-style transactions, including:
	(1) Discussion of methodology used to assign economic capital and credit limits for counterparty credit exposures;
	(2) Discussion of policies for securing collateral, valuing and managing collateral, and establishing credit reserves;
	(3) Discussion of the primary types of collateral taken;
	(4) Discussion of policies with respect to wrong-way risk exposures; and
	(5) Discussion of the impact of the amount of collateral the [BANK] would have to provide if the [BANK] were to receive a credit rating downgrade.
Quantitative disclosures	(b) Gross positive fair value of contracts, netting benefits, netted current credit exposure, collateral held (including type, for example, cash, government securities), and net unsecured credit exposure.[20] Also report measures for EAD used for regulatory capital for these transactions, the notional value of credit derivative hedges purchased for counterparty credit risk protection, and, for [BANK]s not using the internal models methodology in § ____.132(d), the distribution of current credit exposure by types of credit exposure.[21]
	(c) Notional amount of purchased and sold credit derivatives, segregated between use for the [BANK]'s own credit portfolio and for its intermediation activities, including the distribution of the credit derivative products used, categorized further by protection bought and sold within each product group.
	(d) The estimate of alpha if the [BANK] has received supervisory approval to estimate alpha.

TABLE 11.8—CREDIT RISK MITIGATION [22] [23]

Qualitative disclosures	(a) The general qualitative disclosure requirement with respect to credit risk mitigation, including:
	(1) Policies and processes for, and an indication of the extent to which the [BANK] uses, on- or off-balance sheet netting;
	(2) Policies and processes for collateral valuation and management;
	(3) A description of the main types of collateral taken by the [BANK];
	(4) The main types of guarantors/credit derivative counterparties and their creditworthiness; and
	(5) Information about (market or credit) risk concentrations within the mitigation taken.
Quantitative disclosures	(b) For each separately disclosed portfolio, the total exposure (after, where applicable, on- or off-balance sheet netting) that is covered by guarantees/credit derivatives.

TABLE 11.9—SECURITIZATION

Qualitative disclosures	(a) The general qualitative disclosure requirement with respect to securitization (including synthetic securitizations), including a discussion of:
	(1) The [BANK]'s objectives for securitizing assets, including the extent to which these activities transfer credit risk of the underlying exposures away from the [BANK] to other entities and including the type of risks assumed and retained with resecuritization activity;[24]
	(2) The nature of the risks (e.g. liquidity risk) inherent in the securitized assets;

[14] This disclosure item does not require a detailed description of the model in full—it should provide the reader with a broad overview of the model approach, describing definitions of the variables and methods for estimating and validating those variables set out in the quantitative risk disclosures below. This should be done for each of the four category/subcategories. The [BANK] must disclose any significant differences in approach to estimating these variables within each category/subcategories.

[15] The PD, LGD and EAD disclosures in Table 11.6(c) should reflect the effects of collateral, qualifying master netting agreements, eligible guarantees and eligible credit derivatives as defined under this part. Disclosure of each PD grade should include the exposure-weighted average PD for each grade. Where a [BANK] aggregates PD grades for the purposes of disclosure, this should be a representative breakdown of the distribution of PD grades used for regulatory capital purposes.

[16] Outstanding loans and EAD on undrawn commitments can be presented on a combined basis for these disclosures.

[17] These disclosures are a way of further informing the reader about the reliability of the information provided in the "quantitative disclosures: risk assessment" over the long run. The disclosures are requirements from year-end 2010; in the meantime, early adoption is encouraged. The phased implementation is to allow a [BANK] sufficient time to build up a longer run of data that will make these disclosures meaningful.

[18] This disclosure item is not intended to be prescriptive about the period used for this assessment. Upon implementation, it is expected that a [BANK] would provide these disclosures for as long a set of data as possible—for example, if a [BANK] has 10 years of data, it might choose to disclose the average default rates for each PD grade over that 10-year period. Annual amounts need not be disclosed.

[19] A [BANK] must provide this further decomposition where it will allow users greater insight into the reliability of the estimates provided in the "quantitative disclosures: risk assessment." In particular, it must provide this information where there are material differences between its estimates of PD, LGD or EAD compared to actual outcomes over the long run. The [BANK] must also provide explanations for such differences.

[20] Net unsecured credit exposure is the credit exposure after considering the benefits from legally enforceable netting agreements and collateral arrangements, without taking into account haircuts for price volatility, liquidity, etc.

[21] This may include interest rate derivative contracts, foreign exchange derivative contracts, equity derivative contracts, credit derivatives, commodity or other derivative contracts, repostyle transactions, and eligible margin loans.

[22] At a minimum, a [BANK] must provide the disclosures in Table 11.8 in relation to credit risk mitigation that has been recognized for the purposes of reducing capital requirements under this subpart. Where relevant, [BANK]s are encouraged to give further information about mitigants that have not been recognized for that purpose.

[23] Credit derivatives and other credit mitigation that are treated for the purposes of this subpart as synthetic securitization exposures should be excluded from the credit risk mitigation disclosures (in Table 11.8) and included within those relating to securitization (in Table 11.9).

TABLE 11.9—SECURITIZATION—Continued

	(3) The roles played by the [BANK] in the securitization process[25] and an indication of the extent of the [BANK]'s involvement in each of them; (4) The processes in place to monitor changes in the credit and market risk of securitization exposures including how those processes differ for resecuritization exposures; (5) The [BANK]'s policy for mitigating the credit risk retained through securitization and resecuritization exposures; and (6) The risk-based capital approaches that the [BANK] follows for its securitization exposures including the type of securitization exposure to which each approach applies. (b) A list of: (1) The type of securitization SPEs that the [BANK], as sponsor, uses to securitize third-party exposures. The [BANK] must indicate whether it has exposure to these SPEs, either on- or off- balance sheet; and (2) Affiliated entities: (i) That the [BANK] manages or advises; and (ii) That invest either in the securitization exposures that the [BANK] has securitized or in securitization SPEs that the [BANK] sponsors.[26] (c) Summary of the [BANK]'s accounting policies for securitization activities, including: (1) Whether the transactions are treated as sales or financings; (2) Recognition of gain-on-sale; (3) Methods and key assumptions and inputs applied in valuing retained or purchased interests; (4) Changes in methods and key assumptions and inputs from the previous period for valuing retained interests and impact of the changes; (5) Treatment of synthetic securitizations; (6) How exposures intended to be securitized are valued and whether they are recorded under subpart E of this part; and (7) Policies for recognizing liabilities on the balance sheet for arrangements that could require the [BANK] to provide financial support for securitized assets. (d) An explanation of significant changes to any of the quantitative information set forth below since the last reporting period.
Quantitative disclosures	(e) The total outstanding exposures securitized[27] by the [BANK] in securitizations that meet the operational criteria in §____.141 (categorized into traditional/synthetic), by underlying exposure type,[28] separately for securitizations of third-party exposures for which the bank acts only as sponsor. (f) For exposures securitized by the [BANK] in securitizations that meet the operational criteria in §____.141: (1) Amount of securitized assets that are impaired[29]/past due categorized by exposure type; and (2) Losses recognized by the [BANK] during the current period categorized by exposure type.[30] (g) The total amount of outstanding exposures intended to be securitized categorized by exposure type. (h) Aggregate amount of: (1) On-balance sheet securitization exposures retained or purchased categorized by exposure type; and (2) Off-balance sheet securitization exposures categorized by exposure type. (i)(1) Aggregate amount of securitization exposures retained or purchased and the associated capital requirements for these exposures, categorized between securitization and resecuritization exposures, further categorized into a meaningful number of risk weight bands and by risk-based capital approach (e.g. SA, SFA, or SSFA). (2) Exposures that have been deducted entirely from tier 1 capital, credit enhancing I/Os deducted from total capital (as described in §____.42(a)(1), and other exposures deducted from total capital should be disclosed separately by exposure type. (j) Summary of current year's securitization activity, including the amount of exposures securitized (by exposure type), and recognized gain or loss on sale by asset type. (k) Aggregate amount of resecuritization exposures retained or purchased categorized according to: (1) Exposures to which credit risk mitigation is applied and those not applied; and (2) Exposures to guarantors categorized according to guarantor credit worthiness categories or guarantor name.

TABLE 11.10—OPERATIONAL RISK

Qualitative disclosures	(a) The general qualitative disclosure requirement for operational risk. (b) Description of the AMA, including a discussion of relevant internal and external factors considered in the [BANK]'s measurement approach.

[24] The [BANK] must describe the structure of resecuritizations in which it participates; this description must be provided for the main categories of resecuritization products in which the [BANK] is active.

[25] For example, these roles would include originator, investor, servicer, provider of credit enhancement, sponsor, liquidity provider, or swap provider.

[26] For example, money market mutual funds should be listed individually, and personal and private trusts should be noted collectively.

[27] "Exposures securitized" include underlying exposures originated by the bank, whether generated by them or purchased, and recognized in the balance sheet, from third parties, and third-party exposures included in sponsored transactions. Securitization transactions (including underlying exposures originally on the bank's balance sheet and underlying exposures acquired by the bank from third-party entities) in which the originating bank does not retain any securitization exposure should be shown separately but need only be reported for the year of inception.

[28] A [BANK] is required to disclose exposures regardless of whether there is a capital charge under Pillar 1.

[29] A [BANK] must include credit-related other than temporary impairment (OTTI).

[30] For example, charge-offs/allowances (if the assets remain on the bank's balance sheet) or credit-related OTTI of I/O strips and other retained residual interests, as well as recognition of liabilities for probable future financial support required of the bank with respect to securitized assets.

TABLE 11.10—OPERATIONAL RISK—Continued

	(c) A description of the use of insurance for the purpose of mitigating operational risk.

TABLE 11.11—EQUITIES NOT SUBJECT TO SUBPART F OF THIS PART

Qualitative disclosures	(a) The general qualitative disclosure requirement with respect to the equity risk of equity holdings not subject to subpart F of this part, including: (1) Differentiation between holdings on which capital gains are expected and those held for other objectives, including for relationship and strategic reasons; and (2) Discussion of important policies covering the valuation of and accounting for equity holdings not subject to subpart F of this [PART]. This includes the accounting methodology and valuation methodologies used, including key assumptions and practices affecting valuation as well as significant changes in these practices.
Quantitative disclosures	(b) Carrying value on the balance sheet of equity investments, as well as the fair value of those investments. (c) The types and nature of investments, including the amount that is: (1) Publicly-traded; and (2) Non-publicly-traded. (d) The cumulative realized gains (losses) arising from sales and liquidations in the reporting period. (e)(1) Total unrealized gains (losses) [31] (2) Total latent revaluation gains (losses) [32] (3) Any amounts of the above included in tier 1 and/or tier 2 capital. (f) Capital requirements categorized by appropriate equity groupings, consistent with the [BANK]'s methodology, as well as the aggregate amounts and the type of equity investments subject to any supervisory transition regarding total capital requirements.[33]

TABLE 11.12—INTEREST RATE RISK FOR NON-TRADING ACTIVITIES

Qualitative disclosures	(a) The general qualitative disclosure requirement, including the nature of interest rate risk for non-trading activities and key assumptions, including assumptions regarding loan prepayments and behavior of non-maturity deposits, and frequency of measurement of interest rate risk for non-trading activities.
Quantitative disclosures	(b) The increase (decline) in earnings or economic value (or relevant measure used by management) for upward and downward rate shocks according to management's method for measuring interest rate risk for non-trading activities, categorized by currency (as appropriate).

Subpart F—Risk-Weighted Assets—Market Risk

§____.201 Purpose, applicability, and reservation of authority.

(a) *Purpose.* This subpart F establishes risk-based capital requirements for [BANK]s with significant exposure to market risk, provides methods for these [BANK]s to calculate their standardized measure for market risk and, if applicable, advanced measure for market risk, and establishes public disclosure requirements.

(b) *Applicability.* (1) This subpart applies to any [BANK] with aggregate trading assets and trading liabilities (as reported in the [BANK]'s most recent quarterly [regulatory report]), equal to:

(i) 10 percent or more of quarter-end total assets as reported on the most recent quarterly [Call Report or FR Y–9C]; or

(ii) $1 billion or more.

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[31] Unrealized gains (losses) recognized in the balance sheet but not through earnings.

[32] Unrealized gains (losses) not recognized either in the balance sheet or through earnings.

[33] This disclosure must include a breakdown of equities that are subject to the 0 percent, 20 percent, 100 percent, 300 percent, 400 percent, and 600 percent risk weights, as applicable.

(2) The [AGENCY] may apply this subpart to any [BANK] if the [AGENCY] deems it necessary or appropriate because of the level of market risk of the [BANK] or to ensure safe and sound banking practices.

(3) The [AGENCY] may exclude a [BANK] that meets the criteria of paragraph (b)(1) of this section from application of this subpart if the [AGENCY] determines that the exclusion is appropriate based on the level of market risk of the [BANK] and is consistent with safe and sound banking practices.

(c) *Reservation of authority.* (1) The [AGENCY] may require a [BANK] to hold an amount of capital greater than otherwise required under this subpart if the [AGENCY] determines that the [BANK]'s capital requirement for market risk as calculated under this subpart is not commensurate with the market risk of the [BANK]'s covered positions. In making determinations under paragraphs (c)(1) through (c)(3) of this section, the [AGENCY] will apply notice and response procedures generally in the same manner as the notice and response procedures set forth in [12 CFR 3.12, 12 CFR 263.202, 12 CFR 325.6(c), 12 CFR 567.3(d)].

(2) If the [AGENCY] determines that the risk-based capital requirement calculated under this subpart by the [BANK] for one or more covered positions or portfolios of covered positions is not commensurate with the risks associated with those positions or portfolios, the [AGENCY] may require the [BANK] to assign a different risk-based capital requirement to the positions or portfolios that more accurately reflects the risk of the positions or portfolios.

(3) The [AGENCY] may also require a [BANK] to calculate risk-based capital requirements for specific positions or portfolios under this subpart, or under subpart D or subpart E of this part, as appropriate, to more accurately reflect the risks of the positions.

(4) Nothing in this subpart limits the authority of the [AGENCY] under any other provision of law or regulation to take supervisory or enforcement action, including action to address unsafe or unsound practices or conditions, deficient capital levels, or violations of law.

§____.202 Definitions.

(a) Terms set forth in §____.2 and used in this subpart have the definitions assigned thereto in §____.2.

(b) For the purposes of this subpart, the following terms are defined as follows:

Backtesting means the comparison of a [BANK]'s internal estimates with actual outcomes during a sample period not used in model development. For purposes of this subpart, backtesting is one form of out-of-sample testing.

Commodity position means a position for which price risk arises from changes in the price of a commodity.

Corporate debt position means a debt position that is an exposure to a company that is not a sovereign entity, the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, a multilateral development bank, a depository institution, a foreign bank, a credit union, a public sector entity, a government-sponsored entity, or a securitization.

Correlation trading position means:

(1) A securitization position for which all or substantially all of the value of the underlying exposures is based on the credit quality of a single company for which a two-way market exists, or on commonly traded indices based on such exposures for which a two-way market exists on the indices; or

(2) A position that is not a securitization position and that hedges a position described in paragraph (1) of this definition; and

(3) A correlation trading position does not include:

(i) A resecuritization position;

(ii) A derivative of a securitization position that does not provide a pro rata share in the proceeds of a securitization tranche; or

(iii) A securitization position for which the underlying assets or reference exposures are retail exposures, residential mortgage exposures, or commercial mortgage exposures.

Covered position means the following positions:

(1) A trading asset or trading liability (whether on- or off-balance sheet),[1] as reported on Schedule RC–D of the Call Report or Schedule HC–D of the FR Y–9C, that meets the following conditions:

(i) The position is a trading position or hedges another covered position;[2] and

(ii) The position is free of any restrictive covenants on its tradability or the [BANK] is able to hedge the material

risk elements of the position in a two-way market;

(2) A foreign exchange or commodity position, regardless of whether the position is a trading asset or trading liability (excluding any structural foreign currency positions that the [BANK] chooses to exclude with prior supervisory approval); and

(3) Notwithstanding paragraphs (1) and (2) of this definition, a covered position does not include:

(i) An intangible asset, including any servicing asset;

(ii) Any hedge of a trading position that the [AGENCY] determines to be outside the scope of the [BANK]'s hedging strategy required in paragraph (a)(2) of § ____.203;

(iii) Any position that, in form or substance, acts as a liquidity facility that provides support to asset-backed commercial paper;

(iv) A credit derivative the [BANK] recognizes as a guarantee for risk-weighted asset amount calculation purposes under subpart D or subpart E of this part;

(v) Any position that is recognized as a credit valuation adjustment hedge under § ____.132(e)(5) or § ____.132(e)(6), except as provided in § ____.132(e)(6)(vii);

(vi) Any equity position that is not publicly traded, other than a derivative that references a publicly traded equity;

(vii) Any position a [BANK] holds with the intent to securitize; or

(viii) Any direct real estate holding.

Debt position means a covered position that is not a securitization position or a correlation trading position and that has a value that reacts primarily to changes in interest rates or credit spreads.

Default by a sovereign entity has the same meaning as the term sovereign default under § ____.2.

Equity position means a covered position that is not a securitization position or a correlation trading position and that has a value that reacts primarily to changes in equity prices.

Event risk means the risk of loss on equity or hybrid equity positions as a result of a financial event, such as the announcement or occurrence of a company merger, acquisition, spin-off, or dissolution.

Foreign exchange position means a position for which price risk arises from changes in foreign exchange rates.

General market risk means the risk of loss that could result from broad market movements, such as changes in the general level of interest rates, credit spreads, equity prices, foreign exchange rates, or commodity prices.

Hedge means a position or positions that offset all, or substantially all, of one

or more material risk factors of another position.

Idiosyncratic risk means the risk of loss in the value of a position that arises from changes in risk factors unique to that position.

Incremental risk means the default risk and credit migration risk of a position. Default risk means the risk of loss on a position that could result from the failure of an obligor to make timely payments of principal or interest on its debt obligation, and the risk of loss that could result from bankruptcy, insolvency, or similar proceeding. Credit migration risk means the price risk that arises from significant changes in the underlying credit quality of the position.

Market risk means the risk of loss on a position that could result from movements in market prices.

Resecuritization position means a covered position that is:

(1) An on- or off-balance sheet exposure to a resecuritization; or

(2) An exposure that directly or indirectly references a resecuritization exposure in paragraph (1) of this definition.

Securitization means a transaction in which:

(1) All or a portion of the credit risk of one or more underlying exposures is transferred to one or more third parties;

(2) The credit risk associated with the underlying exposures has been separated into at least two tranches that reflect different levels of seniority;

(3) Performance of the securitization exposures depends upon the performance of the underlying exposures;

(4) 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);

(5) For non-synthetic securitizations, the underlying exposures are not owned by an operating company;

(6) The underlying exposures are not owned by a small business investment company described in section 302 of the Small Business Investment Act;

(7) The underlying exposures are not owned by a firm an investment in which qualifies as a community development investment under section 24 (Eleventh) of the National Bank Act;

(8) The [AGENCY] may determine that a transaction in which the underlying exposures are owned by an investment firm that exercises substantially unfettered control over the size and composition of its assets, liabilities, and off-balance sheet

exposures is not a securitization based on the transaction's leverage, risk profile, or economic substance;

(9) The [AGENCY] may deem an exposure to a transaction that meets the definition of a securitization, notwithstanding paragraph (5), (6), or (7) of this definition, to be a securitization based on the transaction's leverage, risk profile, or economic substance; and

(10) The transaction is not:

(i) An investment fund;

(ii) A collective investment fund (as defined in 12 CFR 208.34 (Board), 12 CFR 9.18 (OCC), and 12 CFR 344.3 (FDIC);

(iii) A pension fund regulated under the ERISA or a foreign equivalent thereof; or

(iv) Regulated under the Investment Company Act of 1940 (15 U.S.C. 80a–1) or a foreign equivalent thereof.

Securitization position means a covered position that is:

(1) An on-balance sheet or off-balance sheet credit exposure (including credit-enhancing representations and warranties) that arises from a securitization (including a resecuritization); or

(2) An exposure that directly or indirectly references a securitization exposure described in paragraph (1) of this definition.

Sovereign debt position means a direct exposure to a sovereign entity.

Specific risk means the risk of loss on a position that could result from factors other than broad market movements and includes event risk, default risk, and idiosyncratic risk.

Structural position in a foreign currency means a position that is not a trading position and that is:

(1) Subordinated debt, equity, or minority interest in a consolidated subsidiary that is denominated in a foreign currency;

(2) Capital assigned to foreign branches that is denominated in a foreign currency;

(3) A position related to an unconsolidated subsidiary or another item that is denominated in a foreign currency and that is deducted from the [BANK]'s tier 1 or tier 2 capital; or

(4) A position designed to hedge a [BANK]'s capital ratios or earnings against the effect on paragraphs (1), (2), or (3) of this definition of adverse exchange rate movements.

Term repo-style transaction means a repo-style transaction that has an original maturity in excess of one business day.

Trading position means a position that is held by the [BANK] for the purpose of short-term resale or with the intent of benefiting from actual or expected short-term price movements, or to lock in arbitrage profits.

Two-way market means a market where there are independent bona fide offers to buy and sell so that a price reasonably related to the last sales price or current bona fide competitive bid and offer quotations can be determined within one day and settled at that price within a relatively short timeframe conforming to trade custom.

Value-at-Risk (VaR) means the estimate of the maximum amount that the value of one or more positions could decline due to market price or rate movements during a fixed holding period within a stated confidence interval.

§ ____.203 Requirements for application of this subpart F.

(a) *Trading positions.* (1) *Identification of trading positions.* A [BANK] must have clearly defined policies and procedures for determining which of its trading assets and trading liabilities are trading positions and which of its trading positions are correlation trading positions. These policies and procedures must take into account:

(i) The extent to which a position, or a hedge of its material risks, can be marked-to-market daily by reference to a two-way market; and

(ii) Possible impairments to the liquidity of a position or its hedge.

(2) *Trading and hedging strategies.* A [BANK] must have clearly defined trading and hedging strategies for its trading positions that are approved by senior management of the [BANK].

(i) The trading strategy must articulate the expected holding period of, and the market risk associated with, each portfolio of trading positions.

(ii) The hedging strategy must articulate for each portfolio of trading positions the level of market risk the [BANK] is willing to accept and must detail the instruments, techniques, and strategies the [BANK] will use to hedge the risk of the portfolio.

(b) *Management of covered positions.* (1) *Active management.* A [BANK] must have clearly defined policies and procedures for actively managing all covered positions. At a minimum, these policies and procedures must require:

(i) Marking positions to market or to model on a daily basis;

(ii) Daily assessment of the [BANK]'s ability to hedge position and portfolio risks, and of the extent of market liquidity;

(iii) Establishment and daily monitoring of limits on positions by a risk control unit independent of the trading business unit;

(iv) Daily monitoring by senior management of information described in paragraphs (b)(1)(i) through (b)(1)(iii) of this section;

(v) At least annual reassessment of established limits on positions by senior management; and

(vi) At least annual assessments by qualified personnel of the quality of market inputs to the valuation process, the soundness of key assumptions, the reliability of parameter estimation in pricing models, and the stability and accuracy of model calibration under alternative market scenarios.

(2) *Valuation of covered positions.* The [BANK] must have a process for prudent valuation of its covered positions that includes policies and procedures on the valuation of positions, marking positions to market or to model, independent price verification, and valuation adjustments or reserves. The valuation process must consider, as appropriate, unearned credit spreads, close-out costs, early termination costs, investing and funding costs, liquidity, and model risk.

(c) *Requirements for internal models.* (1) A [BANK] must obtain the prior written approval of the [AGENCY] before using any internal model to calculate its risk-based capital requirement under this subpart.

(2) A [BANK] must meet all of the requirements of this section on an ongoing basis. The [BANK] must promptly notify the [AGENCY] when:

(i) The [BANK] plans to extend the use of a model that the [AGENCY] has approved under this subpart to an additional business line or product type;

(ii) The [BANK] makes any change to an internal model approved by the [AGENCY] under this subpart that would result in a material change in the [BANK]'s risk-weighted asset amount for a portfolio of covered positions; or

(iii) The [BANK] makes any material change to its modeling assumptions.

(3) The [AGENCY] may rescind its approval of the use of any internal model (in whole or in part) or of the determination of the approach under § ____.209(a)(2)(ii) for a [BANK]'s modeled correlation trading positions and determine an appropriate capital requirement for the covered positions to which the model would apply, if the [AGENCY] determines that the model no longer complies with this subpart or fails to reflect accurately the risks of the [BANK]'s covered positions.

(4) The [BANK] must periodically, but no less frequently than annually, review its internal models in light of developments in financial markets and modeling technologies, and enhance those models as appropriate to ensure

that they continue to meet the [AGENCY]'s standards for model approval and employ risk measurement methodologies that are most appropriate for the [BANK]'s covered positions.

(5) The [BANK] must incorporate its internal models into its risk management process and integrate the internal models used for calculating its VaR-based measure into its daily risk management process.

(6) The level of sophistication of a [BANK]'s internal models must be commensurate with the complexity and amount of its covered positions. A [BANK]'s internal models may use any of the generally accepted approaches, including but not limited to variance-covariance models, historical simulations, or Monte Carlo simulations, to measure market risk.

(7) The [BANK]'s internal models must properly measure all the material risks in the covered positions to which they are applied.

(8) The [BANK]'s internal models must conservatively assess the risks arising from less liquid positions and positions with limited price transparency under realistic market scenarios.

(9) The [BANK] must have a rigorous and well-defined process for re-estimating, re-evaluating, and updating its internal models to ensure continued applicability and relevance.

(10) If a [BANK] uses internal models to measure specific risk, the internal models must also satisfy the requirements in paragraph (b)(1) of § ____.207.

(d) *Control, oversight, and validation mechanisms.* (1) The [BANK] must have a risk control unit that reports directly to senior management and is independent from the business trading units.

(2) The [BANK] must validate its internal models initially and on an ongoing basis. The [BANK]'s validation process must be independent of the internal models' development, implementation, and operation, or the validation process must be subjected to an independent review of its adequacy and effectiveness. Validation must include:

(i) An evaluation of the conceptual soundness of (including developmental evidence supporting) the internal models;

(ii) An ongoing monitoring process that includes verification of processes and the comparison of the [BANK]'s model outputs with relevant internal and external data sources or estimation techniques; and

(iii) An outcomes analysis process that includes backtesting. For internal

models used to calculate the VaR-based measure, this process must include a comparison of the changes in the [BANK]'s portfolio value that would have occurred were end-of-day positions to remain unchanged (therefore, excluding fees, commissions, reserves, net interest income, and intraday trading) with VaR-based measures during a sample period not used in model development.

(3) The [BANK] must stress test the market risk of its covered positions at a frequency appropriate to each portfolio, and in no case less frequently than quarterly. The stress tests must take into account concentration risk (including but not limited to concentrations in single issuers, industries, sectors, or markets), illiquidity under stressed market conditions, and risks arising from the [BANK]'s trading activities that may not be adequately captured in its internal models.

(4) The [BANK] must have an internal audit function independent of business-line management that at least annually assesses the effectiveness of the controls supporting the [BANK]'s market risk measurement systems, including the activities of the business trading units and independent risk control unit, compliance with policies and procedures, and calculation of the [BANK]'s measures for market risk under this subpart. At least annually, the internal audit function must report its findings to the [BANK]'s board of directors (or a committee thereof).

(e) *Internal assessment of capital adequacy.* The [BANK] must have a rigorous process for assessing its overall capital adequacy in relation to its market risk. The assessment must take into account risks that may not be captured fully in the VaR-based measure, including concentration and liquidity risk under stressed market conditions.

(f) *Documentation.* The [BANK] must adequately document all material aspects of its internal models, management and valuation of covered positions, control, oversight, validation and review processes and results, and internal assessment of capital adequacy.

§ ____.204   Measure for market risk.

(a) *General requirement.* (1) A [BANK] must calculate its standardized measure for market risk by following the steps described in paragraph (a)(2) of this section. An advanced approaches [BANK] also must calculate an advanced measure for market risk by following the steps in paragraph (a)(2) of this section.

(2) *Measure for market risk.* A [BANK] must calculate the standardized

measure for market risk, which equals the sum of the VaR-based capital requirement, stressed VaR-based capital requirement, specific risk add-ons, incremental risk capital requirement, comprehensive risk capital requirement, and capital requirement for *de minimis* exposures all as defined under this paragraph (a)(2), (except, that the [BANK] may not use the SFA in section 210(b)(2)(vii)(B) of this subpart for purposes of this calculation). An advanced approaches [BANK] also must calculate the advanced measure for market risk, which equals the sum of the VaR-based capital requirement, stressed VaR-based capital requirement, specific risk add-ons, incremental risk capital requirement, comprehensive risk capital requirement, and capital requirement for *de minimis* exposures as defined under this paragraph (a)(2).

(i) *VaR-based capital requirement.* A [BANK]'s VaR-based capital requirement equals the greater of:

(A) The previous day's VaR-based measure as calculated under § ____.205; or

(B) The average of the daily VaR-based measures as calculated under § ____.205 for each of the preceding 60 business days multiplied by three, except as provided in paragraph (b) of this section.

(ii) *Stressed VaR-based capital requirement.* A [BANK]'s stressed VaR-based capital requirement equals the greater of:

(A) The most recent stressed VaR-based measure as calculated under § ____.206; or

(B) The average of the stressed VaR-based measures as calculated under § ____.206 for each of the preceding 12 weeks multiplied by three, except as provided in paragraph (b) of this section.

(iii) *Specific risk add-ons.* A [BANK]'s specific risk add-ons equal any specific risk add-ons that are required under § ____.207 and are calculated in accordance with § ____.210.

(iv) *Incremental risk capital requirement.* A [BANK]'s incremental risk capital requirement equals any incremental risk capital requirement as calculated under section 208 of this subpart.

(v) *Comprehensive risk capital requirement.* A [BANK]'s comprehensive risk capital requirement equals any comprehensive risk capital requirement as calculated under section 209 of this subpart.

(vi) *Capital requirement for de minimis exposures.* A [BANK]'s capital requirement for *de minimis* exposures equals:

(A) The absolute value of the market value of those *de minimis* exposures that are not captured in the [BANK]'s VaR-based measure or under paragraph (a)(2)(vi)(B) of this section; and

(B) With the prior written approval of the [AGENCY], the capital requirement for any *de minimis* exposures using alternative techniques that appropriately measure the market risk associated with those exposures.

(b) *Backtesting.* A [BANK] must compare each of its most recent 250 business days' trading losses (excluding fees, commissions, reserves, net interest income, and intraday trading) with the corresponding daily VaR-based measures calibrated to a one-day holding period and at a one-tail, 99.0 percent confidence level. A [BANK] must begin backtesting as required by this paragraph no later than one year after the later of January 1, 2013 and the date on which the [BANK] becomes subject to this subpart. In the interim, consistent with safety and soundness principles, a [BANK] subject to this subpart as of its effective date should continue to follow backtesting procedures in accordance with the [AGENCY]'s supervisory expectations.

(1) Once each quarter, the [BANK] must identify the number of exceptions (that is, the number of business days for which the actual daily net trading loss, if any, exceeds the corresponding daily VaR-based measure) that have occurred over the preceding 250 business days.

(2) A [BANK] must use the multiplication factor in table 1 that corresponds to the number of exceptions identified in paragraph (b)(1) of this section to determine its VaR-based capital requirement for market risk under paragraph (a)(2)(i) of this section and to determine its stressed VaR-based capital requirement for market risk under paragraph (a)(2)(ii) of this section until it obtains the next quarter's backtesting results, unless the [AGENCY] notifies the [BANK] in writing that a different adjustment or other action is appropriate.

TABLE 1—MULTIPLICATION FACTORS BASED ON RESULTS OF BACKTESTING

Number of exceptions	Multiplication factor
4 or fewer	3.00
5	3.40
6	3.50
7	3.65
8	3.75
9	3.85
10 or more	4.00

§ ____.205 VaR-based measure.

(a) *General requirement.* A [BANK] must use one or more internal models to calculate daily a VaR-based measure of the general market risk of all covered positions. The daily VaR-based measure also may reflect the [BANK]'s specific risk for one or more portfolios of debt and equity positions, if the internal models meet the requirements of paragraph (b)(1) of § ____.207. The daily VaR-based measure must also reflect the [BANK]'s specific risk for any portfolio of correlation trading positions that is modeled under § ____.209. A [BANK] may elect to include term repo-style transactions in its VaR-based measure, provided that the [BANK] includes all such term repo-style transactions consistently over time.

(1) The [BANK]'s internal models for calculating its VaR-based measure must use risk factors sufficient to measure the market risk inherent in all covered positions. The market risk categories must include, as appropriate, interest rate risk, credit spread risk, equity price risk, foreign exchange risk, and commodity price risk. For material positions in the major currencies and markets, modeling techniques must incorporate enough segments of the yield curve—in no case less than six—to capture differences in volatility and less than perfect correlation of rates along the yield curve.

(2) The VaR-based measure may incorporate empirical correlations within and across risk categories, provided the [BANK] validates and demonstrates the reasonableness of its process for measuring correlations. If the VaR-based measure does not incorporate empirical correlations across risk categories, the [BANK] must add the separate measures from its internal models used to calculate the VaR-based measure for the appropriate market risk categories (interest rate risk, credit spread risk, equity price risk, foreign exchange rate risk, and/or commodity price risk) to determine its aggregate VaR-based measure.

(3) The VaR-based measure must include the risks arising from the nonlinear price characteristics of options positions or positions with embedded optionality and the sensitivity of the market value of the positions to changes in the volatility of the underlying rates, prices, or other material risk factors. A [BANK] with a large or complex options portfolio must measure the volatility of options positions or positions with embedded optionality by different maturities and/or strike prices, where material.

(4) The [BANK] must be able to justify to the satisfaction of the [AGENCY] the

omission of any risk factors from the calculation of its VaR-based measure that the [BANK] uses in its pricing models.

(5) The [BANK] must demonstrate to the satisfaction of the [AGENCY] the appropriateness of any proxies used to capture the risks of the [BANK]'s actual positions for which such proxies are used.

(b) *Quantitative requirements for VaR-based measure.* (1) The VaR-based measure must be calculated on a daily basis using a one-tail, 99.0 percent confidence level, and a holding period equivalent to a 10-business-day movement in underlying risk factors, such as rates, spreads, and prices. To calculate VaR-based measures using a 10-business-day holding period, the [BANK] may calculate 10-business-day measures directly or may convert VaR-based measures using holding periods other than 10 business days to the equivalent of a 10-business-day holding period. A [BANK] that converts its VaR-based measure in such a manner must be able to justify the reasonableness of its approach to the satisfaction of the [AGENCY].

(2) The VaR-based measure must be based on a historical observation period of at least one year. Data used to determine the VaR-based measure must be relevant to the [BANK]'s actual exposures and of sufficient quality to support the calculation of risk-based capital requirements. The [BANK] must update data sets at least monthly or more frequently as changes in market conditions or portfolio composition warrant. For a [BANK] that uses a weighting scheme or other method for the historical observation period, the [BANK] must either:

(i) Use an effective observation period of at least one year in which the average time lag of the observations is at least six months; or

(ii) Demonstrate to the [AGENCY] that its weighting scheme is more effective than a weighting scheme with an average time lag of at least six months representing the volatility of the [BANK]'s trading portfolio over a full business cycle. A [BANK] using this option must update its data more frequently than monthly and in a manner appropriate for the type of weighting scheme.

(c) A [BANK] must divide its portfolio into a number of significant subportfolios approved by the [AGENCY] for subportfolio backtesting purposes. These subportfolios must be sufficient to allow the [BANK] and the [AGENCY] to assess the adequacy of the VaR model at the risk factor level; the [AGENCY] will evaluate the

appropriateness of these subportfolios relative to the value and composition of the [BANK]'s covered positions. The [BANK] must retain and make available to the [AGENCY] the following information for each subportfolio for each business day over the previous two years (500 business days), with no more than a 60-day lag:

(1) A daily VaR-based measure for the subportfolio calibrated to a one-tail, 99.0 percent confidence level;

(2) The daily profit or loss for the subportfolio (that is, the net change in price of the positions held in the portfolio at the end of the previous business day); and

(3) The p-value of the profit or loss on each day (that is, the probability of observing a profit that is less than, or a loss that is greater than, the amount reported for purposes of paragraph (c)(2) of this section based on the model used to calculate the VaR-based measure described in paragraph (c)(1) of this section).

§ ____.206 Stressed VaR-based measure.

(a) *General requirement.* At least weekly, a [BANK] must use the same internal model(s) used to calculate its VaR-based measure to calculate a stressed VaR-based measure.

(b) *Quantitative requirements for stressed VaR-based measure.* (1) A [BANK] must calculate a stressed VaR-based measure for its covered positions using the same model(s) used to calculate the VaR-based measure, subject to the same confidence level and holding period applicable to the VaR-based measure under § ____.205, but with model inputs calibrated to historical data from a continuous 12-month period that reflects a period of significant financial stress appropriate to the [BANK]'s current portfolio.

(2) The stressed VaR-based measure must be calculated at least weekly and be no less than the [BANK]'s VaR-based measure.

(3) A [BANK] must have policies and procedures that describe how it determines the period of significant financial stress used to calculate the [BANK]'s stressed VaR-based measure under this section and must be able to provide empirical support for the period used. The [BANK] must obtain the prior approval of the [AGENCY] for, and notify the [AGENCY] if the [BANK] makes any material changes to, these policies and procedures. The policies and procedures must address:

(i) How the [BANK] links the period of significant financial stress used to calculate the stressed VaR-based measure to the composition and

directional bias of its current portfolio; and

(ii) The [BANK]'s process for selecting, reviewing, and updating the period of significant financial stress used to calculate the stressed VaR-based measure and for monitoring the appropriateness of the period to the [BANK]'s current portfolio.

(4) Nothing in this section prevents the [AGENCY] from requiring a [BANK] to use a different period of significant financial stress in the calculation of the stressed VaR-based measure.

§ ____.207 Specific risk.

(a) *General requirement.* A [BANK] must use one of the methods in this section to measure the specific risk for each of its debt, equity, and securitization positions with specific risk.

(b) *Modeled specific risk.* A [BANK] may use models to measure the specific risk of covered positions as provided in paragraph (a) of section 205 of this subpart (therefore, excluding securitization positions that are not modeled under section 209 of this subpart). A [BANK] must use models to measure the specific risk of correlation trading positions that are modeled under § ____.209.

(1) *Requirements for specific risk modeling.* (i) If a [BANK] uses internal models to measure the specific risk of a portfolio, the internal models must:

(A) Explain the historical price variation in the portfolio;

(B) Be responsive to changes in market conditions;

(C) Be robust to an adverse environment, including signaling rising risk in an adverse environment; and

(D) Capture all material components of specific risk for the debt and equity positions in the portfolio. Specifically, the internal models must:

(*1*) Capture event risk and idiosyncratic risk;

(*2*) Capture and demonstrate sensitivity to material differences between positions that are similar but not identical and to changes in portfolio composition and concentrations.

(ii) If a [BANK] calculates an incremental risk measure for a portfolio of debt or equity positions under section 208 of this subpart, the [BANK] is not required to capture default and credit migration risks in its internal models used to measure the specific risk of those portfolios.

(2) *Specific risk fully modeled for one or more portfolios.* If the [BANK]'s VaR-based measure captures all material aspects of specific risk for one or more of its portfolios of debt, equity, or correlation trading positions, the

[BANK] has no specific risk add-on for those portfolios for purposes of paragraph (a)(2)(iii) of § ____.204.

(c) *Specific risk not modeled.* (1) If the [BANK]'s VaR-based measure does not capture all material aspects of specific risk for a portfolio of debt, equity, or correlation trading positions, the [BANK] must calculate a specific-risk add-on for the portfolio under the standardized measurement method as described in § ____.210.

(2) A [BANK] must calculate a specific risk add-on under the standardized measurement method as described in § ____.210 for all of its securitization positions that are not modeled under § ____.209.

§ ____.208 Incremental risk.

(a) *General requirement.* A [BANK] that measures the specific risk of a portfolio of debt positions under § ____.207(b) using internal models must calculate at least weekly an incremental risk measure for that portfolio according to the requirements in this section. The incremental risk measure is the [BANK]'s measure of potential losses due to incremental risk over a one-year time horizon at a one-tail, 99.9 percent confidence level, either under the assumption of a constant level of risk, or under the assumption of constant positions. With the prior approval of the [AGENCY], a [BANK] may choose to include portfolios of equity positions in its incremental risk model, provided that it consistently includes such equity positions in a manner that is consistent with how the [BANK] internally measures and manages the incremental risk of such positions at the portfolio level. If equity positions are included in the model, for modeling purposes default is considered to have occurred upon the default of any debt of the issuer of the equity position. A [BANK] may not include correlation trading positions or securitization positions in its incremental risk measure.

(b) *Requirements for incremental risk modeling.* For purposes of calculating the incremental risk measure, the incremental risk model must:

(1) Measure incremental risk over a one-year time horizon and at a one-tail, 99.9 percent confidence level, either under the assumption of a constant level of risk, or under the assumption of constant positions.

(i) A constant level of risk assumption means that the [BANK] rebalances, or rolls over, its trading positions at the beginning of each liquidity horizon over the one-year horizon in a manner that maintains the [BANK]'s initial risk level. The [BANK] must determine the

frequency of rebalancing in a manner consistent with the liquidity horizons of the positions in the portfolio. The liquidity horizon of a position or set of positions is the time required for a [BANK] to reduce its exposure to, or hedge all of its material risks of, the position(s) in a stressed market. The liquidity horizon for a position or set of positions may not be less than the shorter of three months or the contractual maturity of the position.

(ii) A constant position assumption means that the [BANK] maintains the same set of positions throughout the one-year horizon. If a [BANK] uses this assumption, it must do so consistently across all portfolios.

(iii) A [BANK]'s selection of a constant position or a constant risk assumption must be consistent between the [BANK]'s incremental risk model and its comprehensive risk model described in section 209 of this subpart, if applicable.

(iv) A [BANK]'s treatment of liquidity horizons must be consistent between the [BANK]'s incremental risk model and its comprehensive risk model described in section 209, if applicable.

(2) Recognize the impact of correlations between default and migration events among obligors.

(3) Reflect the effect of issuer and market concentrations, as well as concentrations that can arise within and across product classes during stressed conditions.

(4) Reflect netting only of long and short positions that reference the same financial instrument.

(5) Reflect any material mismatch between a position and its hedge.

(6) Recognize the effect that liquidity horizons have on dynamic hedging strategies. In such cases, a [BANK] must:

(i) Choose to model the rebalancing of the hedge consistently over the relevant set of trading positions;

(ii) Demonstrate that the inclusion of rebalancing results in a more appropriate risk measurement;

(iii) Demonstrate that the market for the hedge is sufficiently liquid to permit rebalancing during periods of stress; and

(iv) Capture in the incremental risk model any residual risks arising from such hedging strategies.

(7) Reflect the nonlinear impact of options and other positions with material nonlinear behavior with respect to default and migration changes.

(8) Maintain consistency with the [BANK]'s internal risk management methodologies for identifying, measuring, and managing risk.

(c) *Calculation of incremental risk capital requirement.* The incremental risk capital requirement is the greater of:

(1) The average of the incremental risk measures over the previous 12 weeks; or

(2) The most recent incremental risk measure.

§ ___.209 Comprehensive risk.

(a) *General requirement.* (1) Subject to the prior approval of the [AGENCY], a [BANK] may use the method in this section to measure comprehensive risk, that is, all price risk, for one or more portfolios of correlation trading positions.

(2) A [BANK] that measures the price risk of a portfolio of correlation trading positions using internal models must calculate at least weekly a comprehensive risk measure that captures all price risk according to the requirements of this section. The comprehensive risk measure is either:

(i) The sum of:

(A) The [BANK]'s modeled measure of all price risk determined according to the requirements in paragraph (b) of this section; and

(B) A surcharge for the [BANK]'s modeled correlation trading positions equal to the total specific risk add-on for such positions as calculated under section 210 of this subpart multiplied by 8.0 percent; or

(ii) With approval of the [AGENCY] and provided the [BANK] has met the requirements of this section for a period of at least one year and can demonstrate the effectiveness of the model through the results of ongoing model validation efforts including robust benchmarking, the greater of:

(A) The [BANK]'s modeled measure of all price risk determined according to the requirements in paragraph (b) of this section; or

(B) The total specific risk add-on that would apply to the bank's modeled correlation trading positions as calculated under section 210 of this subpart multiplied by 8.0 percent.

(b) *Requirements for modeling all price risk.* If a [BANK] uses an internal model to measure the price risk of a portfolio of correlation trading positions:

(1) The internal model must measure comprehensive risk over a one-year time horizon at a one-tail, 99.9 percent confidence level, either under the assumption of a constant level of risk, or under the assumption of constant positions.

(2) The model must capture all material price risk, including but not limited to the following:

(i) The risks associated with the contractual structure of cash flows of

the position, its issuer, and its underlying exposures;

(ii) Credit spread risk, including nonlinear price risks;

(iii) The volatility of implied correlations, including nonlinear price risks such as the cross-effect between spreads and correlations;

(iv) Basis risk;

(v) Recovery rate volatility as it relates to the propensity for recovery rates to affect tranche prices; and

(vi) To the extent the comprehensive risk measure incorporates the benefits of dynamic hedging, the static nature of the hedge over the liquidity horizon must be recognized. In such cases, a [BANK] must:

(A) Choose to model the rebalancing of the hedge consistently over the relevant set of trading positions;

(B) Demonstrate that the inclusion of rebalancing results in a more appropriate risk measurement;

(C) Demonstrate that the market for the hedge is sufficiently liquid to permit rebalancing during periods of stress; and

(D) Capture in the comprehensive risk model any residual risks arising from such hedging strategies;

(3) The [BANK] must use market data that are relevant in representing the risk profile of the [BANK]'s correlation trading positions in order to ensure that the [BANK] fully captures the material risks of the correlation trading positions in its comprehensive risk measure in accordance with this section; and

(4) The [BANK] must be able to demonstrate that its model is an appropriate representation of comprehensive risk in light of the historical price variation of its correlation trading positions.

(c) *Requirements for stress testing.* (1) A [BANK] must at least weekly apply specific, supervisory stress scenarios to its portfolio of correlation trading positions that capture changes in:

(i) Default rates;

(ii) Recovery rates;

(iii) Credit spreads;

(iv) Correlations of underlying exposures; and

(v) Correlations of a correlation trading position and its hedge.

(2) *Other requirements.* (i) A [BANK] must retain and make available to the [AGENCY] the results of the supervisory stress testing, including comparisons with the capital requirements generated by the [BANK]'s comprehensive risk model.

(ii) A [BANK] must report to the [AGENCY] promptly any instances where the stress tests indicate any material deficiencies in the comprehensive risk model.

(d) *Calculation of comprehensive risk capital requirement.* The comprehensive risk capital requirement is the greater of:

(1) The average of the comprehensive risk measures over the previous 12 weeks; or

(2) The most recent comprehensive risk measure.

§____.210 Standardized measurement method for specific risk.

(a) *General requirement.* A [BANK] must calculate a total specific risk add-on for each portfolio of debt and equity positions for which the [BANK]'s VaR-based measure does not capture all material aspects of specific risk and for all securitization positions that are not modeled under §____.209. A [BANK] must calculate each specific risk add-on in accordance with the requirements of this section. Notwithstanding any other definition or requirement in this appendix, a position that would have qualified as a debt position or an equity position but for the fact that it qualifies as a correlation trading position under paragraph (2) of the definition of correlation trading position in §____.2, shall be considered a debt position or an equity position, respectively, for purposes of this section 210 of this subpart.

(1) The specific risk add-on for an individual debt or securitization position that represents sold credit protection is capped at the notional amount of the credit derivative contract. The specific risk add-on for an individual debt or securitization position that represents purchased credit protection is capped at the current market value of the transaction plus the absolute value of the present value of all remaining payments to the protection seller under the transaction. This sum is equal to the value of the protection leg of the transaction.

(2) For debt, equity, or securitization positions that are derivatives with linear payoffs, a [BANK] must assign a specific risk-weighting factor to the market value of the effective notional amount of the underlying instrument or index portfolio, except for a securitization position for which the [BANK] directly calculates a specific risk add-on using the SFA in paragraph (b)(2)(vii)(B) of this section. A swap must be included as an effective notional position in the underlying instrument or portfolio, with the receiving side treated as a long position and the paying side treated as a short position. For debt, equity, or securitization positions that are

derivatives with nonlinear payoffs, a [BANK] must risk weight the market value of the effective notional amount of the underlying instrument or portfolio multiplied by the derivative's delta.

(3) For debt, equity, or securitization positions, a [BANK] may net long and short positions (including derivatives) in identical issues or identical indices. A [BANK] may also net positions in depositary receipts against an opposite position in an identical equity in different markets, provided that the [BANK] includes the costs of conversion.

(4) A set of transactions consisting of either a debt position and its credit derivative hedge or a securitization position and its credit derivative hedge has a specific risk add-on of zero if:

(i) The debt or securitization position is fully hedged by a total return swap (or similar instrument where there is a matching of swap payments and changes in market value of the debt or securitization position);

(ii) There is an exact match between the reference obligation of the swap and the debt or securitization position;

(iii) There is an exact match between the currency of the swap and the debt or securitization position; and

(iv) There is either an exact match between the maturity date of the swap and the maturity date of the debt or securitization position; or, in cases where a total return swap references a portfolio of positions with different maturity dates, the total return swap maturity date must match the maturity date of the underlying asset in that portfolio that has the latest maturity date.

(5) The specific risk add-on for a set of transactions consisting of either a debt position and its credit derivative hedge or a securitization position and its credit derivative hedge that does not meet the criteria of paragraph (a)(4) of this section is equal to 20.0 percent of the capital requirement for the side of the transaction with the higher specific risk add-on when:

(i) The credit risk of the position is fully hedged by a credit default swap or similar instrument;

(ii) There is an exact match between the reference obligation of the credit derivative hedge and the debt or securitization position;

(iii) There is an exact match between the currency of the credit derivative hedge and the debt or securitization position; and

(iv) There is either an exact match between the maturity date of the credit derivative hedge and the maturity date of the debt or securitization position; or, in the case where the credit derivative hedge has a standard maturity date:

(A) The maturity date of the credit derivative hedge is within 30 business days of the maturity date of the debt or securitization position; or

(B) For purchased credit protection, the maturity date of the credit derivative hedge is later than the maturity date of the debt or securitization position, but is no later than the standard maturity date for that instrument that immediately follows the maturity date of the debt or securitization position. The maturity date of the credit derivative hedge may not exceed the maturity date of the debt or securitization position by more than 90 calendar days.

(6) The specific risk add-on for a set of transactions consisting of either a debt position and its credit derivative hedge or a securitization position and its credit derivative hedge that does not meet the criteria of either paragraph (a)(4) or (a)(5) of this section, but in which all or substantially all of the price risk has been hedged, is equal to the specific risk add-on for the side of the transaction with the higher specific risk add-on.

(b) *Debt and securitization positions.* (1) The total specific risk add-on for a portfolio of debt or securitization positions is the sum of the specific risk add-ons for individual debt or securitization positions, as computed under this section. To determine the specific risk add-on for individual debt or securitization positions, a [BANK] must multiply the absolute value of the current market value of each net long or net short debt or securitization position in the portfolio by the appropriate specific risk-weighting factor as set forth in paragraphs (b)(2)(i) through (b)(2)(vii) of this section.

(2) For the purpose of this section, the appropriate specific risk-weighting factors include: (i) *Sovereign debt positions.* (A) *In general.* A [BANK] must assign a specific risk-weighting factor to a sovereign debt position based on the CRC applicable to the sovereign entity and, as applicable, the remaining contractual maturity of the position, in accordance with table 2 of this section. Sovereign debt positions that are backed by the full faith and credit of the United States are treated as having a CRC of 0.

TABLE 2—SPECIFIC RISK-WEIGHTING FACTORS FOR SOVEREIGN DEBT POSITIONS

		Specific risk-weighting factor	Percent
Sovereign CRC	0–1		0.0
	2–3	Remaining contractual maturity is 6 months or less	0.25
		Remaining contractual maturity is greater than 6 and up to and including 24 months.	1.0
		Remaining contractual maturity exceeds 24 months	1.6
	4–6		8.0
	7		12.0
No CRC			8.0
Default by the Sovereign Entity			12.0

(B) Notwithstanding paragraph (b)(2)(i)(A) of this section, a [BANK] may assign to a sovereign debt position a specific risk-weighting factor that is lower than the applicable specific risk-weighting factor in table 2 if:

(*1*) The position is denominated in the sovereign entity's currency;

(*2*) The [BANK] has at least an equivalent amount of liabilities in that currency; and

(*3*) The sovereign entity allows banks under its jurisdiction to assign the lower specific risk-weighting factor to the same exposures to the sovereign entity.

(C) A [BANK] must assign a 12.0 percent specific risk-weighting factor to a sovereign debt position immediately upon determination a default has occurred; or if a default has occurred within the previous five years.

(D) A [BANK] must assign an 8.0 percent specific risk-weighting factor to a sovereign debt position if the sovereign entity does not have a CRC assigned to it, unless the sovereign debt position must be assigned a higher specific risk-weighting factor under paragraph (b)(2)(i)(C) of this section.

(ii) *Certain supranational entity and multilateral development bank debt positions.* A [BANK] may assign a 0.0 percent specific risk-weighting factor to a debt position that is an exposure to the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, or an MDB.

(iii) *GSE debt positions.* A [BANK] must assign a 1.6 percent specific risk-weighting factor to a debt position that

is an exposure to a GSE. Notwithstanding the foregoing, a [BANK] must assign an 8.0 percent specific risk-weighting factor to preferred stock issued by a GSE.

(iv) *Depository institution, foreign bank, and credit union debt positions.* (A) Except as provided in paragraph (b)(2)(iv)(B) of this section, a [BANK] must assign a specific risk-weighting factor to a debt position that is an exposure to a depository institution, a foreign bank, or a credit union using the specific risk-weighting factor that corresponds to that entity's home country and, as applicable, the remaining contractual maturity of the position, in accordance with table 3 of this section.

TABLE 3—SPECIFIC RISK-WEIGHTING FACTORS FOR DEPOSITORY INSTITUTIONS, FOREIGN BANK, AND CREDIT UNION DEBT PENSIONS

		Specific risk-weighting factor	Percent
Sovereign CRC	0–2	Remaining contractual maturity of 6 months or less	0.25
		Remaining contractual maturity of greater than 6 and up to and including 24 months.	1.0
		Remaining contractual maturity exceeds 24 months	1.6
	3		8.0
	4–7		12.0
No CRC			8.0
Default by the Sovereign Entity			12.0

(B) A [BANK] must assign a specific risk-weighting factor of 8.0 percent to a debt position that is an exposure to a depository institution or a foreign bank that is includable in the depository institution's or foreign bank's regulatory capital and that is not subject to

deduction as a reciprocal holding under § ____.22.

(C) A [BANK] must assign a 12.0 percent specific risk-weighting factor to a debt position that is an exposure to a foreign bank immediately upon determination that a default by the

foreign bank's home country has occurred or if a default by the foreign bank's home country has occurred within the previous five years.

(v) *PSE debt positions.* (A) Except as provided in paragraph (b)(2)(v)(B) of this section, a [BANK] must assign a

specific risk-weighting factor to a debt position that is an exposure to a PSE based on the specific risk-weighting factor that corresponds to the PSE's home country and to the position's categorization as a general obligation or revenue obligation and, as applicable, the remaining contractual maturity of the position, as set forth in tables 4 and 5 of this section.

(B) A [BANK] may assign a lower specific risk-weighting factor than would otherwise apply under tables 4 and 5 of this section to a debt position that is an exposure to a foreign PSE if:

(1) The PSE's home country allows banks under its jurisdiction to assign a lower specific risk-weighting factor to such position; and

(2) The specific risk-weighting factor is not lower than the risk weight that corresponds to the PSE's home country in accordance with tables 4 and 5 of this section.

(C) A [BANK] must assign a 12.0 percent specific risk-weighting factor to a PSE debt position immediately upon determination that a default by the PSE's home country has occurred or if a default by the PSE's home country has occurred within the previous five years.

TABLE 4—SPECIFIC RISK-WEIGHTING FACTORS FOR PSE GENERAL OBLIGATION DEBT POSITIONS

		General obligations specific risk-weighting factor	Percent
Sovereign CRC	0–2	Remaining contractual maturity of 6 months or less	0.25
		Remaining contractual maturity of greater than 6 and up to and including 24 months.	1.0
		Remaining contractual maturity exceeds 24 months	1.6
	3		8.0
	4–7		12.0
No CFR			8.0
Default by the Sovereign Entity			12.0

TABLE 5—SPECIFIC RISK-WEIGHTING FACTORS FOR PSE REVENUE OBLIGATION DEBT POSITIONS

		Revenue obligation specific risk-weighting factor	Percent
Sovereign CRC	0–1	Remaining contractual maturity of 6 months or less	0.25
		Remaining contractual maturity of greater than 6 and up to and including 24 months.	1.0
		Remaining contractual maturity exceeds 24 months	1.6
	2–3		8.0
	4–7		12.0
No CFR			8.0
Default by the Sovereign Entity			12.0

(vi) *Corporate debt positions.* Except as otherwise provided in paragraph (b)(2)(vi)(B) of this section, a [BANK] must assign a specific risk-weighting factor to a corporate debt position in accordance with the investment grade methodology in paragraph (b)(2)(vi)(A) of this section.

(A) *Investment grade methodology.* (1) For corporate debt positions that are exposures to entities that have issued and outstanding publicly traded instruments, a [BANK] must assign a specific risk-weighting factor based on the category and remaining contractual maturity of the position, in accordance with table 6. For purposes of this paragraph (b)(2)(vi)(A)(1), the [BANK] must determine whether the position is in the investment grade or not investment grade category.

TABLE 6—SPECIFIC RISK-WEIGHTING FACTORS FOR CORPORATE DEBT POSITIONS UNDER THE INVESTMENT GRADE METHODOLOGY

Category	Remaining contractual maturity	Specific risk-weighting factor (in percent)
Investment Grade	6 months or less	0.50
	Greater than 6 and up to and including 24 months	2.00
	Greater than 24 months	4.00
Non-investment Grade	....	12.00

(*2*) A [BANK] must assign an 8.0 percent specific risk-weighting factor for corporate debt positions that are exposures to entities that do not have publicly traded instruments outstanding.

(B) *Limitations.* (*1*) A [BANK] must assign a specific risk-weighting factor of at least 8.0 percent to an interest-only mortgage-backed security that is not a securitization position.

(*2*) A [BANK] shall not assign a corporate debt position a specific risk-weighting factor that is lower than the specific risk-weighting factor that corresponds to the CRC of the issuer's home country in table 2 of this section.

(vii) *Securitization positions.* (A) General requirements. (*1*) A [BANK] that is not an advanced approaches bank must assign a specific risk-weighting factor to a securitization position using either the simplified supervisory formula approach (SSFA) in paragraph (b)(2)(vii)(C) of this section (and § ____.211) or assign a specific risk-weighting factor of 100 percent to the position.

(*2*) A [BANK] that is an advanced approaches bank must calculate a specific risk add-on for a securitization position in accordance with paragraph (b)(2)(vii)(B) of this section if the [BANK] and the securitization position each qualifies to use the SFA in § ____.143. A [BANK] that is an advanced approaches bank with a securitization position that does not qualify for the SFA under paragraph (b)(2)(vii)(B) of this section may assign a specific risk-weighting factor to the securitization position using the SSFA in accordance with paragraph (b)(2)(vii)(C) of this section or assign a specific risk-weighting factor of 100 percent to the position.

(*3*) A [BANK] must treat a short securitization position as if it is a long securitization position solely for calculation purposes when using the SFA in paragraph (b)(2)(vii)(B) of this section or the SSFA in paragraph (b)(2)(vii)(C) of this section.

(B) *SFA.* To calculate the specific risk add-on for a securitization position using the SFA, a [BANK] that is an advanced approaches bank must set the specific risk add-on for the position equal to the risk-based capital requirement as calculated under § ____.143.

(C) *SSFA.* To use the SSFA to determine the specific risk-weighting factor for a securitization position, a [BANK] must calculate the specific risk-weighting factor in accordance with § ____.211.

(D) *Nth-to-default credit derivatives.* A [BANK] must determine a specific

risk add-on using the SFA in paragraph (b)(2)(vii)(B) of this section, or assign a specific risk-weighting factor using the SSFA in paragraph (b)(2)(vii)(C) of this section to an nth-to-default credit derivative in accordance with this paragraph (b)(2)(vii)(D), regardless of whether the [BANK] is a net protection buyer or net protection seller. A [BANK] must determine its position in the nth-to-default credit derivative as the largest notional dollar amount of all the underlying exposures.

(*1*) For purposes of determining the specific risk add-on using the SFA in paragraph (b)(2)(vii)(B) of this section or the specific risk-weighting factor for an nth-to-default credit derivative using the SSFA in paragraph (b)(2)(vii)(C) of this section the [BANK] must calculate the attachment point and detachment point of its position as follows:

(*i*) The attachment point (parameter A) is the ratio of the sum of the notional amounts of all underlying exposures that are subordinated to the [BANK]'s position to the total notional amount of all underlying exposures. For purposes of using the SFA in paragraph (b)(2)(vii)(B) of this section to calculate the specific add-on for its position in an nth-to-default credit derivative, parameter A must be set equal to *the credit enhancement level* (L) input to the SFA formula in section 143 of this subpart. In the case of a first-to-default credit derivative, there are no underlying exposures that are subordinated to the [BANK]'s position. In the case of a second-or-subsequent-to-default credit derivative, the smallest (n-1) notional amounts of the underlying exposure(s) are subordinated to the [BANK]'s position.

(*ii*) The detachment point (parameter D) equals the sum of parameter A plus the ratio of the notional amount of the [BANK]'s position in the nth-to-default credit derivative to the total notional amount of all underlying exposures. For purposes of using the SFA in paragraph (b)(2)(vii)(B) of this section to calculate the specific risk add-on for its position in an nth-to-default credit derivative, parameter D must be set to equal the L input plus the *thickness of tranche* T input to the SFA formula in § ____.143 of this subpart.

(*2*) A [BANK] that does not use the SFA in paragraph (b)(2)(vii)(B) of this section to determine a specific risk-add on, or the SSFA in paragraph (b)(2)(vii)(C) of this section to determine a specific risk-weighting factor for its position in an nth-to-default credit derivative must assign a specific risk-weighting factor of 100 percent to the position.

(c) *Modeled correlation trading positions.* For purposes of calculating the comprehensive risk measure for modeled correlation trading positions under either paragraph (a)(2)(i) or (a)(2)(ii) of § ____.209, the total specific risk add-on is the greater of:

(1) The sum of the [BANK]'s specific risk add-ons for each net long correlation trading position calculated under this section; or

(2) The sum of the [BANK]'s specific risk add-ons for each net short correlation trading position calculated under this section.

(d) *Non-modeled securitization positions.* For securitization positions that are not correlation trading positions and for securitizations that are correlation trading positions not modeled under § ____.209, the total specific risk add-on is the greater of:

(1) The sum of the [BANK]'s specific risk add-ons for each net long securitization position calculated under this section; or

(2) The sum of the [BANK]'s specific risk add-ons for each net short securitization position calculated under this section.

(e) *Equity positions.* The total specific risk add-on for a portfolio of equity positions is the sum of the specific risk add-ons of the individual equity positions, as computed under this section. To determine the specific risk add-on of individual equity positions, a [BANK] must multiply the absolute value of the current market value of each net long or net short equity position by the appropriate specific risk-weighting factor as determined under this paragraph:

(1) The [BANK] must multiply the absolute value of the current market value of each net long or net short equity position by a specific risk-weighting factor of 8.0 percent. For equity positions that are index contracts comprising a well-diversified portfolio of equity instruments, the absolute value of the current market value of each net long or net short position is multiplied by a specific risk-weighting factor of 2.0 percent.[3]

(2) For equity positions arising from the following futures-related arbitrage strategies, a [BANK] may apply a 2.0 percent specific risk-weighting factor to one side (long or short) of each position with the opposite side exempt from an additional capital requirement:

(i) Long and short positions in exactly the same index at different dates or in different market centers; or

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[3] A portfolio is well-diversified if it contains a large number of individual equity positions, with no single position representing a substantial portion of the portfolio's total market value.

(ii) Long and short positions in index contracts at the same date in different, but similar indices.

(3) For futures contracts on main indices that are matched by offsetting positions in a basket of stocks comprising the index, a [BANK] may apply a 2.0 percent specific risk-weighting factor to the futures and stock basket positions (long and short), provided that such trades are deliberately entered into and separately controlled, and that the basket of stocks is comprised of stocks representing at least 90.0 percent of the capitalization of the index. A main index refers to the Standard & Poor's 500 Index, the FTSE All-World Index, and any other index for which the [BANK] can demonstrate to the satisfaction of the [AGENCY] that the equities represented in the index have liquidity, depth of market, and size of bid-ask spreads comparable to equities in the Standard & Poor's 500 Index and FTSE All-World Index.

(f) *Due diligence requirements.* (1) A [BANK] must demonstrate to the satisfaction of the [AGENCY] a comprehensive understanding of the features of a securitization position that would materially affect the performance of the position by conducting and documenting the analysis set forth in paragraph (f)(2) of this section. The [BANK]'s analysis must be commensurate with the complexity of the securitization position and the materiality of the position in relation to capital.

(2) A [BANK] must demonstrate its comprehensive understanding for each securitization position by:

(i) Conduct an analysis of the risk characteristics of a securitization position prior to acquiring the position and document such analysis within three business days after acquiring position, considering:

(A) Structural features of the securitization that would materially impact the performance of the position, for example, the contractual cash flow waterfall, waterfall-related triggers, credit enhancements, liquidity enhancements, market value triggers, the performance of organizations that service the position, and deal-specific definitions of default;

(B) Relevant information regarding the performance of the underlying credit exposure(s), for example, the percentage of loans 30, 60, and 90 days past due; default rates; prepayment rates; loans in foreclosure; property types; occupancy; average credit score or other measures of creditworthiness; average loan-to-value ratio; and industry and geographic diversification data on the underlying exposure(s);

(C) Relevant market data of the securitization, for example, bid-ask spreads, most recent sales price and historical price volatility, trading volume, implied market rating, and size, depth and concentration level of the market for the securitization; and

(D) For resecuritization positions, performance information on the underlying securitization exposures, for example, the issuer name and credit quality, and the characteristics and performance of the exposures underlying the securitization exposures; and

(ii) On an on-going basis (no less frequently than quarterly), evaluating, reviewing, and updating as appropriate the analysis required under paragraph (f)(1) of this section for each securitization position.

§ 211 Simplified supervisory formula approach (SSFA).

(a) *General requirements.* To use the SSFA to determine the specific risk-weighting factor for a securitization position, a [BANK] must have data that enables it to assign accurately the parameters described in paragraph (b) of this section. Data used to assign the parameters described in paragraph (b) of this section must be the most currently available data and no more than 91 calendar days old. A [BANK] that does not have the appropriate data to assign the parameters described in paragraph (b) of this section must assign a specific risk-weighting factor of 100 percent to the position.

(b) *SSFA parameters.* To calculate the specific risk-weighting factor for a securitization position using the SSFA, a [BANK] must have accurate information on the five inputs to the SSFA calculation described in paragraphs (b)(1) through (b)(5) of this section.

(1) K_G is the weighted-average (with unpaid principal used as the weight for each exposure) total capital requirement of the underlying exposures calculated using subpart D. K_G is expressed as a decimal value between zero and 1 (that is, an average risk weight of 100 percent represents a value of K_G equal to .08).

(2) Parameter W is expressed as a decimal value between zero and one. Parameter W is the ratio of the sum of the dollar amounts of any underlying exposures within the securitized pool that meet any of the criteria are set forth in paragraphs (i) through (vi) of this paragraph (b)(2) to the ending balance, measured in dollars, of underlying exposures:

(i) Ninety days or more past due;

(ii) Subject to a bankruptcy or insolvency proceeding;

(iii) In the process of foreclosure;

(iv) Held as real estate owned;

(v) Has contractually deferred interest payments for 90 days or more; or

(vi) Is in default.

(3) Parameter A is the attachment point for the position, which represents the threshold at which credit losses will first be allocated to the position. Parameter A equals the ratio of the current dollar amount of underlying exposures that are subordinated to the position of the [BANK] to the current dollar amount of underlying exposures. Any reserve account funded by the accumulated cash flows from the underlying exposures that is subordinated to the position that contains the [BANK]'s securitization exposure may be included in the calculation of parameter A to the extent that cash is present in the account. Parameter A is expressed as a decimal value between zero and one.

(4) Parameter D is the detachment point for the position, which represents the threshold at which credit losses of principal allocated to the position would result in a total loss of principal. Parameter D equals parameter A plus the ratio of the current dollar amount of the securitization positions that are *pari passu* with the position (that is, have equal seniority with respect to credit risk) to the current dollar amount of the underlying exposures. Parameter D is expressed as a decimal value between zero and one.

(5) A supervisory calibration parameter, p, is equal to 0.5 for securitization positions that are not resecuritization positions and equal to 1.5 for resecuritization positions.

(c) *Mechanics of the SSFA.* K_G and W are used to calculate K_A, the augmented value of K_G, which reflects the observed credit quality of the underlying pool of exposures. K_A is defined in paragraph (d) of this section. The values of parameters A and D, relative to K_A determine the specific risk-weighting factor assigned to a position as described in this paragraph and paragraph (d) of this section. The specific risk-weighting factor assigned to a securitization position, or portion of a position, as appropriate, is the larger of the specific risk-weighting factor determined in accordance with this paragraph and paragraph (d) of this section and a specific risk-weighting factor of 1.6 percent.

(1) When the detachment point, parameter D, for a securitization position is less than or equal to K_A, the position must be assigned a specific risk-weighting factor of 100 percent.

(2) When the attachment point, parameter A, for a securitization

position is greater than or equal to K_A, the [BANK] must calculate the specific risk-weighting factor in accordance with paragraph (d) of this section.

(3) When A is less than K_A and D is greater than K_A, the specific risk-weighting factor is a weighted-average of 1.00 and K_{SSFA} calculated under paragraphs (c)(3)(i) and (c)(3)(ii) of this section, but with the parameter A revised to be set equal to K_A. For the purpose of this calculation:

(i) The weight assigned to 1.00 equals $\dfrac{K_A - A}{D - A}$.

(ii) The weight assigned to K_{SSFA} equals $\dfrac{D - K_A}{D - A}$. The specific risk-weighting factor is equal to:

$$SRWF = 100 \times \left[\left(\frac{K_A - A}{D - A} \right) \times 1.00 \right] + \left[\left(\frac{D - K_A}{D - A} \right) \times K_{SSFA} \right]$$

(d) <u>SSFA equation.</u> (1) The [BANK] must define the following parameters:

$$K_A = (1 - W) \cdot K_G + (0.5 \cdot W)$$

$$a = -\frac{1}{p \cdot K_A}$$

$$u = D - K_A$$

$$l = A - K_A$$

$e = 2.71828$, the base of the natural logarithms.

(2) Then the [BANK] must calculate K_{SSFA} according to the following formula:

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

(3) The specific risk-weighting factor for the position (expressed as a percent) is equal to

$K_{SSFA} \times 100$.

§___.212 Market risk disclosures.

(a) *Scope.* A [BANK] must comply with this section unless it is a consolidated subsidiary of a bank holding company or a depository institution that is subject to these requirements or of a non-U.S. banking organization that is subject to comparable public disclosure requirements in its home jurisdiction. A [BANK] must make quantitative disclosures publicly each calendar quarter. If a significant change occurs, such that the most recent reporting amounts are no longer reflective of the [BANK]'s capital adequacy and risk

profile, then a brief discussion of this change and its likely impact must be provided as soon as practicable thereafter. Qualitative disclosures that typically do not change each quarter may be disclosed annually, provided any significant changes are disclosed in the interim. If a [BANK] believes that disclosure of specific commercial or financial information would prejudice seriously its position by making public certain information that is either proprietary or confidential in nature, the [BANK] is not required to disclose these specific items, but must disclose more general information about the subject

matter of the requirement, together with the fact that, and the reason why, the specific items of information have not been disclosed.

(b) *Disclosure policy.* The [BANK] must have a formal disclosure policy approved by the board of directors that addresses the [BANK]'s approach for determining its market risk disclosures. The policy must address the associated internal controls and disclosure controls and procedures. The board of directors and senior management must ensure that appropriate verification of the disclosures takes place and that effective internal controls and

disclosure controls and procedures are maintained. One or more senior officers of the [BANK] must attest that the disclosures meet the requirements of this subpart, and the board of directors and senior management are responsible for establishing and maintaining an effective internal control structure over financial reporting, including the disclosures required by this section.

(c) *Quantitative disclosures.* (1) For each material portfolio of covered positions, the [BANK] must disclose publicly the following information at least quarterly:

(i) The high, low, and mean VaR-based measures over the reporting period and the VaR-based measure at period-end;

(ii) The high, low, and mean stressed VaR-based measures over the reporting period and the stressed VaR-based measure at period-end;

(iii) The high, low, and mean incremental risk capital requirements over the reporting period and the incremental risk capital requirement at period-end;

(iv) The high, low, and mean comprehensive risk capital requirements over the reporting period and the comprehensive risk capital requirement at period-end, with the period-end requirement broken down into appropriate risk classifications (for example, default risk, migration risk, correlation risk);

(v) Separate measures for interest rate risk, credit spread risk, equity price risk, foreign exchange risk, and commodity price risk used to calculate the VaR-based measure; and

(vi) A comparison of VaR-based estimates with actual gains or losses experienced by the [BANK], with an analysis of important outliers.

(2) In addition, the [BANK] must disclose publicly the following information at least quarterly:

(i) The aggregate amount of on-balance sheet and off-balance sheet securitization positions by exposure type; and

(ii) The aggregate amount of correlation trading positions.

(d) *Qualitative disclosures.* For each material portfolio of covered positions, the [BANK] must disclose publicly the following information at least annually, or more frequently in the event of material changes for each portfolio:

(1) The composition of material portfolios of covered positions;

(2) The [BANK]'s valuation policies, procedures, and methodologies for covered positions including, for securitization positions, the methods and key assumptions used for valuing such positions, any significant changes

since the last reporting period, and the impact of such change;

(3) The characteristics of the internal models used for purposes of this subpart. For the incremental risk capital requirement and the comprehensive risk capital requirement, this must include:

(i) The approach used by the [BANK] to determine liquidity horizons;

(ii) The methodologies used to achieve a capital assessment that is consistent with the required soundness standard; and

(iii) The specific approaches used in the validation of these models;

(4) A description of the approaches used for validating and evaluating the accuracy of internal models and modeling processes for purposes of this subpart;

(5) For each market risk category (that is, interest rate risk, credit spread risk, equity price risk, foreign exchange risk, and commodity price risk), a description of the stress tests applied to the positions subject to the factor;

(6) The results of the comparison of the [BANK]'s internal estimates for purposes of this subpart with actual outcomes during a sample period not used in model development;

(7) The soundness standard on which the [BANK]'s internal capital adequacy assessment under this subpart is based, including a description of the methodologies used to achieve a capital adequacy assessment that is consistent with the soundness standard;

(8) A description of the [BANK]'s processes for monitoring changes in the credit and market risk of securitization positions, including how those processes differ for resecuritization positions; and

(9) A description of the [BANK]'s policy governing the use of credit risk mitigation to mitigate the risks of securitization and resecuritization positions.

End of Common Rule

List of Subjects

12 CFR Part 3

Administrative practices and procedure, Capital, National banks, Reporting and recordkeeping requirements, Risk.

12 CFR Part 217

Banks, banking, Federal Reserve System, Holding companies, Reporting and recordkeeping requirements, Securities.

12 CFR Part 325

Administrative practice and procedure, Banks, banking, Capital Adequacy, Reporting and recordkeeping

requirements, Savings associations, State non-member banks.

Adoption of Proposed Common Rule

The adoption of the proposed common rules by the agencies, as modified by agency-specific text, is set forth below:

Department of the Treasury

Office of the Comptroller of the Currency

12 CFR Chapter I

Authority and Issuance

For the reasons set forth in the common preamble, the Office of the Comptroller of the Currency proposes to further amend part 3 of chapter I of title 12 of the Code of Federal Regulations is proposed to be amended elsewhere in this issue of the **Federal Register** under Docket ID OCC–2012–0008 and OCC–2012–0009, as follows:

PART 3—MINIMUM CAPITAL RATIOS; ISSUANCE OF DIRECTIVES

1. The authority citation for part 3 continues to read as follows:

Authority: 12 U.S.C. 93a, 161, 1462, 1462a, 1463, 1464, 1818, 1828(n), 1828 note, 1831n note, 1835, 3907 and 3909, and 5412(b)(2)(B).

2. Designate the text set forth at the end of the common preamble as part 3, subparts E and F.

3. Newly designated subparts E and F of part 3 are amended as set forth below:

i. Remove ''[AGENCY]'' and add ''OCC'' in its place, wherever it appears;

ii. Remove ''[BANK]'' and add ''national bank or Federal savings association'' in its place, wherever it appears;

iii. Remove ''[BANKS]'' and ''[BANK]s'' and add ''national banks and Federal savings associations'' in their places, wherever they appear;

iv. Remove ''[BANK]'s'' and add ''national bank's and Federal savings association's'' in its place, wherever it appears;

v. Remove ''[PART]'' and add ''Part 3'' in its place, wherever it appears; and

vi. Remove ''[Regulatory Reports]'' and add ''Call Report'' in its place, wherever it appears; and

vii. Remove ''[regulatory report]'' and add ''Call Reports'' in its place, wherever it appears.

Board of Governors of the Federal Reserve System

12 CFR Chapter II

Authority and Issuance

For the reasons set forth in the common preamble, part 217 of chapter II of title 12 of the Code of Federal

Regulations are proposed to be amended as follows:

PART 217—CAPITAL ADEQUACY OF BANK HOLDING COMPANIES, SAVINGS AND LOAN HOLDING COMPANIES, AND STATE MEMBER BANKS

1. The authority citation for part 217 continues to read as follows:

Authority: 12 U.S.C. 248(a), 321–338a, 481–486, 1462a, 1467a, 1818, 1828, 1831n, 1831o, 1831p–l, 1831w, 1835, 1844(b), 3904, 3906–3909, 4808, 5365, 5371.

Subpart E—Risk-Weighted Assets—Internal Ratings-Based and Advanced Measurement Approaches

Subpart F—Risk-weighted Assets—Market Risk

2. Designate the text set forth at the end of the common preamble as part 217, subparts E and F.

3. Part 217 is amended as set forth below:

a. Remove ''[AGENCY]'' and add ''Board'' in its place wherever it appears.

b. Remove ''[BANK]'' and add ''Board-regulated institution'' in its place wherever it appears.

c. Remove ''[PART]'' and add ''part'' in its place wherever it appears.

d. Remove ''[Regulatory Reports]'' and add in its place ''Consolidated Reports of Condition and Income (Call Report), for a state member bank, or Consolidated Financial Statements for Bank Holding Companies (FR Y–9C), for a bank holding company or savings and loan holding company, as applicable'' the first time it appears; and

e. Remove ''[regulatory report]'' and add in its place ''Call Report, for a state member bank or FR Y–9C, for a bank holding company or savings and loan holding company, as applicable''.

4. In § 217.100, revise paragraph (b)(1) to read as follows:

§ 217.100 Purpose, Applicability, and Principle of Conservatism.

* * * * *

(b) *Applicability.* (1) This subpart applies to:

(i) A top-tier bank holding company or savings and loan holding company domiciled in the United States that:

(A) Is not a consolidated subsidiary of another bank holding company or savings and loan holding company that uses 12 CFR part 217, subpart E, to calculate its risk-based capital requirements; and

(B) That:

(*1*) Has total consolidated assets (excluding assets held by an insurance

underwriting subsidiary), as defined on schedule HC–K of the FR Y–9C, equal to $250 billion or more;

(*2*) Has consolidated total on-balance sheet foreign exposure at the most recent year-end equal to $10 billion (excluding exposures held by an insurance underwriting subsidiary). Total on-balance sheet foreign exposure equals total cross-border claims less claims with head office or guarantor located in another country plus redistributed guaranteed amounts to the country of head office or guarantor plus local country claims on local residents plus revaluation gains on foreign exchange and derivative products, calculated in accordance with the Federal Financial Institutions Examination Council (FFIEC) 009 Country Exposure Report); or

(*3*) Has a subsidiary depository institution that is required, or has elected, to use 12 CFR part 3, subpart E (OCC), 12 CFR part 217, subpart E (Board), or 12 CFR part 325, subpart E (FDIC) to calculate its risk-based capital requirements;

(ii) A state member bank that:

(A) Has total consolidated assets, as reported on the most recent year-end Consolidated Report of Condition and Income (Call Report), equal to $250 billion or more;

(B) Has consolidated total on-balance sheet foreign exposure at the most recent year-endequal to $10 billion or more (where total on-balance sheet foreign exposure equals total cross-border claims less claims with head office or guarantor located in another country plus redistributed guaranteed amounts to the country of head office or guarantor plus local country claims on local residents plus revaluation gains on foreign exchange and derivative products, calculated in accordance with the Federal Financial Institutions Examination Council (FFIEC) 009 Country Exposure Report);

(C) Is a subsidiary of a depository institution that uses 12 CFR part 3, subpart E (OCC), 12 CFR part 217, subpart E (Board), or 12 CFR part 325, subpart E (FDIC) to calculate its risk-based capital requirements; or

(D) Is a subsidiary of a bank holding company that uses 12 CFR part 217, subpart E, to calculate its risk-based capital requirements; and

(iii) Any Board-regulated institution that elects to use this subpart to calculate its risk-based capital requirements.

* * * * *

5. In § 217.121, revise paragraph (a) to read as follows:

* * * * *

§ 217.121 Qualification process.

(a) *Timing.* (1) A Board-regulated institution that is described in § 217.100(b)(1)(i) and (ii) must adopt a written implementation plan no later than six months after the date the Board-regulated institution meets a criterion in that section. The implementation plan must incorporate an explicit start date no later than 36 months after the date the Board-regulated institution meets at least one criterion under § 217.100(b)(1)(i) and (ii). The Board may extend the start date.

(2) A Board-regulated institution that elects to be subject to this subpart under § 217.101(b)(1)(iii) must adopt a written implementation plan.

* * * * *

6. In § 217.122(g), revise paragraph (g)(3)(ii) to read as follows:

§_____.122 Qualification requirements.

* * * * *

(g) * * *

(3) * * *

(ii)(A) With the prior written approval of the Board, a state member bank may generate an estimate of its operational risk exposure using an alternative approach to that specified in paragraph (g)(3)(i) of this section. A state member bank proposing to use such an alternative operational risk quantification system must submit a proposal to the Board. In determining whether to approve a state member bank's proposal to use an alternative operational risk quantification system, the Board will consider the following principles:

(A) Use of the alternative operational risk quantification system will be allowed only on an exception basis, considering the size, complexity, and risk profile of the state member bank;

(B) The state member bank must demonstrate that its estimate of its operational risk exposure generated under the alternative operational risk quantification system is appropriate and can be supported empirically; and

(C) A state member bank must not use an allocation of operational risk capital requirements that includes entities other than depository institutions or the benefits of diversification across entities.

* * * * *

7. In § 217.131, revise paragraph (b) and paragraphs (e)(3)(i) and (ii), and add a new paragraph (e)(5) to read as follows:

§ 217.131 Mechanics for calculating total wholesale and retail risk-weighted assets.

* * * * *

(b) *Phase 1—Categorization.* The Board-regulated institution must determine which of its exposures are wholesale exposures, retail exposures, securitization exposures, or equity exposures. The Board-regulated institution must categorize each retail exposure as a residential mortgage exposure, a QRE, or an other retail exposure. The Board-regulated institution must identify which wholesale exposures are HVCRE exposures, sovereign exposures, OTC derivative contracts, repo-style transactions, eligible margin loans, eligible purchased wholesale exposures, cleared transactions, default fund contributions, and unsettled transactions to which § 217.136 applies, and eligible guarantees or eligible credit derivatives that are used as credit risk mitigants. The Board-regulated institution must identify any on-balance sheet asset that does not meet the definition of a wholesale, retail, equity, or securitization exposure, any non-material portfolio of exposures described in paragraph (e)(4) of this section, and for bank holding companies and savings and loan holding companies, any on-balance sheet asset that is held in a non-guaranteed separate account.

* * * * *

(e) * * *

(3) * * *

(i) A bank holding company or savings and loan holding company may assign a risk-weighted asset amount of zero to cash owned and held in all offices of subsidiary depository institutions or in transit; and for gold bullion held in a subsidiary depository institution's own vaults, or held in another depository institution's vaults on an allocated basis, to the extent the gold bullion assets are offset by gold bullion liabilities.

(ii) A state member bank may assign a risk-weighted asset amount to cash owned and held in all offices of the state member bank or in transit and for gold bullion held in the state member bank's own vaults, or held in another depository institution's vaults on an allocated basis, to the extent the gold bullion assets are offset by gold bullion liabilities.

* * * * *

(5) *Assets held in non-guaranteed separate accounts.* The risk-weighted asset amount for an on-balance sheet asset that is held in a non-guaranteed separate account is zero percent of the carrying value of the asset.

8. In § 217.142, revise paragraph (k)(1)(iv) to read as follows:

§ 217.142 Risk-based capital requirement for securitization exposures.

* * * * *

(k) * * *

(1) * * *

(iv) * * *

(A) In the case of a state member bank, the bank is well capitalized, as defined in 12 CFR 208.43. For purposes of determining whether a state member bank is well capitalized for purposes of this paragraph, the state member bank's capital ratios must be calculated without regard to the capital treatment for transfers of small-business obligations with recourse specified in paragraph (k)(1) of this section.

(B) In the case of a bank holding company or savings and loan holding company, the bank holding company or savings and loan holding company is well capitalized, as defined in 12 CFR 225.2. For purposes of determining whether a bank holding company or savings and loan holding company is well capitalized for purposes of this paragraph, the bank holding company or savings and loan holding company's capital ratios must be calculated without regard to the capital treatment for transfers of small-business obligations with recourse specified in paragraph (k)(1) of this section.

* * * * *

9. In § 217.152, revise paragraph (b)(3)(i) to read as follows:

§ 217.152 Simple risk weight approach (SRWA).

* * * * *

(b) * * *

(3) * * *

(i) *Community development equity exposures.* (A) For state member banks and bank holding companies, an equity exposure that qualifies as a community development investment under 12 U.S.C. 24 (Eleventh), excluding equity exposures to an unconsolidated small business investment company and equity exposures held through a consolidated small business investment company described in section 302 of the Small Business Investment Act of 1958 (15 U.S.C. 682).

(B) For savings and loan holding companies, an equity exposure that is designed primarily to promote community welfare, including the welfare of low- and moderate-income communities or families, such as by providing services or employment, and excluding equity exposures to an unconsolidated small business investment company and equity exposures held through a small business investment company described in

section 302 of the Small Business Investment Act of 1958 (15 U.S.C. 682).

* * * * *

10. In § 217.201, revise paragraph (b)(1) introductory text to read as follows:

§ 271.201 Purpose, Applicability, and Reservation of Authority.

(b) *Applicability.* (1) This subpart applies to any Board-regulated institution with aggregate trading assets and trading liabilities (as reported in the Board-regulated institution's most recent quarterly Call Report, for a state member bank, or FR Y–9C, for a bank holding company or savings and loan holding company, as applicable, any savings and loan holding company that does not file the FR Y–9C should follow the instructions to the FR Y–9C), equal to:

* * * * *

11. In § 217.202, amend paragraph (b) by revising paragraph (1) of the definition of ''Covered position'' to read as follows:

§____.202 Definitions.

* * * * *

Covered position means the following positions:

(1) A trading asset or trading liability (whether on- or off-balance sheet),[1] as reported on Schedule RC–D of the Call Report or Schedule HC–D of the FR Y–9C (any savings and loan holding companies that do not file the FR Y–9C should follow the instructions to the FR Y–9C)), that meets the following conditions:

* * * * *

Federal Deposit Insurance Corporation

12 CFR Chapter III

Authority and Issuance

For the reasons set forth in the common preamble, the Federal Deposit Insurance Corporation proposes to amend part 324 of chapter III of title 12 of the Code of Federal Regulations as follows:

PART 324—CAPITAL ADEQUACY

1. The authority citation for part 324 continues to read as follows:

Authority: 12 U.S.C. 1815(a), 1815(b), 1816, 1818(a), 1818(b), 1818(c), 1818(t), 1819 (Tenth), 1828(c), 1828(d), 1828(i), 1828(n), 1828(o), 1831o, 1835, 3907, 3909, 4808; 5371; 5412; Pub. L. 102–233, 105 Stat. 1761, 1789, 1790 (12 U.S.C. 1831n note); Pub. L. 102–242, 105 Stat. 2236, 2355, as amended by Pub. L. 103–325, 108 Stat. 2160, 2233 (12

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[1] Securities subject to repurchase and lending agreements are included as if they are still owned by the lender.

U.S.C. 1828 note); Pub. L. 102–242, 105 Stat. 2236, 2386, as amended by Pub. L. 102–550, 106 Stat. 3672, 4089 (12 U.S.C. 1828 note); Pub. L. 111–203, 124 Stat. 1376, 1887 (15 U.S.C. 78o–7 note).

2. Subparts E and F are added as set forth at the end of the common preamble.

3. Subparts E and F are amended as set forth below:

a. Remove ''[AGENCY]'' and add ''FDIC'' in its place, wherever it appears;

b. Remove ''[Agency]'' and add ''FDIC'' in its place, wherever it appears;

c. Remove ''[12 CFR 3.12, 12 CFR 263.202, 12 CFR 325.6(c), 12 CFR 567.3(d)]'' and add ''12 CFR 325.6'' in its place, wherever it appears;

d. Remove ''[BANK]'' and add ''bank or state savings association'' in its place, wherever it appears in the phrases ''A [BANK]'', ''a [BANK]'', ''The [BANK]'', or ''the [BANK]'';

e. Remove ''[BANK]'' and add ''bank and state savings association'' in its place, wherever it appears in the phrases ''Each [BANK]'' or ''each [BANK]'';

f. Remove ''[BANKS]'' and ''[BANK]s'' and add ''banks and state savings associations'' in their place, wherever they appear;

g. Remove ''[PART]'' and add ''Part 324'' in its place, wherever it appears;

h. Remove ''[Regulatory Reports]'' and add ''Consolidated Report of Condition and Income (Call Report)'' in its place;

i. Remove ''of 12 CFR part 3 (OCC), 12 CFR part 208 (Board), or 12 CFR part 325 (FDIC)'' and add ''of 12 CFR part 324'' in its place, wherever it appears;

j. Remove ''[prompt corrective action regulation]'' and add ''Subpart H of this part'' in its place, wherever it appears;

k. Remove ''banking organization'' and add ''bank and/or state savings associations, as''

l. Remove ''[Regulatory Reports]'' and add ''Consolidated Report of Condition and Income (Call Report)'' in its place; and

m. Remove ''[regulatory report]'' and add ''Call Report'' in its place wherever it appears; and

PART 325—CAPITAL MAINTENANCE

4. The authority citation for part 325 continues to read as follows:

Authority: 12 U.S.C. 1815(a), 1815(b), 1816, 1818(a), 1818(b), 1818(c), 1818(t), 1819 (Tenth), 1828(c), 1828(d), 1828(i), 1828(n), 1828(o), 1831o, 1835, 3907, 3909, 4808; Pub. L. 102–233, 105 Stat. 1761, 1789, 1790 (12 U.S.C. 1831n note); Pub. L. 102–242, 105 Stat. 2236, 2355, as amended by Pub. L. 103–325, 108 Stat. 2160, 2233 (12 U.S.C. 1828 note); Pub. L. 102–242, 105 Stat. 2236, 2386, as amended by Pub. L. 102–550, 106 Stat. 3672, 4089 (12 U.S.C. 1828 note).

Appendix D to Part 325—[Removed and reserved]

5. Appendix D to part 325 is removed and reserved.

Dated: June 11, 2012.

Thomas J. Curry,

Comptroller of the Currency.

By order of the Board of Governors of the Federal Reserve System, July 3, 2012.

Jennifer J. Johnson,

Secretary of the Board.

Dated at Washington, DC, this 12th day of June, 2012.

By order of the Board of Directors.

Federal Deposit Insurance Corporation.

Robert E. Feldman,

Executive Secretary.

[FR Doc. 2012–16761 Filed 8–10–12; 8:45 am]

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