

**DEPARTMENT OF THE TREASURY**  
**Office of the Comptroller of the Currency**  
**12 CFR Part 3**  
**[Docket No. 06-10]**  
**RIN 1557-AC99**

**pub 9/25/06**

**FEDERAL RESERVE SYSTEM**  
**12 CFR Parts 208 and 225**  
**[Regulations H and Y; Docket No. R-1266]**

**FEDERAL DEPOSIT INSURANCE CORPORATION**  
**12 CFR Part 325**  
**RIN 3064-AD10**

**DEPARTMENT OF THE TREASURY**  
**Office of Thrift Supervision**  
**12 CFR Part 566**  
**[Docket No. 2006-34]**  
**RIN 1550-AC02**

**Risk-Based Capital Standards: Market Risk**

**AGENCIES:** Office of the Comptroller of the Currency, Treasury; Board of Governors of the Federal Reserve System; Federal Deposit Insurance Corporation, and Office of Thrift Supervision, Treasury.

**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) are proposing revisions to the market risk capital rule to enhance its risk sensitivity and introduce requirements for public disclosure of certain qualitative and quantitative information about the market risk of a bank or bank holding company. The Office of Thrift Supervision (OTS) currently does not apply a market risk capital rule to savings associations and is proposing in this notice a market risk capital rule for savings associations. The proposed rules for each agency are substantively identical.

**DATES: Comments must be received on or before [INSERT DATE 120 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER].**

**ADDRESSES: Comments should be directed to:**

**OCC:** You should include OCC and Docket Number 06-10 in your comment.

You may submit comments by any of the following methods:

- **Federal eRulemaking Portal:** <http://www.regulations.gov>. Follow the instructions for submitting comments.
- **OCC Web Site:** <http://www.occ.treas.gov>. Click on "Contact the OCC," scroll down and click on "Comments on Proposed Regulations."
- **E-mail address:** [regs.comments@occ.treas.gov](mailto:regs.comments@occ.treas.gov).
- **Fax:** (202) 874-4448.
- **Mail:** Office of the Comptroller of the Currency, 250 E Street, SW, Mail Stop 1-5, Washington, DC 20219.
- **Hand Delivery/Courier:** 250 E Street, SW., Attn: Public Information Room, Mail Stop 1-5, Washington, DC 20219.

Instructions: All submissions received must include the agency name (OCC) and docket number or Regulatory Information Number (RIN) for this notice of proposed rulemaking. In general, OCC will enter all comments received into the docket without change, including any business or personal information that you provide. You may review comments and other related materials by any of the following methods:

- **Viewing Comments Personally:** You may personally inspect and photocopy comments at the OCC's Public Information Room, 250 E Street, SW, Washington, DC. You can make an appointment to inspect comments by calling (202) 874-5043.

**Board: You may submit comments, identified by Docket No. R-1265, 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.
- E-mail: [regs.comments@Federalreserve.gov](mailto: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, 20<sup>th</sup> Street and Constitution Avenue, NW, Washington, DC 20551.

All public comments are available from the Board's web site at [www.Federalreserve.gov/generalinfo/foia/ProposedRegs.cfm](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 (20<sup>th</sup> and C Streets, NW) between 9:00 a.m. and 5:00 p.m. on weekdays.

**FDIC:** You may submit written comments, identified by RIN number, 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.
- E-mail: [comments@FDIC.gov](mailto:comments@FDIC.gov). Include the RIN number in the subject line of the message.
- Mail: Robert E. Feldman, Executive Secretary, Attention: Comments, Federal Deposit Insurance Corporation, 550 17<sup>th</sup> Street, NW, Washington, DC 20429.
- Hand Delivery/Courier: Guard station at rear of the 550 17<sup>th</sup> Street Building (located on F Street) on business days between 7:00 a.m. and 5:00 p.m.

Instructions: All submissions received must include the agency name and RIN number for this rulemaking. 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 E-1002, 3502 Fairfax Drive, Arlington, VA, 22226, between 9:00 a.m. and 5:00 p.m. on business days.

**OTS:** You may submit comments, identified by No. 2006-34 by any of the following methods:

- **Federal eRulemaking Portal:** <http://www.regulations.gov>. Follow the instructions for submitting comments.
- **E-mail address:** [regs.comments@ots.treas.gov](mailto:regs.comments@ots.treas.gov). Please include No. 2006-34 in the subject line of the message and include your name and telephone number in the message.
- **Fax:** (202) 906-6518.
- **Mail:** Regulation Comments, Chief Counsel's Office, Office of Thrift Supervision, 1700 G Street, NW, Washington, DC 20552, Attention: No. 2006-34
- **Hand Delivery/Courier:** Guard's Desk, East Lobby Entrance, 1700 G Street, NW, from 9:00 a.m. to 4:00 p.m. on business days, Attention: Regulation Comments, Chief Counsel's Office, No. 2006-34.

Instructions: All submissions received must include the agency name and docket number or Regulatory Information Number (RIN) for this rulemaking. All comments received will be posted without change to the OTS Internet Site at <http://www.ots.treas.gov/pagehtml.cfm?catNumber=67&an=1>, including any personal information provided.

Docket: For access to the docket to read background documents or comments received, go to <http://www.ots.treas.gov/pagehtml.cfm?catNumber=67&an=1>. In addition, you may inspect comments at the Public Reading Room, 1700 G Street, NW., by appointment. To make an appointment for access, call (202) 906-5922, send

an e-mail to [public.info@ots.treas.gov](mailto:public.info@ots.treas.gov), or send a facsimile transmission to (202) 906-7755. (Prior notice identifying the materials you will be requesting will assist us in serving you.) We schedule appointments on business days between 10:00 a.m. and 4:00 p.m. In most cases, appointments will be available the next business day following the date we receive a request.

**FOR FURTHER INFORMATION CONTACT:**

*OCC:* Margot Schwadron, Risk Expert, Capital Policy (202–874–6022) or Ron Shimabukuro, Special Counsel, Legislative and Regulatory Activities Division, (202–874–5090).

*Board:* Barbara Bouchard, Deputy Associate Director (202-452-3072 or [barbara.bouchard@frb.gov](mailto:barbara.bouchard@frb.gov)), Mary Frances Monroe, Manager (202-452-5231 or [mary.f.monroe@frb.gov](mailto:mary.f.monroe@frb.gov)), or Anna Lee Hewko, Senior Supervisory Financial Analyst, (202-530-6260 or [anna.hewko@frb.gov](mailto:anna.hewko@frb.gov)), Division of Banking Supervision and Regulation; or Allison Breault, Attorney (202-452-3124 or [allison.breault@frb.gov](mailto:allison.breault@frb.gov)), Legal Division. For users of Telecommunications Device for the Deaf (“TDD”) only, contact (202-263-4869).

*FDIC:* Jason C. Cave, Associate Director (202-898-3548), Gloria Ikosi, Senior Quantitative Risk Analyst (202-898-3997), or Karl R. Reitz, Financial Analyst (202-898-3857), Capital Markets Branch, Division of Supervision and Consumer Protection; or Michael B. Phillips, Counsel, (202-898-3581), or Benjamin W. McDonough, Attorney (202-898-7411), Supervision and Legislation Branch, Legal Division.

*OTS*: Michael D. Solomon, Director, Capital Policy (202-906-5654), Austin Hong, Senior Analyst (202-906-6389), Christine A. Smith, Program Manager (202-906-5740) or Karen Osterloh, Special Counsel, Regulations and Legislation Division (202-906-6639).

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## **I. Introduction**

### **A. Background**

The first international capital framework for banks<sup>1</sup> entitled, International Convergence of Capital Measurement and Capital Standards (1988 Capital Accord), was developed by the Basel Committee on Banking Supervision (BCBS)<sup>2</sup> and endorsed by the G-10 governors in 1988. The OCC, the Board, the FDIC, and the OTS (collectively, the agencies) implemented the 1988 Capital Accord in 1989. In 1996, the BCBS amended the 1988 Capital Accord to require banks to measure and hold capital to cover their exposure to market risk associated with foreign exchange and commodity positions and positions located in the trading account (the Market Risk Amendment or MRA). The OCC, Board, and FDIC implemented the MRA effective January 1, 1997 (market risk capital rule).<sup>3</sup>

In June 2004, the BCBS issued a final text of a revised regulatory capital framework for banks entitled, International Convergence of Capital Measurement and Capital Standards: A Revised Framework (New Accord), which was intended for use by

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<sup>1</sup> For simplicity, and unless otherwise indicated, this notice of proposed rulemaking (NPR) uses the term “bank” to include banks, savings associations, and bank holding companies (BHCs). The terms “bank holding company” and “BHC” refer only to bank holding companies regulated by the Board.

<sup>2</sup> 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 Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Spain, Sweden, Switzerland, the United Kingdom, and the United States. Publications of the BCBS, including the 1988 Capital Accord, the market risk amendment (and amendments thereto in 1997 and 2005), the New Accord, and the Trading Book Improvements (discussed later in this preamble) are available through the Bank for International Settlements website at [www.bis.org](http://www.bis.org).

<sup>3</sup> 61 FR 47358 (September 6, 1996). The agencies’ implementing regulations are available at 12 CFR part 3, Appendices A and B (national banks), 12 CFR part 208, Appendices A and E (state member banks), 12 CFR part 225, Appendices A and E (bank holding companies), and 12 CFR part 325, Appendices A and C (state nonmember banks).



individual countries as the basis for national consultation and implementation. The New Accord sets forth a “three pillar” framework encompassing (1) minimum risk-based capital requirements for credit risk, market risk, and operational risk; (2) supervisory review of capital adequacy; and (3) market discipline through enhanced public disclosures. The changes to the capital framework for credit and operational risks are the subject of the agencies’ Notice of Proposed Rulemaking published elsewhere in today’s Federal Register (proposed advanced capital adequacy framework).<sup>4</sup>

For market risk, the New Accord generally retains the approach contained in the MRA. However, in releasing the New Accord, the BCBS announced that work would continue on the treatment of double default effects in the New Accord and that improvements to the MRA would be developed immediately, especially with respect to the treatment of specific risk. Given the interest of both banks and securities firms in this issue, the BCBS worked jointly with the International Organization of Securities Commissions (IOSCO) on this effort, which culminated in the July 2005 publication of The Application of Basel II to Trading Activities and the Treatment of Double Default Effects by the BCBS and IOSCO.<sup>5</sup> The July 2005 publication is now incorporated in the New Accord and follows its “three pillar” structure. With respect to market risk, the Pillar 1 changes clarify the types of positions that are subject to the market risk capital framework and revise modeling standards; the Pillar 2 changes require banks to conduct internal assessments of their capital adequacy with respect to market risk, taking into

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<sup>4</sup> September 25, 2006.

<sup>5</sup> The treatment of double default effects is discussed in section V.C.5 of the proposed advanced capital adequacy framework.

account the output of their internal models, valuation adjustments, and stress tests; and the Pillar 3 changes require banks to disclose quantitative and qualitative information on their valuation techniques for covered positions, the soundness standard they employ for modeling purposes, and the methodologies they use to make the internal capital adequacy assessment.

In this proposal, the OCC, Board, and FDIC are proposing to amend their market risk capital rules to implement the BCBS's 2005 changes to the market risk capital rule. The OTS has not yet implemented a market risk capital rule for savings associations and is proposing such a rule in this NPR to ensure that savings associations with significant market risk measure this exposure and hold commensurate amounts of regulatory capital. The proposed rules will be substantively identical for each of the agencies, and in this NPR the agencies are publishing a common rule text with certain agency-specific text which appears at the end of the common preamble.

Section I.B of this preamble summarizes the current market risk capital rule and provides background information for banks and other readers that are not currently subject to or not familiar with the market risk capital rule. Part II of this preamble describes proposed revisions to the market risk capital rule. The effective date of any final rule associated with the proposed revisions to the market risk capital rule would be January 1, 2008, with certain exceptions described below.

## **B. Summary of the Current Market Risk Capital Rule**

The current market risk capital rule supplements the general risk-based capital rules<sup>6</sup> by requiring any bank subject to the rule to adjust its risk-based capital ratio to reflect explicitly market risk in its trading activities. The rule applies to a bank with worldwide, consolidated trading activity equal to at least 10 percent of total assets or \$1 billion. The primary Federal supervisor of a bank may generally apply the market risk capital rule to a bank or exempt a bank from application of the rule if the supervisor deems it necessary or appropriate for safe and sound banking practices.

### **1. Covered Positions**

The market risk capital rule requires a bank to maintain capital against the market risk of its covered positions. Covered positions are defined as all on- and off-balance sheet positions in the bank's trading account (as defined in the instructions to the Consolidated Reports of Condition and Income (Call Report) or FR Y-9C Consolidated Financial Statements for Bank Holding Companies (FR Y-9C)), and all foreign exchange and commodity positions, whether or not in the trading account. Covered positions exclude all positions in the trading account that, in form or substance, act as liquidity facilities that provide liquidity support to asset-backed commercial paper.

### **2. Capital Requirement for Market Risk**

The market risk capital rule defines market risk as the risk of loss resulting from movements in market prices. Market risk consists of general market risk and specific risk

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<sup>6</sup> The agencies' general risk-based capital rules are at 12 CFR part 3, Appendix A (national banks); 12 CFR part 208, Appendix A (state member banks); 12 CFR part 225, Appendix A (bank holding companies); 12 CFR part 325, Appendix A (state nonmember banks); and 12 CFR part 567 (savings associations). For purposes of this preamble, credit risk capital rules refers to the general risk-based capital rules and the proposed advanced capital adequacy framework, as applicable to the bank applying the proposed rule.

components. General market risk is defined as changes 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 risk is defined as changes in the market value of a position due to factors other than broad market movements and includes event and default risk as well as idiosyncratic variations. Event risk is the risk of loss on a position that could result from sudden and unexpected large changes in market prices or specific events other than default of the issuer. Default risk is 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. For credit derivatives, default risk means the risk of loss on a position that could result from the default of the reference exposures.

A bank that is subject to the market risk capital rule is required to use an internal model to calculate a value-at-risk (VaR)-based measure of its exposure to market risk. A bank's total risk-based capital requirement for covered positions generally consists of a VaR-based capital requirement plus an add-on for specific risk, if specific risk is not captured in the bank's internal model.<sup>7</sup> A VaR-based capital requirement is one that is based on an estimate of the maximum amount that the value of one or more positions could decline during a fixed holding period within a stated confidence interval. A bank may determine its capital requirement for specific risk using a standard specific risk

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<sup>7</sup> The primary Federal supervisor of a bank may also permit the use of alternative techniques to measure the market risk of de minimis exposures so long as the techniques adequately measure associated market risk.

approach or, with supervisory approval, may use internal models to determine its capital requirement for specific risk.

### **3. Internal Models-Based Capital Requirement**

In calculating the capital requirement for market risk, a bank is required to use an internal model that meets specified qualitative and quantitative criteria. The qualitative requirements reflect basic components of sound market risk management. For example, the current rule requires an independent risk control unit that reports directly to senior management and an internal risk measurement model that is integrated into the daily management process. The quantitative criteria include the use of a VaR-based measure based on a 99 percent, one-tailed confidence level. The VaR-based measure must be based on a price shock equivalent to a ten-business-day movement in rates or prices. Price changes estimated using shorter time periods must be adjusted to the ten-business-day standard. The minimum effective historical observation period for deriving the rate or price changes is one year and data sets must be updated at least quarterly or more frequently if market conditions warrant. For many types of covered positions it is appropriate for a bank to update its data sets more frequently than quarterly. In all cases a bank must have the capability to update its data sets more frequently than quarterly in anticipation of market conditions that would require such updating.

A bank need not employ a single model to calculate its VaR-based measure. A bank's internal model may use any generally accepted approach, such as variance-covariance models, historical simulations, or Monte Carlo simulations. However, the level of sophistication of the bank's internal model must be commensurate with the nature and size of the positions it covers. The internal model must use risk factors

sufficient to measure the market risk inherent in all covered positions. The risk factors must address interest rate risk, equity price risk, foreign exchange rate risk, and commodity price risk.

The market risk capital rule imposes backtesting requirements that must be calculated quarterly. A bank must compare its daily VaR-based measure for each of the preceding 250 business days against its actual daily trading profit or loss, which typically includes realized and unrealized gains and losses on portfolio positions as well as fee income and commissions associated with trading activities. If the quarterly backtesting shows that the bank's daily net trading loss exceeded its corresponding daily VaR-based measure, a backtesting exception has occurred. If a bank experiences more than four backtesting exceptions over the preceding 250 business days, it is generally required to apply a multiplication factor in excess of 3 when it calculates its risk-based capital ratio (see section I.B.5 of this preamble).

A bank subject to the market risk capital rule is also required to conduct stress tests to gain information about the impact of adverse market events on its positions. Specific stress testing methodologies are not prescribed.

#### **4. Specific Risk**

A bank may use an internal model to measure its exposure to specific risk if it has demonstrated to its primary Federal supervisor that the model measures the specific risk, including event and default risk, as well as idiosyncratic variations, of its covered debt and equity positions. A bank that incorporates specific risk in its internal model but fails to demonstrate that the model adequately measures all aspects of specific risk for covered debt and equity positions, including event and default risk, is subject to a specific risk

add-on. If the bank can validly separate its VaR-based measure into a specific risk portion and a general market risk portion, the add-on is equal to the previous day's specific risk portion. If the bank cannot separate the VaR-based measure into a specific risk portion and a general market risk portion, the add-on is equal to the sum of the previous day's VaR-based measures for subportfolios of covered debt and equity positions that contain specific risk.

If the bank does not model specific risk, it must calculate its specific risk capital requirement, termed an add-on, using the standard approach. Under the standard approach for specific risk, the specific risk add-on for covered debt positions is calculated by multiplying the absolute value of the current market value of each net long or short debt position by the appropriate specific risk weighting factor in the rule. The specific risk weighting factor ranges from zero to 8 percent and is based on the identity of the obligor, and in the case of some positions, the credit rating and remaining contractual maturity of the position. Derivative instruments are risk-weighted according to the market value of the effective notional amount of the relevant underlying position. A bank may net long and short identical debt positions (including derivatives) with exactly the same issuer, coupon, currency, and maturity. A bank may also offset a matched position in a derivative and its corresponding underlying instrument.

Under the standard approach, the specific risk add-on for covered equity positions is the sum of the bank's long and short equity positions, multiplied by a specific risk-weighting factor. A bank may net long and short positions (including derivatives) in identical equity issues or equity indices in the same market. The standard specific risk add-on is 8 percent of the net equity position, unless the bank's portfolio is both liquid

and well-diversified, in which case the add-on is 4 percent.<sup>8</sup> For positions that are index contracts comprising a well-diversified portfolio of equities, the specific risk add-on is 2 percent of the net long or short position in the index.<sup>9</sup>

## **5. Calculation of the Risk-Based Capital Ratio**

A bank subject to the market risk capital rule must calculate its adjusted risk-based capital ratios as follows. First the bank must calculate its adjusted risk-weighted assets, which equals its risk-weighted assets calculated under the general risk-based capital rule excluding the risk-weighted amounts of covered positions (except foreign exchange positions held outside the trading account and over-the-counter derivative instruments) and cash-secured securities borrowing receivables that meet the criteria of the market risk capital rule.<sup>10</sup>

The bank next must calculate its measure for market risk, which equals the sum of the VaR-based capital requirement for market risk, the specific risk add-on (if any), and the capital requirement for de minimis exposures (if any). The VaR-based capital requirement equals the higher of (i) the previous day's VaR-based measure, and (ii) the average of the daily VaR-based measures for each of the preceding 60 business days

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<sup>8</sup> Under the current market risk capital rule, a portfolio is liquid and well-diversified if: (i) it is characterized by a limited sensitivity to price changes of any single equity issue or closely related group of equity issues held in the portfolio; (ii) the volatility of the portfolio's value is not dominated by the volatility of any individual equity issue or by equity issues from any single industry or economic sector; (iii) it contains a large number of individual equity positions, with no single position representing a substantial portion of the portfolio's total market value; and (iv) it consists mainly of issues traded on organized exchanges or in well-established over-the-counter markets.

<sup>9</sup> In addition, for futures contracts on broadly based indices that are matched by offsetting equity baskets, a bank may apply a two percent specific risk requirement to the futures and stock basket positions if the basket comprises at least 90 percent of the capitalization of the index. The two percent specific risk requirement applies to only one side of certain futures-related arbitrage strategies when either: (i) the long and short positions are in exactly the same index at different dates or in different markets; or (ii) the long and short positions are in different but similar indices at the same date.

<sup>10</sup> See 71 FR 8932 (February 22, 2006).



multiplied by three, or such higher multiplier as may be required under the backtesting requirements of the market risk capital rule. The measure for market risk is multiplied by 12.5 to calculate market-risk-equivalent assets. The market-risk-equivalent assets are added to adjusted risk-weighted assets to compute the bank's risk-based capital ratio denominator.

To calculate the numerator, the bank must allocate tier 1 and tier 2 capital equal to 8 percent of adjusted risk-weighted assets, and further allocate excess tier 1, excess tier 2, and tier 3<sup>11</sup> capital equal to the measure for market risk. The sum of tier 2 and tier 3 capital allocated for market risk may not exceed 250 percent of tier 1 capital. As a result, tier 1 capital must equal at least 28.6 percent of the measure for market risk. The sum of tier 2 (both allocated and excess) and allocated tier 3 capital may not exceed 100 percent of tier 1 capital (both allocated and excess). Term subordinated debt and intermediate-term preferred stock and related surplus included in tier 2 capital (both allocated and excess) may not exceed 50 percent of tier 1 capital (both allocated and excess). The sum of tier 1 and tier 2 capital (both allocated and excess) and allocated tier 3 capital is the bank's total risk-based capital numerator.

## **II. Proposed Revisions to the Market Risk Capital Rule**

### **A. Objectives of the Proposed Revisions**

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<sup>11</sup> Tier 1 and tier 2 capital are defined in the general risk-based capital rules. Tier 3 capital is subordinated debt that is unsecured, is fully paid up, has an original maturity of at least two years, is not redeemable before maturity without prior approval by the primary Federal supervisor, includes a lock-in clause precluding payment of either interest or principal (even at maturity) if the payment would cause the issuing bank's risk-based capital ratio to fall or remain below the minimum required under the credit risk capital rules, and does not contain and is not covered by any covenants, terms, or restrictions that are inconsistent with safe and sound banking practices.

The key objectives of the proposed revisions to the current market risk capital rule are to enhance the rule's sensitivity to risks that are not adequately captured in the current methodologies of the rule, to enhance modeling requirements consistent with advances in risk management since the initial implementation of the MRA nearly 10 years ago, and to modify the definition of covered position to better capture positions for which the market risk capital rule is appropriate. The objective of enhancing the risk sensitivity of the rule reflects the growth in traded credit products, such as credit default swaps and tranches of collateralized debt obligations, other structured products, and less liquid products. The risks of these products are not adequately captured in current VaR models and are not fully reflected in a 10-business-day, 99 percent confidence level soundness standard.

The growth in traded credit products has given rise to an increase in default risks that should be captured in a capital requirement for specific risk but have proved difficult to capture adequately with current specific risk models. Other structured and less liquid products may give rise to risks that were not entirely contemplated when the market risk capital rule was first adopted. Moreover, concentration risk may not be adequately reflected in a VaR-based framework, especially when banks rely on proxies to capture the risks of actual holdings. Therefore, the agencies propose to implement an incremental default risk capital requirement for a bank that models specific risk for one or more portfolios of covered positions and to require the consideration of liquidity and concentration risks in that requirement and in the bank's stress tests and internal assessment of capital adequacy. In addition, to address the agencies' concerns about appropriate treatment of covered positions with limited price transparency, the agencies

propose to require banks to have a well-defined valuation process for all covered positions. The specific proposals are discussed below.

## **B. Description of the Proposed Revisions to the Market Risk Capital Rule**

### **1. Scope**

With the exception of the addition of savings associations, the proposed revisions to the market risk capital rule would not change the set of banks to which the rule applies. Thus, the proposed rule would continue to apply to any bank with aggregate trading assets and liabilities equal to 10 percent or more of total assets, or \$1 billion or more. The proposed revisions would apply to a bank meeting the market risk capital rule applicability threshold regardless of whether the bank would adopt the proposed advanced capital adequacy framework or remain under the general risk-based capital rule.

Question 1: The agencies seek comment on the thresholds for the application of the market risk capital rule and, if they should be changed, on what appropriate thresholds might be.

The primary Federal supervisor of a bank that does not meet the threshold criteria may apply the market risk capital rule to the bank if the supervisor deems it necessary or appropriate given the level of market risk of the bank or to ensure safe and sound banking practices. A bank that does not meet the threshold criteria may request that its primary Federal supervisor apply the market risk capital rule to it. A primary Federal supervisor may also exclude a bank that meets the threshold criteria from the rule if appropriate based on the level of market risk of the bank and provided such exemption would be consistent with safe and sound banking practices.

### **2. Reservation of Authority**

The proposed rule would contain a reservation of authority that affirms the authority of a bank's primary Federal supervisor to require the bank to hold an overall amount of capital greater than would otherwise be required under the rule if the supervisor determines that the bank's risk-based capital requirements under the rule are not commensurate with the market risk of the bank's covered positions. In addition, the agencies anticipate that there may be instances when the proposed rule generates a risk-based capital requirement for a specific covered position or portfolio of covered positions that is not commensurate with the risks posed by such exposures. In these cases, a bank's primary Federal supervisor may require the bank to assign a different risk-based capital requirement to the covered position or portfolio of covered positions that better reflects the risk of the position or portfolio. The proposed rule also would provide authority for a bank's primary Federal supervisor to require the bank to calculate capital requirements for specific positions or portfolios under the market risk capital rule or under the credit risk capital rule to more accurately reflect the risks of the positions. Any agency that exercises this reservation of authority would notify each of the other agencies of its determination.

### **3. Modification of the Definition of Covered Position**

The NPR modifies the definition of a covered position to include only trading assets and trading liabilities (as reported on schedule RC-D of the Call Report, Schedule HC-D of the Consolidated Financial Statements for Bank Holding Companies, or as defined in the instructions to the Thrift Financial Report) that are trading positions. The definition also includes trading assets and liabilities that hedge covered positions. In addition, the trading asset or liability must be free of any restrictive covenants on its

tradability or the bank must be able to hedge its material risk elements in a two-way market. A trading position would be defined as 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 price movements or to lock in arbitrage profits. The proposed definition of a trading position recognizes that the accounting definition of trading assets and liabilities includes positions that are not held with the intent or ability to trade.

A trading asset or liability that hedges a trading position is a covered position only if the hedge is within the scope of the bank's hedging strategy (discussed below). The agencies encourage the sound risk management of trading positions and therefore include hedges that offset their risk in the definition of covered position and thus in the measure for market risk. The agencies are concerned, however, that a bank could craft its hedging strategies in order to bring non-trading positions that are more appropriately treated under the credit risk capital rules into the bank's covered positions. The agencies will scrutinize a bank's hedging strategies to ensure that they are not being manipulated in this manner. For example, mortgage-backed securities that are not held with the intent to trade, but that are hedged with interest rate swaps to mitigate interest rate risk, would be subject to the credit risk capital rules. Question 2: The agencies request comment on all aspects of the proposed definition of covered position. The agencies are particularly interested in comment on additional safeguards that the agencies might implement to prevent abuse of the hedge component of the definition of covered position and increase transparency for supervisors.

Consistent with the current definition, a covered position also would include any foreign exchange or commodity position, whether or not a trading asset or trading

liability. With prior supervisory approval a bank could exclude any structural position in a foreign currency.<sup>12</sup>

Also consistent with the current rule, the definition of a covered position would explicitly exclude any position that, in form or substance, acts as a liquidity facility that provides support to asset-backed commercial paper. In addition, under the proposed rule the definition of covered position would exclude any intangible asset, including any servicing asset. Intangible assets are excluded from the definition of covered position because their risks are explicitly addressed in the credit risk capital rules, generally through deduction from capital.

In addition, under the proposed rule, a credit derivative recognized as a guarantee for risk-weighted asset amount calculation purposes under the credit risk capital rules<sup>13</sup> used to hedge a position that is not a covered position (for example, a credit derivative hedge of a loan that is not a covered position) would be excluded from the definition of a covered position. This would require the bank to include the credit derivative in its risk-based capital measure for credit risk and exclude it from its VaR-based measure for market risk. The proposed treatment of a credit derivative hedge for regulatory capital purposes would avoid the mismatch that arises when the hedged position (for example, a

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<sup>12</sup> Structural foreign currency positions include positions designed to hedge a bank's capital ratios against the effect of adverse exchange rate movements on (1) subordinated debt, equity, or minority interests in consolidated subsidiaries and capital assigned to foreign branches that are denominated in foreign currencies, and (2) any positions related to unconsolidated subsidiaries and other items that are deducted from an institution's capital when calculating its capital base.

<sup>13</sup> See 12 CFR part 3, § 3 (national banks); 12 CFR part 208, Appendix A, § II.B (state member banks); 12 CFR part 225, Appendix A, § II.B (bank holding companies); 12 CFR part 325, Appendix A, § II.B.3 (state nonmember banks); 12 CFR part 567.6 (savings associations). The treatment of guarantees is described in sections 33 and 34 of the proposed advanced capital adequacy framework and discussed in section V.C.5 of the framework's preamble.

loan) is not a covered position and the credit derivative hedge is a covered position. This mismatch has the potential to inflate the VaR-based measure of market risk because only one side of the transaction is reflected in that measure. Question 3: The agencies request comment on whether there is a better approach that matches more effectively the true economic impact of these transactions.

A similar distortion of the VaR-based measure may arise in the context of interest rate risk. Some banks manage their interest rate risk on a portfolio basis without distinguishing between covered and noncovered positions by using interest rate derivatives with external third parties that are covered positions under the market risk capital rule.<sup>14</sup> The interest rate derivatives hedge the interest rate risk of covered and noncovered positions together; however, only the covered positions are included in the bank's VaR-based measure. This may result in a regulatory capital requirement that does not appropriately reflect the interest rate risk of all of the offsetting transactions. This problem would not exist for interest rate derivatives that are direct hedges of noncovered positions because, under the proposed definition of covered position, the interest rate derivative would not be a covered position. Question 4: The agencies request comment on the extent and materiality of any distortion of the VaR-based measure due to the inclusion of some, but not all, offsetting transactions, and on any appropriate approaches to address this distortion in the final rule, including, subject to certain restrictions, (1) permitting a bank to include in its VaR-based measure the interest rate risk associated

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<sup>14</sup> Only transactions with external third parties are covered positions because only such transactions are trading assets and liabilities for consolidated reporting purposes. Internal transactions, such as an interest rate derivative between a bank's treasury function and its trading desk, are not covered positions.

with certain noncovered positions that are hedged by covered positions (while remaining subject to a credit risk capital requirement for the noncovered positions) or (2) permitting a bank to include in its VaR-based measure certain internal interest rate derivatives hedging noncovered positions. The agencies also request comment on any operational considerations such approaches would entail.

Under the proposed rule, the definition of a covered position would exclude any securitization position that is a residual securitization position,<sup>15</sup> subject to a limited market maker exception. The market maker exception would permit these securitization positions to be included as covered positions only upon a determination by the bank's primary Federal supervisor that: (i) a two-way market exists for the securitization position, or in the case of a securitization position that relies solely on credit derivatives, for the securitization position or all of its material risk components; (ii) the bank holds itself out as ready to buy or sell these securitization positions for its own account on a regular and continuous basis at a quoted price, (iii) the bank's internal models fully capture the general market risk and specific risks of its securitization positions and sufficient market data are available to model these risks reliably; and (iv) the bank has adequate internal systems and controls for the trading of securitization positions.

The general exclusion of these securitization positions from the definition of covered position provides a capital treatment for these positions that is appropriate for

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<sup>15</sup> A residual securitization position is any securitization position subject to deduction under the proposed advanced capital adequacy framework or subject to the following provisions under the general risk-based capital rules: 12 CFR part 3, Appendix A, sections 4 (b) and (f) (national banks); 12 CFR part 208, Appendix A.III.B.3.b and III.B.3.e (state member banks); 12 CFR part 225, Appendix A.III.B.3.b and III.B.3.e (bank holding companies); 12 CFR part 325, Appendix A.II.B.5 (state nonmember banks); and 12 CFR 567.6(b)(1) and (2) (savings associations).



their risk. The agencies recognize, however, that a bank may be an active market maker in these securitization positions and may have the models and internal controls capacity to capture the risk of these positions in the bank's VaR-based measure of market risk. The agencies also note that positions that meet the definition of a residual securitization position might be different for a bank that is subject to the proposed advanced capital adequacy framework than for a bank that is subject to the general risk-based capital rules.

Question 5: The agencies seek comment on the proposed definition of residual securitization position, and on the market maker exception and the conditions to use that exception. With respect to positions that do not qualify for the market maker exception, the agencies request comment on the treatment of those positions under the credit risk capital rules and whether such treatment could give rise to any operational or other issues.

#### **4. Requirements for the Identification of Trading Positions and Management of Covered Positions**

The proposal introduces new requirements for the identification of trading positions and the management of covered positions. The agencies believe that these new requirements are warranted based on the trend towards the inclusion of more credit risk-related, less liquid, and less actively traded products in banks' covered positions. The risks of these positions may not be fully reflected in the requirements of the market risk capital rule and may be more appropriately captured under the credit risk capital rules.

A bank would be required to have clearly defined policies and procedures for determining which of its trading assets and trading liabilities are trading positions. In determining the scope of trading positions, the bank would be required to consider (i) the

extent to which a position (or a hedge of its material risks) could be marked-to-market daily by reference to a two-way market, and (ii) possible impairments to the liquidity of a position.

In addition, the bank must have clearly defined trading and hedging strategies. The bank's trading and hedging strategies for its trading positions must be approved by senior management. The trading strategy must articulate the expected holding period of and the market risk associated with each portfolio of trading positions. The trading strategy must also articulate whether the purpose of each portfolio of trading positions is to accommodate customer flow, to engage in proprietary trading, or to make a market in the positions. The hedging strategy must articulate for each portfolio 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. The hedging strategy must clearly articulate which positions are being hedged and which positions serve as hedging instruments.

A bank would be required to have clearly defined policies and procedures for actively managing all covered positions. In the context of nontraded commodities and foreign exchange positions, active management could focus on managing the risks of those positions within the bank's risk limits. For all covered positions, these policies and procedures would be required to address, at a minimum, marking positions to market or model on a daily basis; assessing on a daily basis the bank's ability to hedge position and portfolio risks and the extent of market liquidity; and the establishment and daily monitoring of position limits by a risk control unit independent of the trading business unit. Senior management would be required to monitor all of this information on a daily

basis. The policies and procedures would be required to provide for reassessment by senior management of established position limits on at least an annual basis, as well as 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. Question 6: The agencies seek comment on these requirements and on whether different or additional policies and procedures would be beneficial for ensuring appropriate identification of positions to which the market risk capital rule should be applied and appropriate risk management of covered positions.

The proposal introduces new requirements for the prudent valuation of covered positions that include policies and procedures on position valuation, marking to market or model, independent price verification, and valuation adjustments or reserves. The valuation process would be required to consider, as appropriate, unearned credit spreads, close-out costs, early termination, investing and funding costs, future administrative costs, liquidity, and model risk. These new valuation requirements reflect the agencies' concerns about possible shortcomings in the valuation of less liquid trading positions, especially in light of the historical focus of the market risk capital rule on a 10-business-day time horizon and a 99 percent confidence level, which may be inadequate to reflect the full extent of the risks of less liquid positions.

## **5. Requirements for Internal Models in General**

As under the current market risk capital rule, a bank would be required to use one or more internal models to calculate a daily VaR-based measure that reflects general market risk for all covered positions. The daily VaR-based measure may also reflect the

bank's specific risk for one or more portfolios of covered debt or equity positions. The requirements for internal models are discussed below.

Model Use Requirements. The proposed revisions would specify that a bank must receive the prior written approval of its primary Federal supervisor before using any internal model to calculate its risk-based capital requirement for market risk and before extending the use of a model for which it has received prior written approval to an additional business line or product type. A bank would also be required to notify its primary Federal supervisor promptly if it makes any changes to its internal models that would result in a material change in the bank's risk-weighted asset amount for a portfolio or when the bank makes any material change to its modeling assumptions. The bank's primary Federal supervisor could rescind its approval, in whole or in part, of the use of any internal model if it determines that the model no longer complies with the market risk capital rule or fails to reflect accurately the risks of the bank's covered positions. For example, if adverse market events or other developments reveal that a material assumption in a bank's approved model is flawed, a primary Federal supervisor may require the bank to revise its model assumptions and resubmit the model specifications for review by the supervisor.

Factors and Risks Reflected in Models. As is the case under the current rule, a bank would be required to integrate its internal models into its daily risk management process, and the level of sophistication of a bank's models would need to be commensurate with the nature and size of its covered positions. The internal models used by a bank are required to capture all material risks, including basis and prepayment risks. The proposed revisions add credit spread risk to the list of risk factors required to be

captured as appropriate under the current rule (that is, in addition to interest rate risk, equity price risk, foreign exchange rate risk, and commodity price risk). Under the current rule, a bank that has material exposure to credit spread, basis, or prepayment risks should be capturing those risks in its internal model. In the proposed revisions, the agencies decided to specifically enumerate these risks to stress their importance in light of the growth of traded credit products and products with prepayment or basis risk at banks since the current rule was adopted. The proposed revisions would require risks arising from less liquid positions and positions with limited price transparency to be modeled conservatively under realistic market scenarios.

The agencies are concerned that certain covered positions, especially securitization positions, may contain prepayment risk that is not adequately captured in the VaR-based measure of market risk. Prepayment risk is the risk of loss to holders of debt exposures arising from the repayment of principal differing from the expected or scheduled principal repayment. The agencies recognize that the VaR-based measure may capture a portion of prepayment risk for positions as potential changes in the value of positions due to interest rate risk. However, the agencies question the degree to which interest rate volatility over the 10-business-day horizon adequately captures prepayment risk associated with positions that are subject to significant levels of prepayment. The agencies also recognize that complete models of prepayment include pool and security-specific factors that are not easily incorporated or modeled in daily calculations of a VaR-based measure.

Question 7: The agencies request comment on all aspects of prepayment risk, including the extent and materiality of prepayment risk, whether material prepayment risk

may warrant a further explicit requirement that banks hold capital against prepayment risk over a one-year horizon under both the internal models and standard approaches to specific risk, and the interplay between prepayment risk and default risk for purposes of determining the bank's overall measure for market risk. The agencies also seek comment on how an explicit capital requirement for prepayment risk could be designed.

The proposed rule also requires a bank to have a rigorous process for reestimation, reevaluation and updating of its models to ensure continued applicability and relevance. Further, the proposed rule would continue to require models to include risks arising from the nonlinear price characteristics of option positions, and to incorporate empirical correlations across and within risk factors.

#### Quantitative Requirements for VaR-Based Measure

The proposed rule includes the same quantitative requirements for the VaR-based measure as the current market risk capital rule with respect to daily computations, the one-tailed, 99 percent confidence level, the 10-business-day holding period, and the one-year historical observation period.

The current market risk capital rule requires a bank to include in its VaR-based measure only covered positions. In contrast, the proposed revisions would allow residual securitization positions that are trading assets or liabilities and term repo-style transactions to be included in the VaR-based measure even though these positions may not be included within the definition of a covered position. A term repo-style transaction would be defined as a repurchase or reverse repurchase transaction or a securities borrowing or securities lending transaction with an original maturity in excess of one day, provided that, (i) the transaction is based solely on liquid and readily marketable

securities or cash, (ii) the transaction is marked-to-market daily and subject to daily margin maintenance requirements, (iii) the transaction is executed under an agreement that provides certain rights of acceleration, termination, close-out, and set-off, and (iv) the bank has conducted and documented sufficient legal review to conclude that the agreement includes these rights and is legally binding. While repo-style transactions typically are close adjuncts to trading activities, Generally Accepted Accounting Principles (GAAP) traditionally has not permitted companies to report them as trading assets or liabilities. Repo-style transactions included in the VaR-based measure will continue to be subject to the credit risk capital requirements in order to capture counterparty credit risks.

The agencies believe that residual securitization positions should be subject to the credit risk capital requirements. The agencies also recognize, however, that these positions may be hedged by covered positions and believe that it is appropriate to allow banks to recognize the hedge in calculating their VaR-based measures. Residual securitization positions even if included in the VaR-based measure will continue to be subject to the credit risk capital requirements. A bank may choose whether or not to include all residual securitization positions that are trading assets or liabilities or all term repo-style transactions in its VaR-based measure, and must choose whether or not to include them consistently over time.

Control, Oversight, and Validation Mechanisms. The proposed rule would continue the requirement that a bank have a risk control unit that reports directly to senior management and is independent of its business trading units. In addition, the proposed rule would impose specific model validation standards that are similar to the standards in

the proposed advanced capital adequacy framework. A bank would be required to validate its internal models initially and on an ongoing basis. The validation process must be independent of the internal model development, implementation, and operation, or the validation process must be subject to an independent review of its adequacy and effectiveness. The review personnel must be independent of internal model development, implementation, and operation personnel, but not necessarily external to the bank.

Validation would include evaluation of the conceptual soundness of the internal models; 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 an outcomes analysis process that includes the comparison of a bank's internal estimates with actual outcomes during a sample period not used in model development. The evaluation of conceptual soundness should include evaluation of empirical evidence and documentation supporting the methodologies used, important model assumptions and their limitations, adequacy and robustness of empirical data used in parameter estimation and model calibration, and evidence of the model's strengths and weaknesses.

A comparison of the bank's model outputs with relevant internal and external data sources or estimation techniques is helpful to draw inferences about the performance of model outputs. Results of this comparison can be a valuable diagnostic tool in identifying potential weaknesses in a bank's models. As part of this comparison, the bank should investigate the source of any differences between the model estimates and the relevant internal or external data or estimation techniques and whether the extent of the differences is appropriate.



The proposed revisions expand upon the current market risk capital rule's stress testing requirement. Specifically, the proposed rule would require a bank to stress test the market risk of its covered positions at a frequency appropriate to the portfolio, and in no case less frequently than quarterly. The stress tests must take into account concentration risk, illiquidity under stressed market conditions, and other risks that may not be captured adequately in the bank's VaR-based measure of market risk. For example, it may be appropriate for a bank to include in its stress testing gapping of prices, one-way markets, non-linear or deep out-of-the-money products, jumps-to-default, or significant shifts in correlation. With respect to concentration risk, the relevant types include concentration by name, industry, sector, country, and market. Market concentration occurs when a bank holds a position that represents a concentrated share of the market for a security. A market concentration is a position that is so large, relative to the liquidity typically available in the market, that it requires a longer than usual liquidity horizon to liquidate the position without moving the market. A bank's primary Federal supervisor would evaluate the robustness and appropriateness of a bank's stress tests through the supervisory review process.

The bank would be required to 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 of the independent risk control unit, and compliance with policies and procedures. At least annually, internal audit should review the validation processes, including validation procedures, responsibilities, results, timeliness, and responsiveness to findings. Further, internal audit should evaluate the depth, scope, and

quality of the risk management system review process and conduct appropriate testing to ensure that the conclusions of these reviews are well founded.

Internal Assessment of Capital Adequacy. The proposed revisions include a requirement that a bank have a rigorous process for assessing its overall capital adequacy in relation to its market risk. The assessment must take into account market concentration and liquidity risks under stressed market conditions, as well as other risks that may not be captured appropriately in the VaR-based measure.

Documentation. A bank would be required to document adequately all material aspects of its internal models, the management and valuation of covered positions, its control, oversight, and validation mechanisms, and its internal assessment of capital adequacy. This documentation would facilitate the supervisory review process as well as the bank's internal audit or other review procedures.

Backtesting. The proposal modifies the regulatory backtesting framework for determining the multiplication factor based on the number of backtesting exceptions. Under the current market risk rule, a bank must compare its daily VaR-based measure to its actual daily trading profit or loss, which typically includes realized and unrealized gains and losses on portfolio positions as well as fee income and commissions associated with trading activities. Under the proposed rule, a bank would be required to compare its actual daily trading profit or loss excluding fees, commissions, reserves and net interest income to its daily VaR-based measure. These excluded components of trading profit and loss are not modeled as part of the VaR-based measure and excluding them will improve the accuracy of the backtesting and provide a better assessment of the bank's

internal model. The agencies believe that bank trading and reporting systems have improved sufficiently to allow this type of backtesting.

As noted above, the proposal also imposes specific model validation standards that include outcomes analysis. The agencies expect that outcomes analysis used for model validation would include hypothetical backtesting, that is, comparison of the daily VaR-based measure to hypothetical changes in portfolio value that would occur if there were no intra-period changes. The hypothetical changes in portfolio value would exclude the effects of changes in positions due to intraday trading, new positions, or other sources of intra-period changes, and also exclude fees, commissions, reserves and net interest income. Question 8: The agencies request comment on the exclusion of fees, commissions, reserves, and net interest income for the trading profit or loss used for regulatory backtesting, including the appropriateness and feasibility of these exclusions, and whether additional items should also be excluded. The agencies also request comment on the role of hypothetical backtesting-- specifically, whether hypothetical backtesting is feasible as part of model validation; whether other forms of backtesting should also be used; and whether regulatory backtesting should be based on hypothetical backtesting.

## **6. Revised Modeling Standards for Specific Risk**

The proposed rule would more clearly specify the modeling standards for specific risk and, after a transition period, eliminate the current option for a bank to model some but not all material aspects of specific risk for an individual portfolio of covered debt or equity positions. As under the current market risk capital rule, a bank may use one or more internal models to measure specific risk. The internal model would be required to

explain the historical price variation in the portfolio, be responsive to changes in market conditions, be robust to an adverse environment, and capture all material aspects of specific risk for covered debt and equity positions. Specifically, the proposed revisions would require that a bank's internal models capture default risk, event risk, and idiosyncratic variations; capture concentrations and demonstrate sensitivity to changes in portfolio construction or concentrations; and capture material basis risk and demonstrate sensitivity to material idiosyncratic differences between similar, but not identical, positions. The requirement to capture default and event risk specifies that for debt positions, migration risk must be captured, and for equity positions, events reflected in large changes or jumps in prices must be reflected.

Under the current market risk capital rule, if a bank incorporates specific risk in its internal model but fails to demonstrate to its primary Federal supervisor that its internal model adequately measures all aspects of specific risk for covered debt and equity positions, including event and default risk, it is subject to a specific risk add-on. On and after January 1, 2010, the proposed rule would require a bank that does not have an approved internal model that captures all material aspects of specific risk for a particular portfolio to use the standard specific risk add-on for that portfolio. This proposed change reflects the agencies' interest in creating incentives for more robust specific risk modeling, while providing banks with a reasonable period of time in which to improve current modeling techniques.

The proposed phase-out of partial modeling of specific risk would not preclude a bank from using an internal model to calculate the specific risk of some, but not all, portfolios of covered debt and equity positions and using the standard approach to

calculate the specific risk of other portfolios. Rather, effective January 1, 2010, a bank would not be permitted to use an internal model to calculate the specific risk add-on of a portfolio if the model did not capture all material aspects of specific risk for that portfolio. The bank would be required to use the standard approach to calculate the specific risk add-on for the portfolio until it receives written approval from its primary Federal supervisor to measure the specific risk for the portfolio using its internal model.

Question 9: The agencies request comment on the proposed timeframe for phasing out partial modeling of specific risk and on whether it would allow banks enough time to implement the proposed changes.

While the proposed rule would continue to provide for flexibility and a combination of approaches to measure market risk, including the use of different models to measure general market risk and the specific risk of one or more portfolios of covered debt and equity positions, the agencies strongly encourage banks to develop and implement models that integrate the measurement of VaR for general market risk and specific risk. A bank's use of a combination of approaches would be subject to supervisory review to ensure that the overall capital requirement for market risk is commensurate with the risks of the bank's covered positions.

The proposed rule does not contain explicit specific risk capital requirements for exposures to commodities and foreign exchange positions. Question 10: The agencies seek comment on the extent and materiality of specific risk for commodities and foreign exchange positions and on whether and how a specific risk capital requirement for those positions could be developed under both the internal models and standard approaches.

## **7. Standard Specific Risk Capital Requirement**

The standard specific risk add-ons are largely unchanged from the current market risk capital rule, as summarized above. The proposed rule would make the following modifications to the treatment of covered debt positions, largely to parallel the increased recognition of external ratings in the New Accord. The government category would be expanded to include all sovereign debt, and the risk weight for sovereign debt would change from zero percent to a range from zero to 12 percent based on the external rating of the obligor and remaining contractual maturity of the covered debt position. The proposed rule would change the qualifying category to include all non-sovereign covered debt positions that are (i) rated investment grade by at least two nationally recognized statistical rating organizations (NRSROs); (ii) rated investment grade by one NRSRO and not rated less than investment grade by any other NRSRO; and (iii) unrated debt of financial firms and of other firms that have publicly traded securities or instruments, provided the bank deems the debt to have credit risk comparable to that of investment grade. The risk weight in the other category would be raised from 8 percent to 12 percent for covered debt positions rated more than two categories below investment grade.

Finally, the proposed rule would expand the recognition of netting effects for covered debt positions. In this regard, there would be no standard specific risk add-on when a covered debt position is fully hedged by a total return swap (or similar instrument where there is a matching of payments and changes in market value of the position) and there is an exact match between the reference obligation of the swap and the covered debt position and between the maturity of the swap and the covered debt position.

If a set of transactions consisting of a covered debt position and its credit derivative hedge does not meet these criteria for no specific risk add-on, the add-on

would be equal to 20 percent of the specific risk capital requirement for the side of the transaction with the higher specific risk add-on when the credit risk of the position is fully hedged by a total return swap, credit default swap or similar instrument and there is an exact match in terms (including maturity) of the reference obligation of the credit hedge and the covered debt position, and of the currency of the credit derivative and the covered debt position.

For a set of transactions that consists of a covered debt position and its credit hedge but do not meet the criteria for full offset or the 80 percent offset above, the standard specific risk add-on for the set would be the standard specific risk add-on for the side of the transaction with the higher specific risk capital requirement.

## **8. Incremental Default Risk Capital Requirement**

Under the proposed rule, a bank that models specific risk for one or more portfolios of covered positions would be required to measure the incremental default risk of those positions. Incremental default risk would be defined as the default risk of a covered position that is not reflected in the bank's VaR-based measure because it reflects risk beyond a 10-business-day horizon and a 99 percent confidence level. In the case of a securitization exposure, incremental default risk includes the risk of losses that could result from default of the assets underlying the securitization exposure. A bank would be required to measure incremental default risk for both covered debt and equity positions.

Under the proposed rule, a bank may use one or more internal models to measure its incremental default risk. The agencies propose to set the soundness standard for the incremental default risk capital requirement at the 99.9<sup>th</sup> percentile, rather than the 99<sup>th</sup> percentile generally used to capture market risk. Incremental default risk would be

measured consistent with a one-year time horizon and a one-tailed, 99.9 percent confidence level (that is, comparable to the internal ratings-based approach under the proposed advanced capital adequacy framework), under the assumption of a constant level of risk and adjusted where appropriate to reflect the impact of liquidity, concentrations, hedging, and optionality. An incremental default risk capital requirement would be consistent with an internal ratings-based capital requirement for credit risk if it produced a default risk measure for an infinitely granular portfolio over a one-year time horizon that roughly equals the credit risk charge under the proposed advanced capital adequacy framework.

The proposed assumption of a constant level of risk reflects that a bank makes decisions about capital and business planning over a horizon that is longer than the liquidity horizon of many of its trading portfolios. It assumes that, while the bank would likely change its mix of positions in the event of market losses, it would not automatically reduce its aggregate level of risk-taking. The agencies believe that this assumption is more realistic than assuming that a bank's trading positions at a point in time would be held constant over a longer horizon.

The agencies are evaluating how a bank should adjust the incremental default risk capital requirement to adjust for the impact of liquidity, concentrations, hedging, and optionality. One possible approach to liquidity would be to measure default risk out to an appropriate liquidity horizon. The liquidity horizon of a position or portfolio is the amount of time it takes to sell the position or hedge all of its material risks. To produce a prudent measure of incremental default risk, a bank would set the liquidity horizon in a conservative manner reflecting stressed market conditions and the bank's own policies



and procedures for identifying stale positions. Some covered debt and equity positions such as publicly traded equities may have a liquidity horizon shorter than the VaR-based measure's 10-business-day horizon and thus would not have an incremental default risk capital requirement.

The proposed adjustment of the incremental default risk measure for concentrations of positions would require a bank to consider all types of concentrations, including name concentration and market concentration, when measuring incremental default risk. The adjustment for hedging would reflect offsets of short and long positions in a single instrument when they are expected to be maintained at least over the liquidity horizon. The incremental default risk measure could include the effects of optionality by reflecting the nonlinearity of options or other nonlinear positions when it has a material impact on default risk. The agencies note that nonlinearity would be relevant for products such as synthetic collateralized debt tranches or  $n^{\text{th}}$  to default baskets, where the loss upon the default of one name depends on which other names are defaulting in the same time period. Question 11: The agencies request comment on how a bank should adjust the incremental default risk capital requirement to adjust for the impact of liquidity, concentrations, hedging, and optionality.

The proposed rule would provide flexibility to a bank in developing an approach for the calculation of any incremental default risk capital requirement for a covered position. At present, the agencies anticipate that most, if not all, banks would utilize a separate model for calculating the incremental default risk capital requirement, given the difficulties of modeling to two different soundness standards. Question 12: The agencies request comment on all aspects of the proposal to reflect in the market risk capital

requirement a measure of incremental default risk. Specifically, the agencies seek comment on the feasibility of measuring incremental default risk at a one-year, 99.9 percent confidence level and the appropriateness of the assumption of a constant level of risk.

A bank's primary Federal supervisor would review its internal model for incremental default risk and approve its use for regulatory capital purposes. The incremental default risk capital requirement would not be subject to the multiplier described in paragraphs (a)(2)(B) and (c) of section 4 of the proposed rule. A bank could adjust its incremental default capital requirement to minimize double-counting of default risk already reflected in the 10-business-day, 99 percent confidence level VaR-based measure using an approach agreed upon with its primary Federal supervisor.

In order to provide sufficient time for banks to develop methodologies to capture fully incremental default risk, a bank would have until January 1, 2010 to obtain the approval of its primary Federal supervisor to adopt an approach to measure incremental default risk. Early adoption would be encouraged. If a bank subject to the general risk-based capital rules is unable to develop internal models for incremental default risk on or after January 1, 2010, it would be required to use the standard method for specific risk. If a bank subject to the proposed advanced capital adequacy framework is unable to develop an approach to incremental default risk on or after January 1, 2010, it would be required to use the proposed advanced capital adequacy framework to calculate its incremental default risk capital requirement.

The agencies note that they are working with the banking industry through the Accord Implementation Group of the BCBS to develop guidance on acceptable

approaches to determining the incremental default risk capital charge. Question 13: The agencies request comment on the extent to which banks, at present, measure incremental default risk and the prospects for development of methodologies to capture this risk fully in internal models by the proposed January 1, 2010 deadline. The agencies also request comment on the fallback methods proposed for banks unable to develop an internal model to capture incremental default risk by January 1, 2010.

## **9. Disclosure Requirements**

The proposed revisions would impose disclosure requirements designed to improve market discipline on the top-tier consolidated bank that is subject to the market risk capital rule. The agencies recognize the importance of market discipline in encouraging sound risk management practices and fostering financial stability. With sufficient relevant information, market participants can better evaluate a bank's risk management performance, earnings potential, and financial strength. Many of the proposed disclosure requirements reflect information already disclosed publicly by the banking industry. A bank would be encouraged, but not required, to make these disclosures in a central location on its website.

Consistent with the proposed advanced capital adequacy framework, the proposed revisions would require a bank to comply with the requirements of section 8 of the proposed rule unless it is a consolidated subsidiary of another depository institution or bank holding company that is subject to the disclosure requirements. A bank subject to section 8 would be required to adopt a formal disclosure policy approved by its board of directors that addresses the bank's 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 must verify that the bank has made all required disclosures and maintains effective internal controls and disclosure controls and procedures. The chief financial officer would be required to certify that disclosures required by the proposed rule are appropriate, and the board of directors and senior management are responsible for establishing and maintaining an effective internal control structure over financial reporting, including the information required by this proposed rule.

The proposed revisions would require a bank, at least quarterly, to disclose publicly for each portfolio of covered positions (i) the high, low, and mean VaR-based measures over the reporting period; (ii) separate VaR-based measures for interest rate risk, credit spread risk, equity price risk, foreign exchange rate risk, and commodity price risk; and (iii) a comparison of VaR-based measures with actual results and analysis of important outliers. A bank would be required to make qualitative disclosures at least annually, or more frequently in the event of material changes, of the following information: (i) the composition of material portfolios of covered positions; (ii) the bank's valuation policies, procedures, and methodologies; (iii) the characteristics of its internal models; (iv) a description of its approaches for validating the accuracy of its internal models and modeling processes; (v) a description of the stress tests applied to each market risk factor; (vi) the results of a comparison of the bank's internal estimates with actual outcomes during a sample period not used in model development; and (vii) the soundness standard on which its internal capital adequacy assessment is based, including a description of the methodologies used to achieve a capital adequacy

assessment that is consistent with the soundness standard and the requirements of the market risk capital rule.

In addition to the public disclosures that would be required by the consolidated bank, the agencies would require certain regulatory reporting from all banks applying the market risk capital rule in order to assess the reasonableness and accuracy of the bank's calculation of its minimum capital requirements under this rule and the adequacy of the bank's capital in relation to its risks. The agencies believe that requiring certain common reporting across banks would facilitate comparable application of the proposed rule. Proposed regulatory reporting requirements for banks subject to the rule are the subject of a separate joint notice and request for comment by the agencies [reference].

Question 14: The agencies seek comment on all aspects of the proposed public disclosure requirements.

### **Regulatory Flexibility Act Analysis**

The Regulatory Flexibility Act (RFA) requires an agency that is issuing a proposed rule to prepare and make available for public comment an initial regulatory flexibility analysis that describes the impact of the proposed rule on small entities. 5 U.S.C. 603(a). The RFA provides that an agency is not required to prepare and publish an initial regulatory flexibility analysis if the agency certifies that the proposed rule will not, if promulgated, have a significant economic impact on a substantial number of small entities. 5 U.S.C. 605(b).

Under regulations issued by the Small Business Administration (13 CFR 121.201), a "small entity" includes a bank holding company, commercial bank, or

savings association with assets of \$165 million or less.<sup>16</sup> The proposed rule would require a bank holding company, bank, or savings association to maintain regulatory capital against the market risk of covered positions. The proposed rule would apply only if the bank holding company, bank, or savings association has aggregated trading assets and liabilities equal to 10 percent or more of quarter end total assets, or \$1 billion or more. The agencies estimate that no small bank holding company, bank, or savings association would satisfy these criteria, and that no small entities would be subject to this rule. Accordingly, each agency certifies that the proposed rule will not, if promulgated in final form, have a significant economic impact on a substantial number of small entities.

#### **OCC/OTS Executive Order 12866**

Executive Order 12866 requires Federal agencies to prepare a regulatory impact analysis for agency actions that are found to be “significant regulatory actions.” “Significant regulatory actions” include, among other things, rulemakings that “have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state local, or tribal governments or communities. The OCC and OTS each has determined that its portion of the rule is not a significant regulatory action.

#### **OCC/OTS Unfunded Mandates Reform Act of 1995 Determination**

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<sup>16</sup> Currently, there are approximately 2,934 small bank holding companies, 1,090 small national banks, 491 small state member banks, 3,249 small state nonmember banks, and 446 small savings associations.

The Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4) (UMRA) requires that an agency prepare a budgetary impact 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. The current inflation-adjusted expenditure threshold is \$119.6 million. If a budgetary impact statement is required, section 205 of the UMRA also requires an agency to identify and consider a reasonable number of regulatory alternatives before promulgating a rule. The OCC and OTS each have determined that their respective proposed rule will not result in expenditure by state, local, and tribal governments, or by the private sector, of \$119.6 million or more. Accordingly, neither the OCC nor OTS has prepared a budgetary impact statement or specifically addressed the regulatory alternatives considered.

## **Paperwork Reduction Act**

### **A. Request for Comment on Proposed Information Collection**

In accordance with the requirements of the Paperwork Reduction Act 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 agencies are also giving notice that the proposed collection of information has been submitted to OMB for review and approval.

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.

Comments should be addressed to:

OCC: Communications Division, Office of the Comptroller of the Currency, Public Information Room, Mail stop 1-5, Attention: 1557-NEW, 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](mailto: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 the Docket number, 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.
- E-mail: [regs.comments@federalreserve.gov](mailto: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 Streets, NW) between 9 a.m. and 5 p.m. on weekdays.

FDIC: You may submit written comments, which should refer to 3064-AD10, 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.
- E-mail: [Comments@FDIC.gov](mailto:Comments@FDIC.gov).

- Mail: Steve Hanft, PRA Clearance Officer, Legal Division, 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.

OTS: Information Collection Comments, Chief Counsel's Office, Office of Thrift Supervision, 1700 G Street, NW, Washington, DC 20552; send a facsimile transmission to (202) 906-6518; or send an e-mail to [infocollection.comments@ots.treas.gov](mailto:infocollection.comments@ots.treas.gov). OTS will post comments and the related index on the OTS Internet site at <http://www.ots.treas.gov>. In addition, interested persons may inspect the comments at the Public Reading Room, 1700 G Street, NW, by appointment. To make an appointment, call (202) 906-5922, send an e-mail to [public.info@ots.treas.gov](mailto:public.info@ots.treas.gov), or send a facsimile transmission to (202) 906-7755.

A copy of the comments may also be submitted to the OMB desk officer for the agencies: By mail to U.S. Office of Management and Budget, 725 17th Street, NW, #10235, Washington, DC 20503 or by facsimile to 202-395-6974, Attention: Federal Banking Agency Desk Officer.

## B. Proposed Information Collection

Title of Information Collection: Risk-Based Capital Standards: Market Risk

Frequency of Response: Varied – some requirements are done at least quarterly and some at least annually.

Affected Public:

OCC: National banks and Federal branches and agencies of foreign banks.

Board: State member banks and bank holding companies.

FDIC: Insured state non-member banks, insured state branches of foreign banks, and certain subsidiaries of these entities.

OTS: Savings associations and certain of their subsidiaries.

Abstract: The information collection requirements are found in sections 3, 5, 6, and 9 of the proposed rule. They will enhance risk sensitivity and introduce requirements for public disclosure of certain qualitative and quantitative information about a bank's or bank holding companies' market risk. The collection of information is necessary to ensure capital adequacy according to the level of market risk.

Section-by-section Analysis

Section 3 sets forth the requirements for applying the market risk framework. Section 3(a)(1)(i) requires clearly defined policies and procedures for determining which trading assets are trading positions and specifies what must be taken into account. Section 3(a)(2) requires a clearly defined trading and hedging strategy for trading positions approved by senior management and specifies what the strategy must articulate.

Section 3(b)(1) requires clearly defined policies and procedures for actively managing all covered positions and specifies the minimum that they must require.

Section 5(b)(1) specifies what internal models must include and address.

Sections 6(a) and 6(b) require prior written approvals for incremental default risk.

Section 8(b) requires a formal disclosure policy approved by the board of directors that addresses the bank's approach for determining the market risk disclosures it makes.

Estimated Burden:

The burden associated with this collection of information may be summarized as follows:

OCC

Number of Respondents: 10

Estimated Burden Per Respondent: 680 hours

Total Estimated Annual Burden: 6,800 hours

Board

Number of Respondents: 22

Estimated Burden Per Respondent: 680 hours

Total Estimated Annual Burden: 14,960 hours

FDIC

Number of Respondents: 2

Estimated Burden Per Respondent: 680 hours

Total Estimated Annual Burden: 1,360 hours

OTS

Number of Respondents: 1

Estimated Burden Per Respondent: 2088 hours

Total Estimated Annual Burden: 2088 hours

## **Text of the Proposed Common Rules (All Agencies)**

**The text of the proposed common rules appears below:**

**[Rule] is revised to read as follows:**

Section 1	Purpose, Applicability, and Reservation of Authority
Section 2	Definitions
Section 3	Requirements for Application of the Market Risk Capital Rule
Section 4	Adjustments to the Risk-Based Capital Ratio Calculations
Section 5	Specific Risk
Section 6	Incremental Default Risk
Section 7	Standard Method for Specific Risk
Section 8	Market Risk Disclosures

### **Section 1. Purpose, Applicability, and Reservation of Authority**

(a) Purpose. This rule establishes risk-based capital requirements for banks with significant exposure to market risk and provides methods for these banks to calculate their risk-based capital requirements for market risk. This rule supplements and adjusts the risk-based capital calculations under [the general risk-based capital rules] and [the proposed advanced capital adequacy framework] and establishes public disclosure requirements.

(b) Applicability – (1) This rule applies to any bank with aggregate trading assets and liabilities (as reported in the bank’s most recent quarterly Consolidated Report of Condition and Income (Call Report) or as defined in the Instructions to the Thrift Financial Report and as computed at the end of the most recent calendar quarter), equal to:

(i) 10 percent or more of quarter-end total assets as reported on the most recent quarterly Call Report or Thrift Financial Report; or

(ii) \$1 billion or more.

(2) The [Agency] may apply this rule 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 coverage under this rule 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 rule if the [Agency] determines that the bank's capital requirement for market risk as calculated under this rule is not commensurate with the market risk of the bank's covered positions. In making determinations under this paragraph, the [Agency] will apply notice and response procedures generally in the same manner as the notice and response procedures described 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 rule 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 rule, or under [the proposed advanced capital adequacy framework] or [the general risk-based capital rules], as appropriate, to more accurately reflect the risks of the positions.

(4) Nothing in this rule 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.

## **Section 2. Definitions**

For purposes of this rule, the following definitions apply:

Bank holding company is defined in section 2(a) of the Bank Holding Company Act of 1956 (12 U.S.C. 1841(a)).

Commodity position means a position for which price risk arises from changes in the value of a commodity.

Covered position means the following positions:

(1) A trading asset or trading liability (whether on- or off-balance sheet),<sup>1</sup> as reported on Schedule RC-D of the Call Report, Schedule HC-D of the Consolidated Financial Statements for Bank Holding Companies, or as defined in the Instructions to the Thrift Financial Report, that meets the following conditions:

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<sup>1</sup> Securities subject to repurchase and lending agreements are included as if they are still owned by the lender.



(i) The position is a trading position or hedges another covered position<sup>2</sup> 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, whether or not a trading asset or trading liability (excluding any structural position in a foreign currency that the bank chooses to exclude with prior supervisory approval).

(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 section 3;

(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 recognized as a guarantee for risk-weighted asset amount calculation purposes under [the proposed advanced capital adequacy framework] or [the general risk-based capital rules], as applicable, used to hedge a position that is not a covered position; or

(v) A securitization position that is a residual securitization position, unless the [Agency] has determined in writing that:

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<sup>2</sup> A position that hedges a trading position must be within the scope of the bank's hedging strategy described in paragraph (a)(2) of section (3).

(A) A two-way market exists for the securitization position or, in the case of a securitization that relies solely on credit derivatives, for the securitization position or all of its material risk components;

(B) The bank holds itself out as ready to buy and sell these securitization positions for its own account on a regular and continuous basis at a quoted price;

(C) The bank's internal models fully capture the general market risk and specific risks of the bank's securitization positions and sufficient market data are available to model these risks reliably; and

(D) The bank has adequate internal systems and controls for the trading of securitization positions.

Credit derivative 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) to another party (the protection provider).

Debt position means:

(1) Any security or similar instrument (such as a bond, debenture, or note) that is not an equity position and evidences a liability of the issuer;

(2) Preferred stock that is not an equity position; and

(3) A derivative for which the underlying position is described in paragraph (1) or (2) of this definition.

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. In the

case of credit derivatives, default risk means the risk of losses that could result from the default of the reference exposures.

Depository institution is defined in section 3 of the Federal Deposit Insurance Act (12 U.S.C. 1813).

Equity position means:

(1) A security or instrument, whether voting or non-voting, that represents a direct or indirect ownership interest in, and a residual claim on, the assets or income of a company;

(2) A security or instrument that is mandatorily convertible into a security or instrument described in paragraph (1) of this definition; and

(3) Any other security or instrument, to the extent its return is based on the performance of one or more securities or instruments described in paragraph (1) of this definition.

Event risk means the risk of loss on a position that could result from sudden and unexpected large changes in market prices or specific events other than default of the issuer.

Financial firm means a depository institution, a bank holding company, a savings and loan holding company (as defined in section 10(a)(1)(D) of the Home Owners' Loan Act (12 U.S.C. 1467a(a)(1)(D)), a securities broker or dealer registered with the SEC, or a banking or securities firm that the bank has determined is subject to consolidated supervision and regulation comparable to that imposed on U.S. banks or securities broker-dealers.

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 that offsets all or substantially all of the price risk of another position.

Idiosyncratic variation means variation in the value of a position that results from factors unique to that position.

Incremental default risk means the default risk of a position that is not reflected in the bank's VaR-based measure under paragraph (c) of section 3 of this rule. In the case of securitization positions, incremental default risk includes the risk of losses that could result from the default of the underlying assets.

Market risk means the risk of loss on a position that could result from movements in market prices.

Nationally Recognized Statistical Rating Organization (NRSRO) means an entity recognized by the Division of Market Regulation (or any successor division) of the SEC as a nationally recognized statistical rating organization for various purposes, including SEC Rule 15c3-1 (broker-dealer net capital requirements).

Over-the-counter (OTC) derivative means a derivative contract that is not traded on an exchange that requires the daily receipt and payment of cash-variation margin.

Publicly traded means a financial instrument that is traded on:

(1) Any exchange registered with the SEC as a national securities exchange under section 6 of the Securities Exchange Act of 1934 (15 U.S.C. 78f); or

(2) Any non-U.S.-based securities exchange that:

(i) Is registered with, or approved by, a national securities regulatory authority; and

(ii) Provides a liquid, two-way market for the financial instrument.

Qualifying securities borrowing transaction means a cash-collateralized securities borrowing transaction that meets the following conditions:

(1) The transaction is based on liquid and readily marketable securities;

(2) The transaction is marked-to-market daily;

(3) The transaction is subject to daily margin maintenance requirements; and

(4)(i) The transaction is a securities contract for the purposes of section 555 of the Bankruptcy Code (11 U.S.C. 555), a qualified financial contract for the purposes of section 11(e)(8) of the Federal Deposit Insurance Act (12 U.S.C. 1821(e)(8)), or a netting contract between or among financial institutions for the purposes of sections 401-407 of the Federal Deposit Insurance Corporation Improvement Act of 1991 (12 U.S.C. 4401-4407), or the Board's Regulation EE (12 CFR Part 231); or

(ii) If the transaction does not meet the criteria in paragraph (4)(i) of this definition, either:

(A) The bank has conducted sufficient legal review to reach a well-founded conclusion that:

(1) The securities borrowing agreement executed in connection with the transaction provides the bank the right to accelerate, terminate, and close-out on a net basis all transactions under the agreement and to liquidate or set off collateral promptly upon an

event of counterparty default, including in a bankruptcy, insolvency, or other similar proceeding of the counterparty; and

(2) Under applicable law of the relevant jurisdiction, its rights under the agreement are legal, valid, binding, and enforceable and any exercise of rights under the agreement will not be stayed or avoided; or

(B) The transaction is either overnight or unconditionally cancelable at any time by the bank, and the bank has conducted sufficient legal review to reach a well-founded conclusion that:

(1) The securities borrowing agreement executed in connection with the transaction provides the bank the right to accelerate, terminate, and close-out on a net basis all transactions under the agreement and to liquidate or set off collateral promptly upon an event of counterparty default; and

(2) Under the law governing the agreement, its rights under the agreement are legal, valid, binding, and enforceable.

Residual securitization position means any securitization position subject to deduction under [the proposed advanced capital adequacy framework] or subject to the following provisions under [the general risk-based capital rules]: 12 CFR part 3, Appendix A, sections 4 (b) and (f) (national banks); 12 CFR part 208, Appendix A, section III.B.3.b and III.B.3.e (state member banks); 12 CFR part 225, Appendix A.III.B.3.b and III.B.3.e (bank holding companies); 12 CFR part 325, Appendix A.II.B.5 (state nonmember banks); and 12 CFR 567.6(b)(1) and (2) (savings associations)

SEC means the U.S. Securities and Exchange Commission.

Securitization position means:

(1) An on- or off-balance sheet position arising from a transaction in which:

(i) All or a portion of the credit risk of one or more underlying positions is transferred to one or more third parties (other than through a guarantee that transfers only the credit risk of an individual residential mortgage);

(ii) The credit risk associated with the underlying positions has been separated into at least two tranches reflecting different levels of seniority;

(iii) Performance of the securitization positions depends upon the performance of the underlying positions; and

(iv) All, or substantially all, of the underlying positions are financial positions (such as loans, commitments, credit derivatives, guarantees, receivables, asset-backed securities, mortgage-backed securities, corporate bonds, or equity securities); and

(2) A mortgage-backed pass-through security guaranteed by Fannie Mae or Freddie Mac.

Sovereign entity means a central government (including the U.S. government) or an agency, department, ministry, or central bank of a central government.

Specific risk means the risk of loss on a position that could result from factors other than broad market movements and includes event and default risk, and idiosyncratic variations in rates, spreads, prices, or other risk factors.

Term repo-style transaction means a repurchase or reverse repurchase transaction, or a securities borrowing or securities lending transaction, including a transaction in which the bank acts as agent for a customer and indemnifies the customer against loss, that has an original maturity in excess of one business day, provided that:

(1) The transaction is based solely on liquid and readily marketable securities or cash;

(2) The transaction is marked-to-market daily and subject to daily margin maintenance requirements;

(3) The transaction is executed under an agreement that provides the bank the right to accelerate, terminate, and close-out the transaction on a net basis and to liquidate or set off collateral promptly upon an event of default (including bankruptcy, insolvency, or similar proceeding) of the counterparty, provided that, in any such case, any exercise of rights under the agreement will not be stayed or avoided under applicable law in the relevant jurisdictions;<sup>3</sup> and

(4) The bank has conducted and documented sufficient legal review to conclude with a well-founded basis that the agreement meets the requirements of paragraph (3) of this definition and is legal, valid, binding, and enforceable under applicable law in the relevant jurisdictions.

Tier 1 capital is defined in [the general risk-based capital rules] or [the proposed advanced capital adequacy framework], as applicable.

Tier 2 capital is defined in [the general risk-based capital rules] or [the proposed advanced capital adequacy framework], as applicable.

Tier 3 capital is subordinated debt that is unsecured, is fully paid up, has an original maturity of at least two years, is not redeemable before maturity without prior approval of the [Agency], includes a lock-in clause precluding payment of either interest or principal

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<sup>3</sup> This requirement is met where all transactions under the agreement are (i) executed under U.S. law and (ii) constitute “securities contracts” or “repurchase agreements” under section 555 or 559, respectively, of the Bankruptcy Code (11 U.S.C. 555 or 559), qualified financial contracts under section 11(e)(8) of the Federal Deposit Insurance Act (12 U.S.C. 1821(e)(8)), or netting contracts between or among financial institutions under sections 401-407 of the Federal Deposit Insurance Corporation Improvement Act of 1991 (12 U.S.C. 4407), or the Federal Reserve Board’s Regulation EE (12 CFR part 231).



(even at maturity) if the payment would cause the issuing bank's risk-based capital ratio to fall or remain below the minimum required under [the general risk-based capital rules] or [the proposed advanced capital adequacy framework], as applicable, and does not contain and is not covered by any covenants, terms, or restrictions that are inconsistent with safe and sound banking practices.

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 price movements or to lock in arbitrage profits.

Two-way market means a market where there are enough 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 such price within a relatively short period of time 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.

### **Section 3. Requirements for Application of the Market Risk Capital Rule**

(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. 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. The trading strategy must also articulate whether the purpose of each portfolio of trading positions is to accommodate customer flow, to engage in proprietary trading, or to make a market in the positions.

(ii) The hedging strategy must articulate for each portfolio 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 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, investing and funding costs, future administrative costs, liquidity, and model risk.

(c) Internal models. A bank must use one or more internal models to calculate daily a VaR-based measure that reflects its general market risk for all covered positions. The daily VaR-based measure may also reflect the bank's specific risk for one or more portfolios of covered debt and equity positions, if the internal models meet the requirements of paragraph (b)(1) of section 5.

(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 rule or extending the use of a model for which it has received prior written approval to an additional business line or product type.

(2) A bank must meet all of the requirements of this section on an ongoing basis. The bank must promptly notify the [Agency] when the bank makes any change to any internal model used to calculate risk-based capital requirements under this rule that would result in a material change in the bank's risk-weighted asset amount for a portfolio of covered

positions, or when the bank makes any material change to its modeling assumptions. The [Agency] may rescind its approval, in whole or in part, of the use of any internal model if it determines that the model no longer complies with this rule or fails to reflect accurately the risks of the bank's covered positions.

(3) The bank must integrate its internal models into the daily risk management process.

(4) The level of sophistication of a bank's internal models must be commensurate with the nature and size of its covered positions. A bank's internal models may use any of the generally accepted approaches, such as variance-covariance models, historical simulations, or Monte Carlo simulations, to measure market risk.

(5) The bank's internal models must use risk factors sufficient to measure the market risk inherent in all covered positions. The risk factors 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.

(6) The bank's internal models must properly measure all of the material risks in its covered positions, including basis risks and prepayment risks.

(7) 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.

(8) The bank must have a rigorous and well-defined process for reestimation, reevaluation, and updating of its internal models to ensure continued applicability and relevance.

(9) The VaR-based measure may incorporate empirical correlations within and across risk factors, provided that the bank's process for measuring correlations is sound. If the VaR-based measure does not incorporate empirical correlations, the bank must add the separate VaR-based measures for the appropriate market risk factors (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.

(10) The VaR-based measure must include the risks arising from the non-linear 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 key 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 strikes, where material.

(11) If a bank uses internal models to measure specific risk, the internal models must satisfy the requirements in paragraph (b)(1) of section 5.

(d) Quantitative requirements for VaR-based measure. (1) A bank must calculate a VaR-based measure of the general market risk of its covered positions and, if applicable under section 5, its specific risk for one or more portfolios of covered debt and equity positions. A bank may elect to include in its VaR-based measure term repo-style transactions and residual securitization positions that are trading assets or liabilities

provided that the bank includes all such term repo-style transactions or securitization positions and that it includes them consistently over time.

(2) The VaR-based measure must be calculated on a daily basis using a one-tailed, 99.0 percent confidence level, and a holding period equivalent to a ten-business-day movement in underlying risk factors, such as rates, spreads, and prices. To calculate VaR-based measures using a ten-business-day holding period, the bank may calculate ten-business-day measures directly or may convert VaR-based measures using holding periods other than ten business days to the equivalent of a ten-business-day holding period.

(3) 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 determination of risk-based capital requirements. For banks that use a weighting scheme or other method for the historical observation period, the effective observation period must be at least one year. The bank must update data sets at least once every three months or more frequently as market conditions warrant.

(e) 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) 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 the comparison of a bank's internal estimates with actual outcomes 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 the bank's 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 of the independent risk control unit, and compliance with policies and procedures.

(f) 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 concentration and liquidity risk under stressed market conditions as well as other risks that may not be captured appropriately in the VaR-based measure.

(g) Documentation. The bank must adequately document all material aspects of its internal models, management and valuation of covered positions, control, oversight, and validation mechanisms, and internal assessment of capital adequacy.

#### **Section 4. Adjustments to the Risk-Based Capital Ratio Calculations**

(a) Risk-based capital ratio denominator. The bank must calculate its risk-based capital ratio denominator as follows:

(1) Adjusted risk-weighted assets. The bank must calculate adjusted risk-weighted assets, which equal risk-weighted assets (as determined in accordance with [the proposed advanced capital adequacy framework] or [the general risk-based capital rules], as applicable), with the following adjustments:

(i) The bank must exclude the risk-weighted asset amounts of all covered positions (except foreign exchange positions that are not trading positions and over-the-counter derivative positions).

(ii) A bank subject to [the general risk-based capital rules] may exclude receivables that arise from the posting of cash collateral and are associated with qualifying securities borrowing transactions to the extent the receivable is collateralized by the market value of the borrowed securities;

(2) Measure for market risk. The bank must calculate the measure for market risk which equals the sum of the following:

(i) VaR-based capital requirement. The VaR-based capital requirement equals the higher of:

(A) The previous day's VaR-based measure; and



(B) The average of the daily VaR-based measures for each of the preceding 60 business days multiplied by three, except as provided in paragraph (c) of section 4 of this rule.

(ii) Any specific risk add-on. The specific risk add-on is calculated in accordance with sections 5 and 7 of this rule.

(iii) Any incremental default risk capital requirement. The incremental default risk capital requirement is calculated under section 6 of this rule.

(iv) Any capital requirement for de minimis exposures. The [Agency] may grant prior written approval to a bank to calculate a capital requirement for de minimis exposures and risks using alternative techniques that adequately measure associated market risk.

(3) Market risk equivalent assets. The bank must calculate market risk equivalent assets as the measure for market risk (as calculated in paragraph (a)(2) of this section) multiplied by 12.5.

(4) Denominator calculation. The bank must add market risk equivalent assets (as calculated in paragraph (a)(3) of this section) to adjusted risk-weighted assets (as calculated in paragraph (a)(1) of this section). The resulting sum is the bank's risk-based capital ratio denominator.

(b) Risk-based capital ratio numerator. The bank must calculate its risk-based capital ratio numerator by allocating capital as follows:

(1) Credit risk allocation. The bank must allocate tier 1 and tier 2 capital equal to 8.0 percent of adjusted risk-weighted assets (as calculated in paragraph (a)(1) of this section).

A bank may not allocate tier 3 capital to support credit risk (as calculated under [the proposed advanced capital adequacy framework] or [the general risk-based capital rules]).

(2) Market risk allocation. The bank must allocate tier 1, tier 2, and tier 3 capital equal to the measure for market risk as calculated in paragraph (a)(2) of this section. The sum of tier 2 and tier 3 capital allocated for market risk must not exceed 250 percent of tier 1 capital allocated for market risk. As a result, tier 1 capital allocated in this paragraph (b)(2) must equal at least 28.6 percent of the measure for market risk.

(3) Restrictions. (i) The sum of tier 2 capital (both allocated and excess) and tier 3 capital (allocated under paragraph (b)(2) of this section) may not exceed 100 percent of tier 1 capital (both allocated and excess). Excess tier 1 capital means tier 1 capital that has not been allocated in paragraphs (b)(1) and (b)(2) of this section. Excess tier 2 capital means tier 2 capital that has not been allocated in paragraph (b)(1) and (b)(2) of this section, subject to the restrictions in paragraph (b)(3) of this section.

(ii) Term subordinated debt (and intermediate-term preferred stock and related surplus) included in tier 2 capital (both allocated and excess) may not exceed 50 percent of tier 1 capital (both allocated and excess).

(4) Numerator calculation. The bank must add tier 1 capital (both allocated and excess), tier 2 capital (both allocated and excess), and tier 3 capital (allocated under paragraph (b)(2) of this section). The resulting sum is the bank's risk-based capital ratio numerator.

(c) Backtesting. A bank must compare each of its most recent 250 business days' actual trading profit or loss (excluding fees, commissions, reserves, and net interest

income) with the corresponding daily VaR-based measures and calibrated to a one-day holding period and a one-tailed, 99.0 percent confidence level.

(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 of this rule to determine its VaR-based capital requirement for market risk under paragraph (a)(2)(i) of this section until it obtains the next quarter's backtesting results, unless the [Agency] advises 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

### Section 5. 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 portfolios of covered debt and equity positions.

(b) Modeled specific risk. A bank may use one or more internal models to measure the specific risk of covered debt and equity positions.

(1) Requirements for specific risk modeling. If a bank uses internal models to measure the specific risk of a portfolio of covered debt or equity positions, the internal models must:

(i) Explain the historical price variation in the portfolio;

(ii) Be responsive to changes in market conditions;

(iii) Be robust to an adverse environment, including signaling rising risk in an adverse environment; and

(iv) Capture all material components of specific risk for the covered debt and equity positions in the portfolio, except as permitted under the transitional rule described in paragraph (d) of this section. Specifically, the internal models must:

(A) Capture default risk, event risk, and idiosyncratic variations, including, for debt positions, migration risk, and for equity positions, events that are reflected in large changes or jumps in prices;

(B) Capture material basis risks and demonstrate sensitivity to material idiosyncratic differences between positions that are similar but not identical; and

(C) Capture concentrations (magnitude and changes in composition) and demonstrate sensitivity to changes in portfolio composition or concentrations.

(2) Specific risk fully modeled for all portfolios. If the bank's VaR-based measure captures all material aspects of specific risk for all of its portfolios of covered debt and equity positions, the bank has no specific risk add-on for purposes of paragraph (a)(2)(ii) of section 4.

(3) Specific risk fully modeled for some but not all portfolios. If the bank's VaR-based measure captures all material aspects of specific risk for one or more of its portfolios of covered debt and equity positions, the bank has no specific risk add-on for those portfolios for purposes of paragraph (a)(2)(ii) of section 4. The bank must calculate a specific risk add-on under the standard method as described in section 7 of this rule for any portfolio of covered debt or equity positions for which the bank's VaR-based measure does not capture all material aspects of specific risk.

(c) Specific risk not modeled. If the bank's VaR-based measure does not capture all material aspects of specific risk for any of its portfolios of covered debt and equity positions, the bank must calculate a specific-risk add-on for all portfolios of covered debt and equity positions under the standard method as described in section 7 of this rule.

(d) Transitional Rule—Specific risk partially modeled for one or more portfolios. Until January 1, 2010, if a bank has received the [Agency's] prior written approval to model the specific risk of one or more portfolios of covered debt or equity positions but the [Agency] has determined that the internal models do not adequately measure all material aspects of specific risk for covered debt and equity positions in the portfolio, including event and default risk, the bank must calculate a specific risk add-on for the partially modeled portfolios using one of the following methods:

(1) If the [Agency] has determined that the bank can validly separate its VaR-based measure into a specific risk portion and a general market risk portion, the specific risk add-on is equal to the higher of:

(i) The previous day's specific risk portion; or

(ii) The average of the daily specific risk portions for each of the preceding 60 business days.

(2) If the [Agency] has determined that the bank cannot validly separate its VaR-based measure into a specific risk portion and a general market risk portion, the specific risk add-on equals the higher of:

(i) The sum of the previous day's VaR-based measures for portfolios of covered debt and equity positions; or

(ii) The average of the sum of the daily VaR-based measures for portfolios of covered debt and equity positions for each of the preceding 60 business days.

#### **Section 6. Incremental Default Risk**

(a) General requirement. On and after January 1, 2010, a bank that models specific risk for one or more portfolios of covered debt or equity positions must use one of the methods in this section to measure the incremental default risk of those portfolios. With the prior written approval of the [Agency], a bank may adjust its incremental default risk capital requirement to minimize double-counting of default risk already reflected in the 10-business-day, 99 percent confidence level VaR-based measure. The incremental default risk capital requirement is not subject to the multiplier described in paragraphs (a)(2)(i)(B) and (c) of section 4.

(b) Modeled incremental default risk. With prior written approval of [Agency], a bank may use one or more internal models to measure its incremental default risk capital requirement. A bank that models its incremental default risk must measure the incremental default risk of its portfolios of covered debt or equity positions, consistent with a one-year time horizon and a one-tailed, 99.9 percent confidence level, under the

assumption of a constant level of risk and adjusted where appropriate to reflect the impact of liquidity, concentrations, hedging, and optionality.

(c) Alternative for banks subject to [the proposed advanced capital adequacy framework]. If a bank subject to [the proposed advanced capital adequacy framework] does not have a model that meets the criteria of paragraph (b) of this section for a portfolio of covered debt or equity positions, the bank's incremental default risk capital requirement for the portfolio is equal to the capital requirement calculated for those positions under [the proposed advanced capital adequacy framework].

(d) Alternative for banks subject to [the general risk-based capital rules]. If a bank subject to [the general risk-based capital rules] does not have a model that meets the criteria in paragraph (b) of this section for a portfolio of covered debt or equity positions, the bank must calculate a specific risk add-on for the portfolio using the standard method under section 7. A bank that calculates a specific risk add-on using the standard method described in section 7 for a portfolio is not subject to an incremental default risk capital requirement for that portfolio.

## **Section 7. Standard Method for Specific Risk**

(a) General requirement. A bank using the standard method of calculating the specific risk add-on must calculate it in accordance with this section.

(b) Covered debt positions. The standard specific risk add-on for covered debt positions is the sum of the risk-weighted asset amounts for individual covered debt positions, as computed under this paragraph. A bank must multiply the absolute value of the current market value of each net long or short covered debt position by the

appropriate specific risk weighting factor in Table 2, subject to the following requirements:

(1) For covered debt positions that are non-option derivatives, a bank must risk-weight the market value of the effective notional amount of the underlying debt instrument or index portfolio. Swaps must be included as the notional positions in the underlying debt instrument or portfolio, with a receiving side treated as a long position and a paying side treated as a short position. For covered debt positions that are options, whether long or short, a bank must risk-weight the market value of the effective notional amount of the underlying debt instrument or portfolio multiplied by the option's delta;

(2) A bank may net long and short covered debt positions (including derivatives) in identical debt issues or indices;

(3) There is no standard specific risk add-on when a covered debt position is fully hedged by a total return swap (or similar instrument where there is a matching of payments and changes in market value of the position) and there is an exact match between the reference obligation of the swap and the covered debt position and between the maturity of the swap and the covered debt position;

(4) The standard specific risk add-on for a set of transactions consisting of a covered debt position and its credit derivative hedge that do not meet the criteria of paragraph (b)(3) of this section is equal to 20 percent of the specific risk add-on for the side of the transaction with the higher specific risk add-on when the credit risk of the position is fully hedged by a total return swap, credit default swap or similar instrument and there is an exact match in terms (including maturity) of the reference obligation of the credit



hedge and the covered debt position, and of the currency of the credit derivative and the covered debt position.

(5) The standard specific risk add-on for a set of transactions consisting of a covered debt position and its hedge that do not meet the criteria of either paragraph (b)(3) or (b)(4) of this section is equal to the specific risk add-on for the side of the transaction with the higher specific risk add-on.

Table 2— Specific Risk Weighting Factors for Covered Debt Positions

Category	Applicable NRSRO Rating (Illustrative Rating Example)	Remaining Contractual Maturity	Specific Risk Risk Weight
Sovereign	Highest investment grade to second highest investment grade (for example, AAA to AA-).	--	0%
	Third highest investment grade to lowest investment grade (for example, A+ to BBB-).	Residual term to final maturity 6 months or less.	0.25%
		Residual term to final maturity greater than 6 and up to and including 24 months.	1.00%
		Residual term to final maturity exceeding 24 months.	1.60%
	One category below investment grade to two categories below investment grade (for example, BB+ to B-).	--	8.00%
	More than two categories below investment grade.	--	12.00%
	Unrated.	--	8.00%
Qualifying	Not applicable.	Residual term to final maturity 6 months or less.	0.25%
		Residual term to final maturity greater than 6 and up to and including 24 months.	1.00%
		Residual term to final maturity exceeding 24 months.	1.60%
Other	One category below investment grade to two categories below investment grade (for example, BB+ to B-).	--	8.00%
	More than two categories below investment grade.	--	12.00%
	Unrated.	--	8.00%

(c) The following definitions apply to this section:

(1) The sovereign category includes all debt instruments issued or guaranteed by sovereign entities.

(2) The qualifying category includes debt instruments not issued or guaranteed by sovereign entities that are:

(i) Rated investment grade by at least two NRSROs;

(ii) Rated investment grade by one NRSRO and not rated less than investment grade by any other NRSRO; or

(iii) Unrated, but the bank deems to be of credit risk comparable to that of investment grade and either:

(A) The issuer is a financial firm; or

(B) The issuer has publicly traded securities or instruments.

(3) The other category includes debt positions that are not included in the sovereign or qualifying categories.

(d) Covered equity positions. The standard specific risk add-on for covered equity positions is the sum of the risk-weighted asset amounts of individual covered equity positions, as computed under this paragraph (d):

(1) For covered equity positions that are non-option derivatives, a bank must risk-weight the market value of the effective notional amount of the underlying equity instrument or equity portfolio. Swaps must be included as the effective notional position in the underlying equity instrument or portfolio, with a receiving side treated as a long position and a paying side treated as a short position.

(2) For covered equity positions that are options, whether long or short, a bank must risk-weight the market value of the effective notional amount of the underlying equity instrument or portfolio multiplied by the option's delta.

(3) A bank may net long and short covered equity positions (including derivatives) in identical equity issues or identical equity indices. A bank may also net positions in depository receipts against an opposite position in an identical equity in different markets, provided that the bank includes the costs of conversion.

(4)(i) The bank must multiply the absolute value of the current market value of each net long or short covered equity position by a risk weighting factor of 8.0 percent, or 4.0 percent if the equity is held in a portfolio that is both liquid and well-diversified.<sup>4</sup> For covered 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 short position is multiplied by a risk-weighting factor of 2.0 percent.

(ii) For covered equity positions arising from the following futures-related arbitrage strategies, a bank may apply a 2.0 percent risk-weighting factor to one side (long or short) of each position with the opposite side exempt from a specific risk add-on:

(A) Long and short positions in exactly the same index at different dates or in different market centers; or

(B) Long and short positions in index contracts at the same date in different but similar indices.

(iii) For futures contracts on broadly based indices that are matched by offsetting positions in a basket of stocks comprising the index, a bank may apply a 2.0 percent risk

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<sup>4</sup> A portfolio is liquid and well-diversified if: (i) it is characterized by a limited sensitivity to price changes of any single equity issue or closely related group of equity issues held in the portfolio; (ii) the volatility of the portfolio's value is not dominated by the volatility of any individual equity issue or by equity issues from any single industry or economic sector; (iii) it contains a large number of individual equity positions, with no single position representing a substantial portion of the portfolio's total market value; (iv) it consists mainly of issues traded on organized exchanges or in well-established over-the-counter markets; and (v) a two-way market exists for all or substantially all of the positions in the portfolio.

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 percent of the capitalization of the index.

## **Section 8. 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.

(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 the market risk disclosures it makes. 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. The chief financial officer of the bank must certify that the disclosures required by this section are appropriate, 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 for internal models. For each portfolio of covered positions, the bank must publicly disclose the following information at least quarterly:

- (1) The high, low, and mean VaR-based measures over the reporting period;
- (2) Separate VaR-based measures for interest rate risk, credit spread risk, equity price risk, foreign exchange risk, and commodity price risk; and

(3) A comparison of VaR-based estimates with actual gains or losses experienced by the bank, with analysis of important outliers.

(d) Qualitative disclosures for internal models. The bank must publicly disclose the following information at least annually, or more frequently in the event of material changes:

(1) The composition of material portfolios of covered positions;

(2) The bank's valuation policies, procedures, and methodologies for covered positions;

(3) The characteristics of the internal models used for purposes of this rule;

(4) A description of the approach used for validating and evaluating the accuracy of the internal models and modeling processes for purposes of this rule;

(5) For each market risk factor (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 a comparison of the bank's internal estimates for purposes of this rule with actual outcomes during a sample period not used in model development; and

(7) The soundness standard on which the bank's internal capital adequacy assessment under this rule is based, including a description of the methodologies used to achieve a capital adequacy assessment that is consistent with the soundness standard and the requirements of this rule.

[END OF COMMON TEXT]

List of Subjects

12 CFR Part 3

Administrative practices and procedure, Capital, National banks, Reporting and recordkeeping requirements, Risk.

12 CFR Part 208

Confidential business information, Crime, Currency, Federal Reserve System, Mortgages, reporting and recordkeeping requirements, Securities.

12 CFR Part 225

Administrative practice and procedure, 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.

12 CFR Part 566

Capital, reporting and recordkeeping requirements, Savings associations.  
Authority and Issuance

### **Adoption of Common Rule**

The adoption of the proposed common rules by the agencies, as modified by agency-specific text, is set forth below:

**Office of the Comptroller of the Currency**

**12 CFR CHAPTER I**

**Authority and Issuance**

For the reasons set forth in the common preamble, part 3 of chapter I of title 12 of the Code of Federal Regulations is amended 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, 1818, 3907 and 3909.

2. Appendix B to part 3 is revised to read as set forth at the end of the common preamble:

**Appendix B to Part 3 – Risk-Based Capital Guidelines; Market Risk Adjustment**

3. Appendix B is further amended by:
  - a. Removing “[Agency]” wherever it appears and adding in its place “OCC”;
  - b. Removing “[the proposed advanced capital adequacy framework]” wherever it appears and adding in its place 12 CFR part 3, Appendix C;
  - c. Removing “[Rule]” wherever it appears and adding in its place “Appendix B to Part 3– Risk-Based Capital Guidelines; Market Risk Adjustment”; and
  - d. Removing “[the general risk-based capital rules]” wherever it appears and adding in its place 12 CFR part 3, Appendix A.



## **Federal Reserve System**

### **12 CFR CHAPTER II**

#### **Authority and Issuance**

For the reasons set forth in the common preamble, part 208 of chapter II of title 12 of the Code of Federal Regulations is amended as follows:

#### **PART 208 – MINIMUM CAPITAL RATIOS; ISSUANCE OF DIRECTIVES**

1. The authority citation for part 208 continues to read as follows:

**Authority:** Subpart A of Regulation H (12 CFR part 208, Subpart A) is issued by the Board of Governors of the Federal Reserve System (Board) under 12 U.S.C. 24, 36; sections 9, 11,21,25 and 25A of the Federal Reserve Act (12 U.S.C. 321-338a, 248(a), 248(c), 481-486, 601 and 611); sections 1814, 1816, 1818, 1831o, 1831p-l, 1831r-l and 1835a of the Federal Deposit Insurance Act (FDI Act) (12 U.S.C. 1814, 1816, 1818, 1831o, 1831p-l, 1831r-l and 1835); and 12 U.S.C. 3906-3909.

2. Appendix E to part 208 is revised to read as set forth at the end of the common preamble:

#### **Appendix E to Part 208 – Capital Adequacy Guidelines for State Member Banks:**

##### **Risk-Based Measure**

3. Appendix E is further amended by:
  - a. Removing “[Agency]” wherever it appears and adding in its place “Board”;
  - b. Removing “[the proposed advanced capital adequacy framework]” wherever it appears and adding in its place “Appendix F”;

c. Removing “[Rule]” wherever it appears and adding in its place “Appendix E to Part 208 – Capital Adequacy Guidelines for State Member Banks: Market Risk Measure”;

and

d. Removing “[the general risk-based capital rules]” wherever it appears and adding in its place 12 CFR part 208, Appendix A.

## **12 CFR CHAPTER II**

### **Authority and Issuance**

For the reasons set forth in the common preamble, part 225 of chapter II of title 12 of the Code of Federal Regulations is amended as follows:

### **PART 225 – MINIMUM CAPITAL RATIOS; ISSUANCE OF DIRECTIVES**

1. The authority citation for part 225 continues to read as follows:

**Authority:** This part 1 (Regulation Y) is issued by the Board of Governors of the Federal Reserve System (Board) under section 5(b) of the Bank Holding Company Act of 1956, as amended (12 U.S.C. 1844(b)) (BHC Act); sections 8 and 13(a) of the International Banking Act of 1978 (12 U.S.C. 3106 and 3108); section 7(j)(13) of the Federal Deposit Insurance Act, as amended by the Change in Bank Control Act of 1978 (12 U.S.C. 1817(j)(13)) (Bank Control Act); section 8(b) of the Federal Deposit Insurance Act (12 U.S.C. 1818(b)); section 914 of the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (12 U.S.C. 1831i); section 106 of the Bank Holding Company Act Amendments of 1970 (12 U.S.C. 1972); and the International Lending Supervision Act of 1983 (Pub. L. 98-181, title IX). The BHC Act is codified at 12 U.S.C. 1841, et seq.

2. Appendix E to part 225 is revised to read as set forth at the end of the common preamble:

**Appendix E to Part 225 – Capital Adequacy Guidelines for Bank Holding Companies: Risk-Based Measure**

3. Appendix E is further amended by:
- a. Removing “[Agency]” wherever it appears and adding in its place “Board”;
  - b. Removing “[the proposed advanced capital adequacy framework]” wherever it appears and adding in its place “Appendix F”;
  - c. Removing “[Rule]” wherever it appears and adding in its place “Appendix E to Part 225 – Capital Adequacy Guidelines for Bank Holding Companies: Market Risk Measure”; and
  - d. Removing “[the general risk-based capital rules]” wherever it appears and adding in its place 12 CFR part 225, Appendix A.

## **Federal Deposit Insurance Corporation**

### **12 CFR CHAPTER III**

#### **Authority and Issuance**

For the reasons set forth in the common preamble, part 325 of chapter III of title 12 of the Code of Federal Regulations is amended as follows:

#### **PART 325 – CAPITAL MAINTENANCE**

1. 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).

2. Appendix C to part 325 is revised to read as set forth at the end of the common preamble:

#### **Appendix C to Part 325 – Risk-Based Capital for State Nonmember Banks: Market Risk**

3. Appendix C is further amended by:
  - a. Removing “[Agency]” wherever it appears and adding in its place “FDIC”;
  - b. Removing “[the proposed advanced capital adequacy framework]” wherever it appears and adding in its place “Appendix D”;
  - c. Removing “[Rule]” wherever it appears and adding in its place “Appendix C to Part 325–Risk-Based Capital for State Nonmember Banks: Market Risk”; and

d. Removing “[the general risk-based capital rules]” wherever it appears and adding in its place “12 CFR part 325, Appendix A.”

## **Office of Thrift Supervision**

### **12 CFR CHAPTER V**

#### **Authority and Issuance**

For the reasons set forth in the common preamble, the Office of Thrift Supervision proposes to add part 566 of chapter V of title 12 of the Code of Federal Regulations to read as follows:

1. Add a new part 566 to read as follows:

#### **PART 566 – ADVANCED CAPITAL ADEQUACY FRAMEWORK AND MARKET RISK ADJUSTMENT**

##### **Sec.**

##### **566.1 Purpose**

##### **Appendix A [Reserved]**

AUTHORITY: 12 U.S.C. 1462, 1462a, 1463, 1464, 1467a, and 1828(note).

##### **§ 566.1 Purpose**

(a) [Reserved]

(b) Market Risk. Appendix B of this part establishes risk-based capital requirements for banks with significant exposure to market risk, provides methods for these banks to calculate their risk-based capital requirements for market risk, and prescribes public disclosure requirements regarding market risk for these savings associations.

##### **Appendix A [Reserved]**

2. Appendix B to part 566 is added and revised to read as set forth at the end of the common preamble.

3. Appendix B to part 566 is further amended by:

a. Removing “[Agency]” wherever it appears and adding in its place “OTS”;

b. Removing “[the proposed advanced capital adequacy framework]” wherever it appears and adding in its place “12 CFR part 566, Appendix A”;

c. Removing “[Rule]” wherever it appears and adding in its place “Appendix B to Part 566–Market Risk Adjustment”; and

d. Removing “[the general risk-based capital rules]” wherever it appears and adding in its place 12 CFR part 567.

Dated: 9-5-06

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John C. Dugan,  
Comptroller of the Currency.

By order of the Board of Governors of the Federal Reserve System, September 11, 2006.

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Jennifer J. Johnson  
Secretary of the Board

Dated at Washington, D.C., this 5<sup>th</sup> day of September, 2006.

By order of the Board of Directors.  
Federal Deposit Insurance Corporation.

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Robert E. Feldman,  
Executive Secretary.

Dated: August 31, 2006  
By the Office of Thrift Supervision

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John M. Reich,  
Director.

Billing Codes 4810-33-P (25%), 6210-01-P (25%), 6714-01-P (25%), 6720-01-P (25%)