

Board of Governors of the Federal Reserve System

Regulation Q

Capital Adequacy of Bank Holding Companies, Savings and Loan Holding Companies, and State Member Banks

12 CFR 217; as amended effective January 1, 2024



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AUTHORITY: 12 U.S.C. 248(a), 321-338a, 481-486,
 1462a, 1467a, 1818, 1828, 1831n, 1831o, 1831p-l, 1831w,
 1835, 1844(b), 1851, 3904, 3906-3909, 4808, 5365, 5368,
 5371, and 5371 note; Pub. L. 116-136, 134 Stat. 281.

equacy standards for entities described in
 paragraph (c)(1) of this section. This part in-
 cludes methodologies for calculating minimum
 capital requirements, public disclosure require-
 ments related to the capital requirements, and
 transition provisions for the application of this
 part.

(b) *Limitation of authority.* Nothing in this
 part shall be read to limit the authority of the
 Board to take action under other provisions of
 law, including action to address unsafe or un-
 sound practices or conditions, deficient capital
 levels, or violations of law or regulation, un-
 der section 8 of the Federal Deposit Insurance
 Act, section 8 of the Bank Holding Company
 Act, or section 10 of the Home Owners’ Loan
 Act.

(c) *Applicability.*

(1) (i) *Applicability in general.* This part
 applies on a consolidated basis to every
 Board-regulated institution that is:

(A) A state member bank;
 (B) A bank holding company domi-
 ciled in the United States that is not
 subject to 12 CFR part 225, appendix
 C, provided that the Board may by
 order apply any or all of this part to
 any bank holding company, based on
 the institution’s size, level of complex-
 ity, risk profile, scope of operations, or
 financial condition; or

(C) A covered savings and loan hold-
 ing company domiciled in the United
 States, other than a savings and loan
 holding company that meets the re-
 quirements of 12 CFR part 225, appen-
 dix C, as if the savings and loan hold-
 ing company were a bank holding
 company and the savings association
 were a bank. For purposes of compli-
 ance with the capital adequacy require-
 ments and calculations in this part,
 savings and loan holding companies
 that do not file form FR Y-9C or form
 FR Q-1 should follow the instructions
 to the FR Y-9C.

(ii) *Mid-tier holding companies of insur-
 ance depository institution holding com-
 panies.* In the case of a bank holding
 company, or a covered savings and loan
 holding company, that does not calculate

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SUBPART A—GENERAL PROVISIONS

SECTION 217.1—Purpose, Applicability, Reservations of Authority, and Timing

(a) *Purpose.* This part establishes minimum
 capital requirements and overall capital ad-

minimum risk-based capital requirements under subpart B of this part by operation of section 217.10(f)(1), this part applies to a depository institution holding company that is a subsidiary of such bank holding company or covered savings and loan holding company, provided that:

(A) The subsidiary depository institution holding company is an insurance mid-tier holding company; and

(B) The subsidiary depository institution holding company's assets and liabilities are not consolidated with those of a depository institution holding company that controls the subsidiary for purposes of determining the parent depository institution holding company's capital requirements and capital ratios under subparts B through F of this part.

(2) *Minimum capital requirements and overall capital adequacy standards.* Each Board-regulated institution must calculate its minimum capital requirements and meet the overall capital adequacy standards in subpart B of this part.

(3) *Regulatory capital.* Each Board-regulated institution must calculate its regulatory capital in accordance with subpart C of this part.

(4) *Risk-weighted assets.*

(i) Each Board-regulated institution must use the methodologies in subpart D of this part (and subpart F of this part for a market risk Board-regulated institution) to calculate standardized total risk-weighted assets.

(ii) Each advanced approaches Board-regulated institution must use the methodologies in subpart E (and subpart F of this part for a market risk Board-regulated institution) to calculate advanced approaches total risk-weighted assets.

(5) *Disclosures.*

(i) Except for an advanced approaches Board-regulated institution that is making public disclosures pursuant to the requirements in subpart E of this part, each Board-regulated institution with total consolidated assets of \$50 billion or more

must make the public disclosures described in subpart D of this part.

(ii) Each market risk Board-regulated institution must make the public disclosures described in subpart F of this part.

(iii) Each advanced approaches Board-regulated institution must make the public disclosures described in subpart E of this part.

(d) *Reservation of authority.*

(1) *Additional capital in the aggregate.* The Board may require a Board-regulated institution to hold an amount of regulatory capital greater than otherwise required under this part if the Board determines that the Board-regulated institution's capital requirements under this part are not commensurate with the Board-regulated institution's credit, market, operational, or other risks.

(2) *Regulatory capital elements.*

(i) If the Board determines that a particular common equity tier 1, additional tier 1, or tier 2 capital element has characteristics or terms that diminish its ability to absorb losses, or otherwise present safety and soundness concerns, the Board may require the Board-regulated institution to exclude all or a portion of such element from common equity tier 1 capital, additional tier 1 capital, or tier 2 capital, as appropriate.

(ii) Notwithstanding the criteria for regulatory capital instruments set forth in subpart C of this part, the Board may find that a capital element may be included in a Board-regulated institution's common equity tier 1 capital, additional tier 1 capital, or tier 2 capital on a permanent or temporary basis consistent with the loss absorption capacity of the element and in accordance with section 217.20(e).

(3) *Risk-weighted asset amounts.* If the Board determines that the risk-weighted asset amount calculated under this part by the Board-regulated institution for one or more exposures is not commensurate with the risks associated with those exposures, the Board may require the Board-regulated institution to assign a different risk-weighted asset amount to the exposure(s) or to deduct

the amount of the exposure(s) from its regulatory capital.

(4) *Total leverage.* If the Board determines that the total leverage exposure, or the amount reflected in the Board-regulated institution's reported average total consolidated assets, for an on- or off-balance sheet exposure calculated by a Board-regulated institution under section 217.10 is inappropriate for the exposure(s) or the circumstances of the Board-regulated institution, the Board may require the Board-regulated institution to adjust this exposure amount in the numerator and the denominator for purposes of the leverage ratio calculations.

(5) *Consolidation of certain exposures.* The Board may determine that the risk-based capital treatment for an exposure or the treatment provided to an entity that is not consolidated on the Board-regulated institution's balance sheet is not commensurate with the risk of the exposure and the relationship of the Board-regulated institution to the entity. Upon making this determination, the Board may require the Board-regulated institution to treat the exposure or entity as if it were consolidated on the balance sheet of the Board-regulated institution for purposes of determining the Board-regulated institution's risk-based capital requirements and calculating the Board-regulated institution's risk-based capital ratios accordingly. The Board will look to the substance of, and risk associated with, the transaction, as well as other relevant factors the Board deems appropriate in determining whether to require such treatment.

(6) *Other reservation of authority.* With respect to any deduction or limitation required under this part, the Board may require a different deduction or limitation, provided that such alternative deduction or limitation is commensurate with the Board-regulated institution's risk and consistent with safety and soundness.

(e) *Notice and response procedures.* In making a determination under this section, the Board will apply notice and response procedures in the same manner and to the same extent as the notice and response procedures in 12 CFR 263.202.

(f) *Timing.*

(1) Subject to the transition provisions in subpart G of this part, an advanced approaches Board-regulated institution that is not a savings and loan holding company must:

(i) Except as described in paragraph (f)(1)(ii) of this section, beginning on January 1, 2014, calculate advanced approaches total risk-weighted assets in accordance with subpart E and, if applicable, subpart F of this part and, beginning on January 1, 2015, calculate standardized total risk-weighted assets in accordance with subpart D and, if applicable, subpart F of this part;

(ii) From January 1, 2014 to December 31, 2014:

(A) Calculate risk-weighted assets in accordance with the general risk-based capital rules under 12 CFR parts 208 or 225, appendix A, and, if applicable, appendix E (state member banks or bank holding companies, respectively)¹ and substitute such risk-weighted assets for standardized total risk-weighted assets for purposes of section 217.10;

(B) If applicable, calculate general market risk equivalent assets in accordance with 12 CFR parts 208 or 225, appendix E, section 4(a)(3) (state member banks or bank holding companies, respectively) and substitute such general market risk equivalent assets for standardized market risk-weighted assets for purposes of section 217.20(d)(3); and

(C) Substitute the corresponding provision or provisions of 12 CFR parts 208 or 225, appendix A, and, if applicable, appendix E (state member banks or bank holding companies, respectively) for any reference to subpart D of this

¹ For the purpose of calculating its general risk-based capital ratios from January 1, 2014 to December 31, 2014, an advanced approaches Board-regulated institution shall adjust, as appropriate, its risk-weighted asset measure (as that amount is calculated under 12 CFR parts 208 and 225, and, if applicable, appendix E (state member banks or bank holding companies, respectively) in the general risk-based capital rules) by excluding those assets that are deducted from its regulatory capital under section 217.22.

part in: section 217.121(c); section 217.124(a) and (b); section 217.144(b); section 217.154(c) and (d); section 217.202(b) (definition of covered position in paragraph (b)(3)(iv)); and section 217.211(b);²

(iii) Beginning on January 1, 2014, calculate and maintain minimum capital ratios in accordance with subparts A, B, and C of this part, provided, however, that such Board-regulated institution must:

(A) From January 1, 2014 to December 31, 2014, maintain a minimum common equity tier 1 capital ratio of 4 percent, a minimum tier 1 capital ratio of 5.5 percent, a minimum total capital ratio of 8 percent, and a minimum leverage ratio of 4 percent; and

(B) From January 1, 2015 to December 31, 2017, an advanced approaches Board-regulated institution:

(1) Is not required to maintain a supplementary leverage ratio; and

(2) Must calculate a supplementary leverage ratio in accordance with section 217.10(c), and must report the calculated supplementary leverage ratio on any applicable regulatory reports.

(2) Subject to the transition provisions in subpart G of this part, a Board-regulated institution that is not an advanced approaches Board-regulated institution or a savings and loan holding company that is an advanced approaches Board-regulated institution must:

(i) Beginning on January 1, 2015, calculate standardized total risk-weighted assets in accordance with subpart D, and if applicable, subpart F of this part; and

(ii) Beginning on January 1, 2015, calculate and maintain minimum capital ratios

in accordance with subparts A, B and C of this part, provided, however, that from January 1, 2015 to December 31, 2017, a savings and loan holding company that is an advanced approaches Board-regulated institution:

(A) Is not required to maintain a supplementary leverage ratio; and

(B) Must calculate a supplementary leverage ratio in accordance with section 217.10(c), and must report the calculated supplementary leverage ratio on any applicable regulatory reports.

(3) Beginning on January 1, 2016, and subject to the transition provisions in subpart G of this part, a Board-regulated institution is subject to limitations on distributions and discretionary bonus payments with respect to its capital conservation buffer, any applicable countercyclical capital buffer amount, and any applicable GSIB surcharge, in accordance with subpart B of this part.

(4) Beginning January 1, 2018, a global systemically important BHC (as defined in section 217.2) is subject to limitations on distributions and discretionary bonus payments in accordance with the lower of the maximum payout amount as determined under section 217.11(a)(2)(iii) and the maximum leverage payout amount as determined under section 217.11(a)(2)(vi).

(5) A depository institution holding company, a U.S. intermediate holding company, or a state member bank that changes from one category of Board-regulated institution to another of such categories must comply with the requirements of its category in this part, including applicable transition provisions of the requirements in this part, no later than on the first day of the second quarter following the change in the company's category.

(g) *Depository institution holding companies and treatment of subsidiary state-regulated insurers, regulated foreign subsidiaries, and regulated foreign affiliates.*

(1) *In general.* In complying with the capital adequacy requirements of this part (except for the requirements and calculations of subpart J of this part), including any determination of applicability under section

² In addition, for purposes of section 217.201(c)(3), from January 1, 2014 to December 31, 2014, for any circumstance in which the Board may require a Board-regulated institution to calculate risk-based capital requirements for specific positions or portfolios under subpart D of this part, the Board will instead require the Board-regulated institution to make such calculations according to 12 CFR parts 208 and 225, appendix A and, if applicable, appendix E (state member banks or bank holding companies, respectively).

217.100 or section 217.201, an insurance bank holding company, insurance savings and loan holding company, or insurance mid-tier holding company may elect not to consolidate the assets and liabilities of its subsidiary state-regulated insurers, regulated foreign subsidiaries, and regulated foreign affiliates. Such an institution that makes this election must either:

- (i) Deduct from the sum of its common equity tier 1 capital elements the aggregate amount of its outstanding equity investment, including retained earnings, in such subsidiaries and affiliates; or
- (ii) Include in the risk-weighted assets of the Board-regulated institution the aggregate amount of its outstanding equity investment, including retained earnings, in such subsidiaries and affiliates and assign to these assets a 400 percent risk weight.

(2) *Method of election.*

- (i) An insurance bank holding company, insurance savings and loan holding company, or insurance mid-tier holding company may make the election described in paragraph (g)(1) of this section by indicating that it has made this election on the applicable regulatory report, filed by the insurance bank holding company, insurance savings and loan holding company, or insurance mid-tier holding company for the first reporting period in which it is an insurance bank holding company, insurance savings and loan holding company, or insurance mid-tier holding company. The electing Board-regulated institution must indicate on the applicable regulatory report whether it elects to deduct from the sum of its common equity tier 1 capital elements in accordance with paragraph (g)(1)(i) of this section or whether it elects to include an amount in its risk-weighted assets in accordance with paragraph (g)(1)(ii) of this section.
- (ii) An insurance bank holding company, insurance savings and loan holding company, or insurance mid-tier holding company that has not made an effective election pursuant to paragraph (g)(2)(i) of this section, or that seeks to change its election (or its choice of treatment under

paragraph (g)(1) of this section) due to a change in control, business combination, or other legitimate business purpose, may do so only with the prior approval of the Board, effective as of the first reporting period after the period in which the Board approves the election, or such other date specified in the approval.

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SECTION 217.2—Definitions

As used in this part:

Additional tier 1 capital is defined in section 217.20(c).

Adjusted allowances for credit losses (AACL) means, with respect to a Board-regulated institution that has adopted CECL, valuation allowances that have been established through a charge against earnings or retained earnings for expected credit losses on financial assets measured at amortized cost and a lessor's net investment in leases that have been established to reduce the amortized cost basis of the assets to amounts expected to be collected as determined in accordance with GAAP. For purposes of this part, adjusted allowances for credit losses include allowances for expected credit losses on off-balance sheet credit exposures not accounted for as insurance as determined in accordance with GAAP. Adjusted allowances for credit losses exclude "allocated transfer risk reserves" and allowances created that reflect credit losses on purchased credit deteriorated assets and available-for-sale debt securities.

Advanced approaches Board-regulated institution means a Board-regulated institution that is described in section 217.100(b)(1).

Advanced approaches total risk-weighted assets means:

- (1) The sum of:
 - (i) Credit-risk-weighted assets;
 - (ii) Credit valuation adjustment (CVA) risk-weighted assets;
 - (iii) Risk-weighted assets for operational risk; and
 - (iv) For a market risk Board-regulated institution only, advanced market risk-weighted assets; minus

(2) Excess eligible credit reserves not included in the Board-regulated institution's tier 2 capital.

Advanced market risk-weighted assets means the advanced measure for market risk calculated under section 217.204 multiplied by 12.5.

Affiliate with respect to a company, means any company that controls, is controlled by, or is under common control with, the company.

Allocated transfer risk reserves means reserves that have been established in accordance with section 905(a) of the International Lending Supervision Act, against certain assets whose value U.S. supervisory authorities have found to be significantly impaired by protracted transfer risk problems.

Allowances for loan and lease losses (ALLL) means valuation allowances that have been established through a charge against earnings to cover estimated credit losses on loans, lease financing receivables or other extensions of credit as determined in accordance with GAAP. ALLL excludes "allocated transfer risk reserves." For purposes of this part, ALLL includes allowances that have been established through a charge against earnings to cover estimated credit losses associated with off-balance sheet credit exposures as determined in accordance with GAAP.

Asset-backed commercial paper (ABCP) program means a program established primarily for the purpose of issuing commercial paper that is investment grade and backed by underlying exposures held in a bankruptcy-remote special purpose entity (SPE).

Asset-backed commercial paper (ABCP) program sponsor means a Board-regulated institution that:

- (1) Establishes an ABCP program;
- (2) Approves the sellers permitted to participate in an ABCP program;
- (3) Approves the exposures to be purchased by an ABCP program; or
- (4) Administers the ABCP program by monitoring the underlying exposures, underwriting or otherwise arranging for the placement of debt or other obligations is-

sued by the program, compiling monthly reports, or ensuring compliance with the program documents and with the program's credit and investment policy.

Bank holding company means a bank holding company as defined in section 2 of the Bank Holding Company Act.

Bank Holding Company Act means the Bank Holding Company Act of 1956, as amended (12 U.S.C. 1841 *et seq.*).

Bankruptcy remote means, with respect to an entity or asset, that the entity or asset would be excluded from an insolvent entity's estate in receivership, insolvency, liquidation, or similar proceeding.

Basis derivative contract means a non-foreign-exchange derivative contract (i.e., the contract is denominated in a single currency) in which the cash flows of the derivative contract depend on the difference between two risk factors that are attributable solely to one of the following derivative asset classes: Interest rate, credit, equity, or commodity.

Board means the Board of Governors of the Federal Reserve System.

Board-regulated institution means a state member bank, bank holding company, or savings and loan holding company.

Call Report means Consolidated Reports of Condition and Income.

Carrying value means, with respect to an asset, the value of the asset on the balance sheet of a Board-regulated institution as determined in accordance with GAAP. For all assets other than available-for-sale debt securities or purchased credit deteriorated assets, the carrying value is not reduced by any associated credit loss allowance that is determined in accordance with GAAP.

Category II Board-regulated institution means:

- (1) A depository institution holding company that is identified as a Category II banking organization pursuant to 12 CFR 252.5 or 12 CFR 238.10, as applicable;
- (2) A U.S. intermediate holding company that is identified as a Category II banking organization pursuant to 12 CFR 252.5;

(3) A state member bank that is a subsidiary of a company identified in paragraph (1) of this definition; or

(4) A state member bank that:

(i) Is not a subsidiary of a depository institution holding company; and

(ii) (A) Has total consolidated assets, calculated based on the average of the state member bank's total consolidated assets for the four most recent calendar quarters as reported on the Call Report, equal to \$700 billion or more. If the state member bank has not filed the Call Report for each of the four most recent calendar quarters, total consolidated assets is calculated based on its total consolidated assets, as reported on the Call Report, for the most recent quarter or average of the most recent quarters, as applicable; or

(B) Has:

(1) Total consolidated assets, calculated based on the average of the state member bank's total consolidated assets for the four most recent calendar quarters as reported on the Call Report, of \$100 billion or more but less than \$700 billion. If the state member bank has not filed the Call Report for each of the four most recent quarters, total consolidated assets is based on its total consolidated assets, as reported on the Call Report, for the most recent quarter or average of the most recent quarters, as applicable; and

(2) Cross-jurisdictional activity, calculated based on the average of its cross-jurisdictional activity for the four most recent calendar quarters, of \$75 billion or more. Cross-jurisdictional activity is the sum of cross-jurisdictional claims and cross-jurisdictional liabilities, calculated in accordance with the instructions to the FR Y-15 or equivalent reporting form.

(iii) After meeting the criteria in paragraph (4)(i) of this section, a state member bank continues to be a Category II Board-regulated institution until the state member bank:

(A) Has:

(1) Less than \$700 billion in total consolidated assets, as reported on the Call Report, for each of the four most recent calendar quarters; and

(2) Less than \$75 billion in cross-jurisdictional activity for each of the four most recent calendar quarters. Cross-jurisdictional activity is the sum of cross-jurisdictional claims and cross-jurisdictional liabilities, calculated in accordance with the instructions to the FR Y-15 or equivalent reporting form; or

(B) Has less than \$100 billion in total consolidated assets, as reported on the Call Report, for each of the four most recent calendar quarters.

Category III Board-regulated institution means:

(1) A depository institution holding company that is identified as a Category III banking organization pursuant to 12 CFR 252.5 or 12 CFR 238.10, as applicable;

(2) A U.S. intermediate holding company that is identified as a Category III banking organization pursuant to 12 CFR 252.5;

(3) A state member bank that is a subsidiary of a company identified in paragraph (1) of this definition;

(4) A depository institution that:

(i) Is not a subsidiary of a depository institution holding company;

(ii) (A) Has total consolidated assets, calculated based on the average of the state member bank's total consolidated assets for the four most recent calendar quarters as reported on the Call Report, equal to \$250 billion or more. If the state member bank has not filed the Call Report for each of the four most recent calendar quarters, total consolidated assets is calculated based on its total consolidated assets, as reported on the Call Report, for the most recent quarter or average of the most recent quarters, as applicable; or

(B) Has:

(1) Total consolidated assets, calculated based on the average of the state member bank's total consoli-

dated assets for the four most recent calendar quarters as reported on the Call Report, of \$100 billion or more but less than \$250 billion. If the state member bank has not filed the Call Report for each of the four most recent calendar quarters, total consolidated assets is calculated based its total consolidated assets, as reported on the Call Report, for the most recent quarter or average of the most recent quarters, as applicable; and

(2) At least one of the following in paragraphs (4)(i)(B)(2)(i) through (iii) of this definition, each calculated as the average of the four most recent calendar quarters:

(i) Total nonbank assets, calculated in accordance with the instructions to the FR Y-9LP or equivalent reporting form, equal to \$75 billion or more;

(ii) Off-balance sheet exposure equal to \$75 billion or more. Off-balance sheet exposure is a state member bank's total exposure, calculated in accordance with the instructions to the FR Y-15 or equivalent reporting form, minus the total consolidated assets of the state member bank, as reported on the Call Report; or

(iii) Weighted short-term wholesale funding, calculated in accordance with the instructions to the FR Y-15 or equivalent reporting form, equal to \$75 billion or more; or

(iii) [Reserved]

(iv) After meeting the criteria in paragraph (4)(ii) of this definition, a state member bank continues to be a Category III Board-regulated institution until the state member bank:

(A) Has:

(1) Less than \$250 billion in total consolidated assets, as reported on the Call Report, for each of the four most recent calendar quarters;

(2) Less than \$75 billion in total nonbank assets, calculated in accordance

with the instructions to the FR Y-9LP or equivalent reporting form, for each of the four most recent calendar quarters;

(3) Less than \$75 billion in weighted short-term wholesale funding, calculated in accordance with the instructions to the FR Y-15 or equivalent reporting form, for each of the four most recent calendar quarters; and

(4) Less than \$75 billion in off-balance sheet exposure for each of the four most recent calendar quarters. Off-balance sheet exposure is a state member bank's total exposure, calculated in accordance with the instructions to the FR Y-15 or equivalent reporting form, minus the total consolidated assets of the state member bank, as reported on the Call Report; or

(B) Has less than \$100 billion in total consolidated assets, as reported on the Call Report, for each of the four most recent calendar quarters; or

(C) Is a Category II Board-regulated institution.

Central counterparty (CCP) means a counterparty (for example, a clearing house) that facilitates trades between counterparties in one or more financial markets by either guaranteeing trades or novating contracts.

CFTC means the U.S. Commodity Futures Trading Commission.

Clean-up call means a contractual provision that permits an originating Board-regulated institution or servicer to call securitization exposures before their stated maturity or call date.

Cleared transaction means an exposure associated with an outstanding derivative contract or repo-style transaction that a Board-regulated institution or clearing member has entered into with a central counterparty (that is, a transaction that a central counterparty has accepted).

(1) The following transactions are cleared transactions:

(i) A transaction between a CCP and a

Board-regulated institution that is a clearing member of the CCP where the Board-regulated institution enters into the transaction with the CCP for the Board-regulated institution's own account;

(ii) A transaction between a CCP and a Board-regulated institution that is a clearing member of the CCP where the Board-regulated institution is acting as a financial intermediary on behalf of a clearing member client and the transaction offsets another transaction that satisfies the requirements set forth in section 217.3(a);

(iii) A transaction between a clearing member client Board-regulated institution and a clearing member where the clearing member acts as a financial intermediary on behalf of the clearing member client and enters into an offsetting transaction with a CCP, provided that the requirements set forth in section 217.3(a) are met; or

(iv) A transaction between a clearing member client Board-regulated institution and a CCP where a clearing member guarantees the performance of the clearing member client Board-regulated institution to the CCP and the transaction meets the requirements of section 217.3(a)(2) and (3).

(2) The exposure of a Board-regulated institution that is a clearing member to its clearing member client is not a cleared transaction where the Board-regulated institution is either acting as a financial intermediary and enters into an offsetting transaction with a CCP or where the Board-regulated institution provides a guarantee to the CCP on the performance of the client.³

Clearing member means a member of, or direct participant in, a CCP that is entitled to enter into transactions with the CCP.

³ For the standardized approach treatment of these exposures, see section 217.34(e) (OTC derivative contracts) or section 217.37(c) (repo-style transactions). For the advanced approaches treatment of these exposures, see sections 217.132(c)(8) and (d) (OTC derivative contracts) or sections 217.132(b) and 217.132(d) (repo-style transactions) and for calculation of the margin period of risk, see section 217.132(d)(5)(iii)(C) (OTC derivative contracts) and section 217.132(d)(5)(iii)(A) (repo-style transactions).

Clearing member client means a party to a cleared transaction associated with a CCP in which a clearing member acts either as a financial intermediary with respect to the party or guarantees the performance of the party to the CCP.

Client-facing derivative transaction means a derivative contract that is not a cleared transaction where the Board-regulated institution is either acting as a financial intermediary and enters into an offsetting transaction with a qualifying central counterparty (QCCP) or where the Board-regulated institution provides a guarantee on the performance of a client on a transaction between the client and a QCCP.

Collateral agreement means a legal contract that specifies the time when, and circumstances under which, a counterparty is required to pledge collateral to a Board-regulated institution for a single financial contract or for all financial contracts in a netting set and confers upon the Board-regulated institution a perfected, first-priority security interest (notwithstanding the prior security interest of any custodial agent), or the legal equivalent thereof, in the collateral posted by the counterparty under the agreement. This security interest must provide the Board-regulated institution with a right to close-out the financial positions and liquidate the collateral upon an event of default of, or failure to perform by, the counterparty under the collateral agreement. A contract would not satisfy this requirement if the Board-regulated institution's exercise of rights under the agreement may be stayed or avoided:

(1) Under applicable law in the relevant jurisdictions, other than:

(i) In receivership, conservatorship, or resolution under the Federal Deposit Insurance Act, Title II of the Dodd-Frank Act, or under any similar insolvency law applicable to GSEs, or laws of foreign jurisdictions that are substantially similar⁴ to the U.S. laws referenced in this paragraph (1)(i) in order to facilitate the or-

⁴ The Board expects to evaluate jointly with the OCC and Federal Deposit Insurance Corporation whether foreign special resolution regimes meet the requirements of this paragraph.

derly resolution of the defaulting counterparty;

(ii) Where the agreement is subject by its terms to, or incorporates, any of the laws referenced in paragraph (1)(i) of this definition; or

(2) Other than to the extent necessary for the counterparty to comply with the requirements of subpart I of the Board's Regulation YY (part 252 of this chapter), part 47 of this title, or part 382 of this title, as applicable.

Commercial end-user means an entity that:

(1) (i) Is using derivative contracts to hedge or mitigate commercial risk; and

(ii) (A) Is not an entity described in section 2(h)(7)(C)(i)(I) through (VIII) of the Commodity Exchange Act (7 U.S.C. 2(h)(7)(C)(i)(I) through (VIII)); or

(B) Is not a "financial entity" for purposes of section 2(h)(7) of the Commodity Exchange Act (7 U.S.C. 2(h)) by virtue of section 2(h)(7)(C)(iii) of the Act (7 U.S.C. 2(h)(7)(C)(iii)); or

(2) (i) Is using derivative contracts to hedge or mitigate commercial risk; and

(ii) Is not an entity described in section 3C(g)(3)(A)(i) through (viii) of the Securities Exchange Act of 1934 (15 U.S.C. 78c-3(g)(3)(A)(i) through (viii)); or

(3) Qualifies for the exemption in section 2(h)(7)(A) of the Commodity Exchange Act (7 U.S.C. 2(h)(7)(A)) by virtue of section 2(h)(7)(D) of the Act (7 U.S.C. 2(h)(7)(D)); or

(4) Qualifies for an exemption in section 3C(g)(1) of the Securities Exchange Act of 1934 (15 U.S.C. 78c-3(g)(1)) by virtue of section 3C(g)(4) of the Act (15 U.S.C. 78c-3(g)(4)).

Commitment means any legally binding arrangement that obligates a Board-regulated institution to extend credit or to purchase assets.

Commodity derivative contract means a commodity-linked swap, purchased commodity-linked option, forward commodity-linked contract, or any other instrument linked to commodities that gives rise to similar counterparty credit risks.

Commodity Exchange Act means the Commodity Exchange Act of 1936 (7 U.S.C. 1 *et seq.*)

Common equity tier 1 capital is defined in section 217.20(b).

Common equity tier 1 minority interest means the common equity tier 1 capital of a depository institution or foreign bank that is:

(1) A consolidated subsidiary of a Board-regulated institution; and

(2) Not owned by the Board-regulated institution.

Company means a corporation, partnership, limited liability company, depository institution, business trust, special purpose entity, association, or similar organization.

Control. A person or company *controls* a company if it:

(1) Owns, controls, or holds with power to vote 25 percent or more of a class of voting securities of the company; or

(2) Consolidates the company for financial reporting purposes.

Corporate exposure means an exposure to a company that is not:

(1) An exposure to a sovereign, the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, the European Stability Mechanism, the European Financial Stability Facility, a multi-lateral development bank (MDB), a depository institution, a foreign bank, a credit union, or a public sector entity (PSE);

(2) An exposure to a GSE;

(3) A residential mortgage exposure;

(4) A pre-sold construction loan;

(5) A statutory multifamily mortgage;

(6) A high volatility commercial real estate (HVCRE) exposure;

(7) A cleared transaction;

(8) A default fund contribution;

(9) A securitization exposure;

(10) An equity exposure; or

(11) An unsettled transaction.

(12) A policy loan;

(13) A separate account; or

(14) A Paycheck Protection Program covered loan as defined in section 7(a)(36) of

the Small Business Act (15 U.S.C. 636(a)(36)).

Country risk classification (CRC) with respect to a sovereign, means the most recent consensus CRC published by the Organization for Economic Cooperation and Development (OECD) as of December 31st of the prior calendar year that provides a view of the likelihood that the sovereign will service its external debt.

Covered debt instrument means an unsecured debt instrument that is:

- (1) Issued by a global systemically important BHC and that is an eligible debt security, as defined in 12 CFR 252.61, or that is *pari passu* or subordinated to any eligible debt security issued by the global systemically important BHC; or
- (2) Issued by a Covered IHC, as defined in 12 CFR 252.161, and that is an eligible Covered IHC debt security, as defined in 12 CFR 252.161, or that is *pari passu* or subordinated to any eligible Covered IHC debt security issued by the Covered IHC; or
- (3) Issued by a global systemically important banking organization, as defined in 12 CFR 252.2 other than a global systemically important BHC; or issued by a subsidiary of a global systemically important banking organization that is not a global systemically important BHC, other than a Covered IHC, as defined in 12 CFR 252.161; and where,

- (i) The instrument is eligible for use to comply with an applicable law or regulation requiring the issuance of a minimum amount of instruments to absorb losses or recapitalize the issuer or any of its subsidiaries in connection with a resolution, receivership, insolvency, or similar proceeding of the issuer or any of its subsidiaries; or
- (ii) The instrument is *pari passu* or subordinated to any instrument described in paragraph (3)(i) of this definition; for purposes of this paragraph (3)(ii) of this definition, if the issuer may be subject to a special resolution regime, in its jurisdiction of incorporation or organization, that addresses the failure or potential failure of a financial company and any in-

strument described in paragraph (3)(i) of this definition is eligible under that special resolution regime to be written down or converted into equity or any other capital instrument, then an instrument is *pari passu* or subordinated to any instrument described in paragraph (3)(i) of this definition if that instrument is eligible under that special resolution regime to be written down or converted into equity or any other capital instrument ahead of or proportionally with any instrument described in paragraph (3)(i) of this definition; and

- (4) Provided that, for purposes of this definition, covered debt instrument does not include a debt instrument that qualifies as tier 2 capital pursuant to 12 CFR 217.20(d) or that is otherwise treated as regulatory capital by the primary supervisor of the issuer.

Covered savings and loan holding company means a top-tier savings and loan holding company other than an institution that—

- (1) Meets the requirements of section 10(c)(9)(C) of the Home Owners' Loan Act (12 U.S.C. 1467a(c)(9)(C)); and
- (2) As of June 30 of the previous calendar year, derived 50 percent or more of its total consolidated assets or 50 percent of its total revenues on an enterprise-wide basis (as calculated under GAAP) from activities that are not financial in nature under section 4(k) of the Bank Holding Company Act (12 U.S.C. 1843(k)).

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

Credit-enhancing interest-only strip (CEIO) means an on-balance sheet asset that, in form or in substance:

- (1) Represents a contractual right to receive some or all of the interest and no more than a minimal amount of principal due on the underlying exposures of a securitization; and
- (2) Exposes the holder of the CEIO to credit risk directly or indirectly associated

with the underlying exposures that exceeds a pro rata share of the holder's claim on the underlying exposures, whether through subordination provisions or other credit-enhancement techniques.

Credit-enhancing representations and warranties means representations and warranties that are made or assumed in connection with a transfer of underlying exposures (including loan servicing assets) and that obligate a Board-regulated institution to protect another party from losses arising from the credit risk of the underlying exposures. Credit-enhancing representations and warranties include provisions to protect a party from losses resulting from the default or nonperformance of the counterparties of the underlying exposures or from an insufficiency in the value of the collateral backing the underlying exposures. Credit-enhancing representations and warranties do not include:

- (1) Early default clauses and similar warranties that permit the return of, or premium refund clauses covering, 1-4 family residential first mortgage loans that qualify for a 50 percent risk weight for a period not to exceed 120 days from the date of transfer. These warranties may cover only those loans that were originated within 1 year of the date of transfer;
- (2) Premium refund clauses that cover assets guaranteed, in whole or in part, by the U.S. Government, a U.S. Government agency or a GSE, provided the premium refund clauses are for a period not to exceed 120 days from the date of transfer; or
- (3) Warranties that permit the return of underlying exposures in instances of misrepresentation, fraud, or incomplete documentation.

Credit risk mitigant means collateral, a credit derivative, or a guarantee.

Credit-risk-weighted assets means 1.06 multiplied by the sum of:

- (1) Total wholesale and retail risk-weighted assets as calculated under section 217.131;
- (2) Risk-weighted assets for securitization exposures as calculated under section 217.142; and

- (3) Risk-weighted assets for equity exposures as calculated under section 217.151.

Credit union means an insured credit union as defined under the Federal Credit Union Act (12 U.S.C. 1752 *et seq.*).

Current expected credit losses (CECL) means the current expected credit losses methodology under GAAP.

Current exposure means, with respect to a netting set, the larger of zero or the fair value of a transaction or portfolio of transactions within the netting set that would be lost upon default of the counterparty, assuming no recovery on the value of the transactions.

Current exposure methodology means the method of calculating the exposure amount for over-the-counter derivative contracts in section 217.34(b).

Custodial banking organization means:

- (1) A Board-regulated institution that is:
 - (i) A top-tier depository institution holding company domiciled in the United States that has assets under custody that are at least 30 times the amount of the depository institution holding company's total assets; or
 - (ii) A state member bank that is a subsidiary of a depository institution holding company described in paragraph (1)(i) of this definition.
- (2) For purposes of this definition, total assets are equal to the average of the banking organization's total consolidated assets for the four most recent calendar quarters. Assets under custody are equal to the average of the Board-regulated institution's assets under custody for the four most recent calendar quarters.

Custodian means a financial institution that has legal custody of collateral provided to a CCP.

Default fund contribution means the funds contributed or commitments made by a clearing member to a CCP's mutualized loss sharing arrangement.

Depository institution means a depository in-

stitution as defined in section 3 of the Federal Deposit Insurance Act.

Depository institution holding company means a bank holding company or savings and loan holding company.

Derivative contract means a financial contract whose value is derived from the values of one or more underlying assets, reference rates, or indices of asset values or reference rates. Derivative contracts include interest rate derivative contracts, exchange rate derivative contracts, equity derivative contracts, commodity derivative contracts, credit derivative contracts, and any other instrument that poses similar counterparty credit risks. Derivative contracts also include unsettled securities, commodities, and foreign exchange transactions with a contractual settlement or delivery lag that is longer than the lesser of the market standard for the particular instrument or five business days.

Discretionary bonus payment means a payment made to an executive officer of a Board-regulated institution, where:

- (1) The Board-regulated institution retains discretion as to whether to make, and the amount of, the payment until the payment is awarded to the executive officer;
- (2) The amount paid is determined by the Board-regulated institution without prior promise to, or agreement with, the executive officer; and
- (3) The executive officer has no contractual right, whether express or implied, to the bonus payment.

Distribution means:

- (1) A reduction of tier 1 capital through the repurchase of a tier 1 capital instrument or by other means, except when a Board-regulated institution, within the same quarter when the repurchase is announced, fully replaces a tier 1 capital instrument it has repurchased by issuing another capital instrument that meets the eligibility criteria for:
 - (i) A common equity tier 1 capital instrument if the instrument being repurchased was part of the Board-regulated institution's common equity tier 1 capital, or

- (ii) A common equity tier 1 or additional tier 1 capital instrument if the instrument being repurchased was part of the Board-regulated institution's tier 1 capital;

- (2) A reduction of tier 2 capital through the repurchase, or redemption prior to maturity, of a tier 2 capital instrument or by other means, except when a Board-regulated institution, within the same quarter when the repurchase or redemption is announced, fully replaces a tier 2 capital instrument it has repurchased by issuing another capital instrument that meets the eligibility criteria for a tier 1 or tier 2 capital instrument;

- (3) A dividend declaration or payment on any tier 1 capital instrument;

- (4) A dividend declaration or interest payment on any tier 2 capital instrument if the Board-regulated institution has full discretion to permanently or temporarily suspend such payments without triggering an event of default; or

- (5) Any similar transaction that the Board determines to be in substance a distribution of capital.

Dodd-Frank Act means the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Pub. L. 111-203, 124 Stat. 1376).

Early amortization provision means a provision in the documentation governing a securitization that, when triggered, causes investors in the securitization exposures to be repaid before the original stated maturity of the securitization exposures, unless the provision:

- (1) Is triggered solely by events not directly related to the performance of the underlying exposures or the originating Board-regulated institution (such as material changes in tax laws or regulations); or
- (2) Leaves investors fully exposed to future draws by borrowers on the underlying exposures even after the provision is triggered.

Effective notional amount means for an eligible guarantee or eligible credit derivative, the lesser of the contractual notional amount of the credit risk mitigant and the exposure amount (or EAD for purposes of subpart E of

this part) of the hedged exposure, multiplied by the percentage coverage of the credit risk mitigant.

Eligible ABCP liquidity facility means a liquidity facility supporting ABCP, in form or in substance, that is subject to an asset quality test at the time of draw that precludes funding against assets that are 90 days or more past due or in default. Notwithstanding the preceding sentence, a liquidity facility is an eligible ABCP liquidity facility if the assets or exposures funded under the liquidity facility that do not meet the eligibility requirements are guaranteed by a sovereign that qualifies for a 20 percent risk weight or lower.

Eligible clean-up call means a clean-up call that:

- (1) Is exercisable solely at the discretion of the originating Board-regulated institution or servicer;
- (2) Is not structured to avoid allocating losses to securitization exposures held by investors or otherwise structured to provide credit enhancement to the securitization; and
- (3) (i) For a traditional securitization, is only exercisable when 10 percent or less of the principal amount of the underlying exposures or securitization exposures (determined as of the inception of the securitization) is outstanding; or
 - (ii) For a synthetic securitization, is only exercisable when 10 percent or less of the principal amount of the reference portfolio of underlying exposures (determined as of the inception of the securitization) is outstanding.

Eligible credit derivative means a credit derivative in the form of a credit default swap, nth-to-default swap, total return swap, or any other form of credit derivative approved by the Board, provided that:

- (1) The contract meets the requirements of an eligible guarantee and has been confirmed by the protection purchaser and the protection provider;
- (2) Any assignment of the contract has been confirmed by all relevant parties;
- (3) If the credit derivative is a credit de-

fault swap or nth-to-default swap, the contract includes the following credit events:

- (i) Failure to pay any amount due under the terms of the reference exposure, subject to any applicable minimal payment threshold that is consistent with standard market practice and with a grace period that is closely in line with the grace period of the reference exposure; and
 - (ii) Receivership, insolvency, liquidation, conservatorship or inability of the reference exposure issuer to pay its debts, or its failure or admission in writing of its inability generally to pay its debts as they become due, and similar events;
- (4) The terms and conditions dictating the manner in which the contract is to be settled are incorporated into the contract;
 - (5) If the contract allows for cash settlement, the contract incorporates a robust valuation process to estimate loss reliably and specifies a reasonable period for obtaining post-credit event valuations of the reference exposure;
 - (6) If the contract requires the protection purchaser to transfer an exposure to the protection provider at settlement, the terms of at least one of the exposures that is permitted to be transferred under the contract provide that any required consent to transfer may not be unreasonably withheld;
 - (7) If the credit derivative is a credit default swap or nth-to-default swap, the contract clearly identifies the parties responsible for determining whether a credit event has occurred, specifies that this determination is not the sole responsibility of the protection provider, and gives the protection purchaser the right to notify the protection provider of the occurrence of a credit event; and
 - (8) If the credit derivative is a total return swap and the Board-regulated institution records net payments received on the swap as net income, the Board-regulated institution records offsetting deterioration in the value of the hedged exposure (either through reductions in fair value or by an addition to reserves).

Eligible credit reserves means:

- (1) For a Board-regulated institution that

has not adopted CECL, all general allowances that have been established through a charge against earnings to cover estimated credit losses associated with on- or off-balance sheet wholesale and retail exposures, including the ALLL associated with such exposures, but excluding allocated transfer risk reserves established pursuant to 12 U.S.C. 3904 and other specific reserves created against recognized losses; and

(2) For a Board-regulated institution that has adopted CECL, all general allowances that have been established through a charge against earnings or retained earnings to cover expected credit losses associated with on- or off-balance sheet wholesale and retail exposures, including AACL associated with such exposures. Eligible credit reserves exclude allocated transfer risk reserves established pursuant to 12 U.S.C. 3904, allowances that reflect credit losses on purchased credit deteriorated assets and available-for-sale debt securities, and other specific reserves created against recognized losses.

Eligible guarantee means a guarantee that:

- (1) Is written;
- (2) Is either:
 - (i) Unconditional, or
 - (ii) A contingent obligation of the U.S. government or its agencies, the enforceability of which is dependent upon some affirmative action on the part of the beneficiary of the guarantee or a third party (for example, meeting servicing requirements);
- (3) Covers all or a pro rata portion of all contractual payments of the obligated party on the reference exposure;
- (4) Gives the beneficiary a direct claim against the protection provider;
- (5) Is not unilaterally cancelable by the protection provider for reasons other than the breach of the contract by the beneficiary;
- (6) Except for a guarantee by a sovereign, is legally enforceable against the protection provider in a jurisdiction where the protection provider has sufficient assets against which a judgment may be attached and enforced;

(7) Requires the protection provider to make payment to the beneficiary on the occurrence of a default (as defined in the guarantee) of the obligated party on the reference exposure in a timely manner without the beneficiary first having to take legal actions to pursue the obligor for payment;

(8) Does not increase the beneficiary's cost of credit protection on the guarantee in response to deterioration in the credit quality of the reference exposure;

(9) Is not provided by an affiliate of the Board-regulated institution, unless the affiliate is an insured depository institution, foreign bank, securities broker or dealer, or insurance company that:

(i) Does not control the Board-regulated institution; and

(ii) Is subject to consolidated supervision and regulation comparable to that imposed on depository institutions, U.S. securities broker-dealers, or U.S. insurance companies (as the case may be); and

(10) For purposes of sections 217.141 through 217.145 and subpart D of this part, is provided by an eligible guarantor.

Eligible guarantor means:

(1) A sovereign, the Bank for International Settlements, the International Monetary Fund, the European Central Bank, the European Commission, a Federal Home Loan Bank, Federal Agricultural Mortgage Corporation (Farmer Mac), the European Stability Mechanism, the European Financial Stability Facility, a multilateral development bank (MDB), a depository institution, a bank holding company, a savings and loan holding company, a credit union, a foreign bank, or a qualifying central counterparty; or

(2) An entity (other than a special purpose entity):

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

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

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

Eligible margin loan means:

- (1) An extension of credit where:
 - (i) The extension of credit is collateralized exclusively by liquid and readily marketable debt or equity securities, or gold;
 - (ii) The collateral is marked-to-fair value daily, and the transaction is subject to daily margin maintenance requirements; and
 - (iii) The extension of credit is conducted under an agreement that provides the Board-regulated institution the right to accelerate and terminate the extension of credit and to liquidate or set-off collateral promptly upon an event of default, including upon an event of receivership, insolvency, liquidation, conservatorship, or similar proceeding, of the counterparty, provided that, in any such case:
 - (A) Any exercise of rights under the agreement will not be stayed or avoided under applicable law in the relevant jurisdictions, other than:
 - (I) In receivership, conservatorship, or resolution under the Federal Deposit Insurance Act, Title II of the Dodd-Frank Act, or under any similar insolvency law applicable to GSEs,⁵ or laws of foreign jurisdictions that are substantially similar⁶ to the U.S. laws referenced in this paragraph (1)(iii)(A)(I) in order to facilitate the orderly resolution of the defaulting counterparty; or
 - (II) Where the agreement is subject by its terms to, or incorporates, any

⁵This requirement is met where all transactions under the agreement are (i) executed under U.S. law and (ii) constitute "securities contracts" under section 555 of the Bankruptcy Code (11 U.S.C. 555), qualified financial contracts under section 11(e)(8) of the Federal Deposit Insurance Act, or netting contracts between or among financial institutions under sections 401-407 of the Federal Deposit Insurance Corporation Improvement Act or the Federal Reserve Board's Regulation EE (12 CFR part 231).

⁶The Board expects to evaluate jointly with the OCC and Federal Deposit Insurance Corporation whether foreign special resolution regimes meet the requirements of this paragraph.

of the laws referenced in paragraph (1)(iii)(A)(I) of this definition; and

(B) The agreement may limit 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 default of the counterparty to the extent necessary for the counterparty to comply with the requirements of subpart I of the Board's Regulation YY (part 252 of this chapter), part 47 of this title, or part 382 of this title, as applicable.

Eligible servicer cash advance facility means a servicer cash advance facility in which:

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

Employee stock ownership plan has the same meaning as in 29 CFR 2550.407d-6.

Equity derivative contract means an equity-linked swap, purchased equity-linked option, forward equity-linked contract, or any other instrument linked to equities that gives rise to similar counterparty credit risks.

Equity exposure means:

- (1) A security or instrument (whether voting or non-voting) that represents a direct or an indirect ownership interest in, and is a residual claim on, the assets and income of a company, unless:
 - (i) The issuing company is consolidated with the Board-regulated institution under GAAP;
 - (ii) The Board-regulated institution is re-

quired to deduct the ownership interest from tier 1 or tier 2 capital under this part;

(iii) The ownership interest incorporates a payment or other similar obligation on the part of the issuing company (such as an obligation to make periodic payments); or

(iv) The ownership interest is a securitization exposure;

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

(3) An option or warrant that is exercisable for a security or instrument described in paragraph (1) of this definition; or

(4) Any other security or instrument (other than a securitization exposure) to the extent the return on the security or instrument is based on the performance of a security or instrument described in paragraph (1) of this definition.

ERISA means the Employee Retirement Income and Security Act of 1974 (29 U.S.C. 1001 *et seq.*).

Exchange rate derivative contract means a cross-currency interest rate swap, forward foreign-exchange contract, currency option purchased, or any other instrument linked to exchange rates that gives rise to similar counterparty credit risks.

Excluded covered debt instrument means an investment in a covered debt instrument held by a global systemically important BHC or a Board-regulated institution that is a subsidiary of a global systemically important BHC that:

(1) Is held in connection with market making-related activities permitted under 12 CFR 248.4, provided that a direct exposure or an indirect exposure to a covered debt instrument is held for 30 business days or less; and

(2) Has been designated as an excluded covered debt instrument by the global systemically important BHC or the subsidiary of a global systemically important BHC pursuant to 12 CFR 217.22(c)(5)(iv)(A).

Executive officer means a person who holds

the title or, without regard to title, salary, or compensation, performs the function of one or more of the following positions: president, chief executive officer, executive chairman, chief operating officer, chief financial officer, chief investment officer, chief legal officer, chief lending officer, chief risk officer, or head of a major business line, and other staff that the board of directors of the Board-regulated institution deems to have equivalent responsibility.

Expected credit loss (ECL) means:

(1) For a wholesale exposure to a non-defaulted obligor or segment of non-defaulted retail exposures that is carried at fair value with gains and losses flowing through earnings or that is classified as held-for-sale and is carried at the lower of cost or fair value with losses flowing through earnings, zero.

(2) For all other wholesale exposures to non-defaulted obligors or segments of non-defaulted retail exposures, the product of the probability of default (PD) times the loss given default (LGD) times the exposure at default (EAD) for the exposure or segment.

(3) For a wholesale exposure to a defaulted obligor or segment of defaulted retail exposures, the Board-regulated institution's impairment estimate for allowance purposes for the exposure or segment.

(4) Total ECL is the sum of expected credit losses for all wholesale and retail exposures other than exposures for which the Board-regulated institution has applied the double default treatment in section 217.135.

Exposure amount means:

(1) For the on-balance sheet component of an exposure (other than an available-for-sale or held-to-maturity security, if the Board-regulated institution has made an AOCI opt-out election (as defined in section 217.22(b)(2)); an OTC derivative contract; a repo-style transaction or an eligible margin loan for which the Board-regulated institution determines the exposure amount under section 217.37; a cleared transaction; a default fund contribution; or a securitization exposure), the Board-regulated institution's carrying value of the exposure.

(2) For a security (that is not a securitization exposure, equity exposure, or preferred stock classified as an equity security under GAAP) classified as available-for-sale or held-to-maturity if the Board-regulated institution has made an AOCI opt-out election (as defined in section 217.22(b)(2)), the Board-regulated institution's carrying value (including net accrued but unpaid interest and fees) for the exposure less any net unrealized gains on the exposure and plus any net unrealized losses on the exposure.

(3) For available-for-sale preferred stock classified as an equity security under GAAP if the Board-regulated institution has made an AOCI opt-out election (as defined in section 217.22(b)(2)), the Board-regulated institution's carrying value of the exposure less any net unrealized gains on the exposure that are reflected in such carrying value but excluded from the Board-regulated institution's regulatory capital components.

(4) For the off-balance sheet component of an exposure (other than an OTC derivative contract; a repo-style transaction or an eligible margin loan for which the Board-regulated institution calculates the exposure amount under section 217.37; a cleared transaction; a default fund contribution; or a securitization exposure), the notional amount of the off-balance sheet component multiplied by the appropriate credit conversion factor (CCF) in section 217.33.

(5) For an exposure that is an OTC derivative contract, the exposure amount determined under section 217.34.

(6) For an exposure that is a cleared transaction, the exposure amount determined under section 217.35.

(7) For an exposure that is an eligible margin loan or repo-style transaction for which the bank calculates the exposure amount as provided in section 217.37, the exposure amount determined under section 217.37.

(8) For an exposure that is a securitization exposure, the exposure amount determined under section 217.42.

Federal Deposit Insurance Act means the Federal Deposit Insurance Act (12 U.S.C. 1813).

Federal Deposit Insurance Corporation Im-

provement Act means the Federal Deposit Insurance Corporation Improvement Act of 1991 (12 U.S.C. 4401).

Fiduciary or custodial and safekeeping account means, for purposes of section 217.10(c)(2)(x), an account administered by a custodial banking organization for which the custodial banking organization provides fiduciary or custodial and safekeeping services, as authorized by applicable Federal or state law.

Financial collateral means collateral:

(1) In the form of:

(i) Cash on deposit with the Board-regulated institution (including cash held for the Board-regulated institution by a third-party custodian or trustee);

(ii) Gold bullion;

(iii) Long-term debt securities that are not resecuritization exposures and that are investment grade;

(iv) Short-term debt instruments that are not resecuritization exposures and that are investment grade;

(v) Equity securities that are publicly traded;

(vi) Convertible bonds that are publicly traded; or

(vii) Money market fund shares and other mutual fund shares if a price for the shares is publicly quoted daily; and

(2) In which the Board-regulated institution has a perfected, first-priority security interest or, outside of the United States, the legal equivalent thereof, (with the exception of cash on deposit; and notwithstanding the prior security interest of any custodial agent or any priority security interest granted to a CCP in connection with collateral posted to that CCP).

Financial institution means:

(1) A bank holding company; savings and loan holding company; nonbank financial institution supervised by the Board under Title I of the Dodd-Frank Act; depository institution; foreign bank; credit union; industrial loan company, industrial bank, or other similar institution described in section 2 of the Bank Holding Company Act; national association, state member bank, or state non-member bank that is not a deposi-

tory institution; insurance company; securities holding company as defined in section 618 of the Dodd-Frank Act; broker or dealer registered with the SEC under section 15 of the Securities Exchange Act; futures commission merchant as defined in section 1a of the Commodity Exchange Act; swap dealer as defined in section 1a of the Commodity Exchange Act; or security-based swap dealer as defined in section 3 of the Securities Exchange Act;

(2) Any designated financial market utility, as defined in section 803 of the Dodd-Frank Act;

(3) Any entity not domiciled in the United States (or a political subdivision thereof) that is supervised and regulated in a manner similar to entities described in paragraphs (1) or (2) of this definition; or

(4) Any other company:

(i) Of which the Board-regulated institution owns:

(A) An investment in GAAP equity instruments of the company with an adjusted carrying value or exposure amount equal to or greater than \$10 million; or

(B) More than 10 percent of the company's issued and outstanding common shares (or similar equity interest), and

(ii) Which is predominantly engaged in the following activities:

(A) Lending money, securities or other financial instruments, including servicing loans;

(B) Insuring, guaranteeing, indemnifying against loss, harm, damage, illness, disability, or death, or issuing annuities;

(C) Underwriting, dealing in, making a market in, or investing as principal in securities or other financial instruments; or

(D) Asset management activities (not including investment or financial advisory activities).

(5) For the purposes of this definition, a company is "predominantly engaged" in an activity or activities if:

(i) 85 percent or more of the total consolidated annual gross revenues (as determined in accordance with applicable ac-

counting standards) of the company is either of the two most recent calendar years were derived, directly or indirectly, by the company on a consolidated basis from the activities; or

(ii) 85 percent or more of the company's consolidated total assets (as determined in accordance with applicable accounting standards) as of the end of either of the two most recent calendar years were related to the activities.

(6) Any other company that the Board may determine is a financial institution based on activities similar in scope, nature, or operation to those of the entities included in paragraphs (1) through (4) of this definition.

(7) For purposes of this part, "financial institution" does not include the following entities:

(i) GSEs;

(ii) Small business investment companies, as defined in section 102 of the Small Business Investment Act of 1958 (15 U.S.C. 662);

(iii) Entities designated as Community Development Financial Institutions (CDFIs) under 12 U.S.C. 4701 *et seq.* and 12 CFR part 1805;

(iv) Entities registered with the SEC under the Investment Company Act of 1940 (15 U.S.C. 80a-1) or foreign equivalents thereof;

(v) Entities to the extent that the Board-regulated institution's investment in such entities would qualify as a community development investment under section 24 (Eleventh) of the National Bank Act; and

(vi) An employee benefit plan as defined in paragraphs (3) and (32) of section 3 of ERISA, a "governmental plan" (as defined in 29 U.S.C. 1002(32)) that complies with the tax deferral qualification requirements provided in the Internal Revenue Code, or any similar employee benefit plan established under the laws of a foreign jurisdiction.

First-lien residential mortgage exposure means a residential mortgage exposure secured by a first lien.

Foreign bank means a foreign bank as defined

in section 211.2 of the Federal Reserve Board's Regulation K (12 CFR 211.2) (other than a depository institution).

Forward agreement means a legally binding contractual obligation to purchase assets with certain drawdown at a specified future date, not including commitments to make residential mortgage loans or forward foreign exchange contracts.

FR Y-9LP means the Parent Company Only Financial Statements for Large Holding Companies.

FR Y-15 means the Systemic Risk Report.

GAAP means generally accepted accounting principles as used in the United States.

Gain-on-sale means an increase in the equity capital of a Board-regulated institution (as reported on [Schedule RC of the Call Report or Schedule HC of the FR Y-9C]) resulting from a traditional securitization (other than an increase in equity capital resulting from the Board-regulated institution's receipt of cash in connection with the securitization or reporting of a mortgage servicing asset on [Schedule RC of the Call Report or Schedule HC of the FRY-9C]).

General obligation means a bond or similar obligation that is backed by the full faith and credit of a public sector entity (PSE).

Global systemically important BHC means a bank holding company that is identified as a global systemically important BHC pursuant to section 217.402.

Government-sponsored enterprise (GSE) means an entity established or chartered by the U.S. government to serve public purposes specified by the U.S. Congress but whose debt obligations are not explicitly guaranteed by the full faith and credit of the U.S. government.

GSIB surcharge means the capital surcharge applicable to a global systemically important BHC calculated pursuant to section 217.403.

Guarantee means a financial guarantee, letter of credit, insurance, or other similar financial instrument (other than a credit derivative) that

allows one party (beneficiary) to transfer the credit risk of one or more specific exposures (reference exposure) to another party (protection provider).

High volatility commercial real estate (HVCRE) exposure means:

(1) A credit facility secured by land or improved real property that, prior to being reclassified by the Board-regulated institution as a non-HVCRE exposure pursuant to paragraph (6) of this definition—

(i) Primarily finances, has financed, or refinances the acquisition, development, or construction of real property;

(ii) Has the purpose of providing financing to acquire, develop, or improve such real property into income-producing real property; and

(iii) Is dependent upon future income or sales proceeds from, or refinancing of, such real property for the repayment of such credit facility.

(2) An HVCRE exposure does not include a credit facility financing—

(i) The acquisition, development, or construction of properties that are—

(A) One- to four-family residential properties. Credit facilities that do not finance the construction of one- to four-family residential structures, but instead solely finance improvements such as the laying of sewers, water pipes, and similar improvements to land, do not qualify for the one- to four-family residential properties exclusion;

(B) Real property that would qualify as an investment in community development; or

(C) Agricultural land;

(ii) The acquisition or refinance of existing income-producing real property secured by a mortgage on such property, if the cash flow being generated by the real property is sufficient to support the debt service and expenses of the real property, in accordance with the Board-regulated institution's applicable loan underwriting criteria for permanent financings;

(iii) Improvements to existing income-producing improved real property secured

by a mortgage on such property, if the cash flow being generated by the real property is sufficient to support the debt service and expenses of the real property, in accordance with the Board-regulated institution's applicable loan underwriting criteria for permanent financings; or

(iv) Commercial real property projects in which—

(A) The loan-to-value ratio is less than or equal to the applicable maximum supervisory loan-to-value ratio as determined by the Board;

(B) The borrower has contributed capital of at least 15 percent of the real property's appraised, 'as completed' value to the project in the form of—

(1) Cash;

(2) Unencumbered readily marketable assets;

(3) Paid development expenses out-of-pocket; or

(4) Contributed real property or improvements; and

(C) The borrower contributed the minimum amount of capital described under paragraph (2)(iv)(B) of this definition before the Board-regulated institution advances funds (other than the advance of a nominal sum made in order to secure the Board-regulated institution's lien against the real property) under the credit facility, and such minimum amount of capital contributed by the borrower is contractually required to remain in the project until the HVCRE exposure has been reclassified by the Board-regulated institution as a non-HVCRE exposure under paragraph (6) of this definition;

(3) An HVCRE exposure does not include any loan made prior to January 1, 2015;

(4) An HVCRE exposure does not include a credit facility reclassified as a non-HVCRE exposure under paragraph (6) of this definition.

(5) Value of contributed real property: For the purposes of this definition of HVCRE exposure, the value of any real property contributed by a borrower as a capital contribution is the appraised value of the property as determined under standards pre-

scribed pursuant to section 1110 of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (12 U.S.C. 3339), in connection with the extension of the credit facility or loan to such borrower.

(6) Reclassification as a non-HVCRE exposure: For purposes of this definition of HVCRE exposure and with respect to a credit facility and a Board-regulated institution, a Board-regulated institution may reclassify an HVCRE exposure as a non-HVCRE exposure upon—

(i) The substantial completion of the development or construction of the real property being financed by the credit facility; and

(ii) Cash flow being generated by the real property being sufficient to support the debt service and expenses of the real property, in accordance with the Board-regulated institution's applicable loan underwriting criteria for permanent financings.

(7) For purposes of this definition, a Board-regulated institution is not required to reclassify a credit facility that was originated on or after January 1, 2015 and prior to April 1, 2020.

Home country means the country where an entity is incorporated, chartered, or similarly established.

Independent collateral means financial collateral, other than variation margin, that is subject to a collateral agreement, or in which a Board-regulated institution has a perfected, first-priority security interest or, outside of the United States, the legal equivalent thereof (with the exception of cash on deposit; notwithstanding the prior security interest of any custodial agent or any prior security interest granted to a CCP in connection with collateral posted to that CCP), and the amount of which does not change directly in response to the value of the derivative contract or contracts that the financial collateral secures.

Indirect exposure means an exposure that arises from the Board-regulated institution's investment in an investment fund which holds an investment in the Board-regulated institution's own capital instrument or an investment

in the capital of an unconsolidated financial institution. For an advanced approaches Board-regulated institution, indirect exposure also includes an investment in an investment fund that holds a covered debt instrument.

Insurance bank holding company means:

- (1) (i) A bank holding company that is an insurance underwriting company; or
 - (ii) A bank holding company that, as of June 30 of the previous calendar year, held 25 percent or more of its total consolidated assets in subsidiaries that are insurance underwriting companies (other than assets associated with insurance underwriting for credit risk).
- (2) For purposes of this definition, the company must calculate its total consolidated assets in accordance with GAAP, or if the company does not calculate its total consolidated assets under GAAP for any regulatory purpose (including compliance with applicable securities laws), the company may estimate its total consolidated assets, subject to review and adjustment by the Board.

Insurance company means an insurance company as defined in section 201 of the Dodd-Frank Act (12 U.S.C. 5381).

Insurance mid-tier holding company means a bank holding company, or savings and loan holding company, domiciled in the United States that:

- (1) Is a subsidiary of:
 - (i) An insurance bank holding company to which subpart J of this part applies; or
 - (ii) An insurance savings and loan holding company to which subpart J of this part applies; and
- (2) Is not an insurance underwriting company that is subject to state law capital requirements.

Insurance savings and loan holding company means:

- (1) (i) A top-tier savings and loan holding company that is an insurance underwriting company; or
 - (ii) A top-tier savings and loan holding company that, as of June 30 of the previous calendar year, held 25 percent or

more of its total consolidated assets in subsidiaries that are insurance underwriting companies (other than assets associated with insurance underwriting for credit risk).

- (2) For purposes of this definition, the company must calculate its total consolidated assets in accordance with GAAP, or if the company does not calculate its total consolidated assets under GAAP for any regulatory purpose (including compliance with applicable securities laws), the company may estimate its total consolidated assets, subject to review and adjustment by the Board.

Insurance underwriting company means an insurance company as defined in section 201 of the Dodd-Frank Act (12 U.S.C. 5381) that engages in insurance underwriting activities.

Insured depository institution means an insured depository institution as defined in section 3 of the Federal Deposit Insurance Act.

Interest rate derivative contract means a single-currency interest rate swap, basis swap, forward rate agreement, purchased interest rate option, when-issued securities, or any other instrument linked to interest rates that gives rise to similar counterparty credit risks.

International Lending Supervision Act means the International Lending Supervision Act of 1983 (12 U.S.C. 3901 *et seq.*).

Investing bank means, with respect to a securitization, a Board-regulated institution that assumes the credit risk of a securitization exposure (other than an originating Board-regulated institution of the securitization). In the typical synthetic securitization, the investing Board-regulated institution sells credit protection on a pool of underlying exposures to the originating Board-regulated institution.

Investment fund means a company:

- (1) Where all or substantially all of the assets of the company are financial assets; and
- (2) That has no material liabilities.

Investment grade means that the entity to which the Board-regulated institution is exposed through a loan or security, or the refer-

ence entity with respect to a credit derivative, has adequate capacity to meet financial commitments for the projected life of the asset or exposure. Such an entity or reference entity has adequate capacity to meet financial commitments if the risk of its default is low and the full and timely repayment of principal and interest is expected.

Investment in a covered debt instrument means a Board-regulated institution's net long position calculated in accordance with section 217.22(h) in a covered debt instrument, including direct, indirect, and synthetic exposures to the debt instrument, excluding any underwriting positions held by the Board-regulated institution for five or fewer business days.

Investment in the capital of an unconsolidated financial institution means a net long position calculated in accordance with section 217.22(h) in an instrument that is recognized as capital for regulatory purposes by the primary supervisor of an unconsolidated regulated financial institution or is an instrument that is part of the GAAP equity of an unconsolidated unregulated financial institution, including direct, indirect, and synthetic exposures to capital instruments, excluding underwriting positions held by the Board-regulated institution for five or fewer business days.

Investment in the Board-regulated institution's own capital instrument means a net long position calculated in accordance with section 217.22(h) in the Board-regulated institution's own common stock instrument, own additional tier 1 capital instrument or own tier 2 capital instrument, including direct, indirect, or synthetic exposures to such capital instruments. An investment in the Board-regulated institution's own capital instrument includes any contractual obligation to purchase such capital instrument.

Junior-lien residential mortgage exposure means a residential mortgage exposure that is not a first-lien residential mortgage exposure.

Main index means the Standard & Poor's 500 Index, the FTSE All-World Index, and any other index for which the Board-regulated in-

stitution can demonstrate to the satisfaction of the Board that the equities represented in the index have comparable liquidity, depth of market, and size of bid-ask spreads as equities in the Standard & Poor's 500 Index and FTSE All-World Index.

Market risk Board-regulated institution means a Board-regulated institution that is described in section 217.201(b).

Minimum transfer amount means the smallest amount of variation margin that may be transferred between counterparties to a netting set pursuant to the variation margin agreement.

Money market fund means an investment fund that is subject to 17 CFR 270.2a-7 or any foreign equivalent thereof.

Mortgage servicing assets (MSAs) means the contractual rights owned by a Board-regulated institution to service for a fee mortgage loans that are owned by others.

Multilateral development bank (MDB) means the International Bank for Reconstruction and Development, the Multilateral Investment Guarantee Agency, the International Finance Corporation, the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, the European Bank for Reconstruction and Development, the European Investment Bank, the European Investment Fund, the Nordic Investment Bank, the Caribbean Development Bank, the Islamic Development Bank, the Council of Europe Development Bank, and any other multilateral lending institution or regional development bank in which the U.S. government is a shareholder or contributing member or which the Board determines poses comparable credit risk.

National Bank Act means the National Bank Act (12 U.S.C. 24).

Net independent collateral amount means the fair value amount of the independent collateral, as adjusted by the standard supervisory haircuts under section 217.132(b)(2)(ii), as applicable, that a counterparty to a netting set has posted to a Board-regulated institution less the fair value amount of the independent collateral, as adjusted by the standard supervisory

haircuts under section 217.132(b)(2)(ii), as applicable, posted by the Board-regulated institution to the counterparty, excluding such amounts held in a bankruptcy remote manner or posted to a QCCP and held in conformance with the operational requirements in section 217.3.

Netting set means a group of transactions with a single counterparty that are subject to a qualifying master netting agreement. For derivative contracts, netting set also includes a single derivative contract between a Board-regulated institution and a single counterparty. For purposes of the internal model methodology under section 217.132(d), netting set also includes a group of transactions with a single counterparty that are subject to a qualifying cross-product master netting agreement and does not include a transaction:

- (1) That is not subject to such a master netting agreement; or
- (2) Where the Board-regulated institution has identified specific wrong-way risk.

Non-guaranteed separate account means a separate account where the insurance company:

- (1) Does not contractually guarantee either a minimum return or account value to the contract holder; and
- (2) Is not required to hold reserves (in the general account) pursuant to its contractual obligations to a policyholder.

Non-significant investment in the capital of an unconsolidated financial institution means an investment by an advanced approaches Board-regulated institution in the capital of an unconsolidated financial institution where the advanced approaches Board-regulated institution owns 10 percent or less of the issued and outstanding common stock of the unconsolidated financial institution.

Nth-o-default credit derivative means a credit derivative that provides credit protection only for the nth-defaulting reference exposure in a group of reference exposures.

Operating entity means a company established to conduct business with clients with the intention of earning a profit in its own right.

Original maturity with respect to an off-balance sheet commitment means the length of time between the date a commitment is issued and:

- (1) For a commitment that is not subject to extension or renewal, the stated expiration date of the commitment; or
- (2) For a commitment that is subject to extension or renewal, the earliest date on which the Board-regulated institution can, at its option, unconditionally cancel the commitment.

Originating Board-regulated institution, with respect to a securitization, means a Board-regulated institution that:

- (1) Directly or indirectly originated or securitized the underlying exposures included in the securitization; or
- (2) Serves as an ABCP program sponsor to the securitization.

Over-the-counter (OTC) derivative contract means a derivative contract that is not a cleared transaction. An OTC derivative includes a transaction:

- (1) Between a Board-regulated institution that is a clearing member and a counterparty where the Board-regulated institution is acting as a financial intermediary and enters into a cleared transaction with a CCP that offsets the transaction with the counterparty; or
- (2) In which a Board-regulated institution that is a clearing member provides a CCP a guarantee on the performance of the counterparty to the transaction.

Performance standby letter of credit (or performance bond) means an irrevocable obligation of a Board-regulated institution to pay a third-party beneficiary when a customer (account party) fails to perform on any contractual nonfinancial or commercial obligation. To the extent permitted by law or regulation, performance standby letters of credit include arrangements backing, among other things, subcontractors' and suppliers' performance, labor and materials contracts, and construction bids.

Policy loan means a loan by an insurance company to a policy holder pursuant to the provisions of an insurance contract that is se-

cured by the cash surrender value or collateral assignment of the related policy or contract. A policy loan includes:

- (1) A cash loan, including a loan resulting from early payment benefits or accelerated payment benefits, on an insurance contract when the terms of contract specify that the payment is a policy loan secured by the policy; and
- (2) An automatic premium loan, which is a loan that is made in accordance with policy provisions which provide that delinquent premium payments are automatically paid from the cash value at the end of the established grace period for premium payments.

Pre-sold construction loan means any one-to-four family residential construction loan to a builder that meets the requirements of section 618(a)(1) or (2) of the Resolution Trust Corporation Refinancing, Restructuring, and Improvement Act of 1991 (12 U.S.C. 1831n note) and the following criteria:

- (1) The loan is made in accordance with prudent underwriting standards, meaning that the Board-regulated institution has obtained sufficient documentation that the buyer of the home has a legally binding written sales contract and has a firm written commitment for permanent financing of the home upon completion;
- (2) The purchaser is an individual(s) that intends to occupy the residence and is not a partnership, joint venture, trust, corporation, or any other entity (including an entity acting as a sole proprietorship) that is purchasing one or more of the residences for speculative purposes;
- (3) The purchaser has entered into a legally binding written sales contract for the residence;
- (4) The purchaser has not terminated the contract; however, if the purchaser terminates the sales contract, the Board must immediately apply a 100 percent risk weight to the loan and report the revised risk weight in the next quarterly Call Report, for a state member bank, or the FR Y-9C, for a bank holding company or savings and loan holding company, as applicable;
- (5) The purchaser has made a substantial earnest money deposit of no less than 3

- percent of the sales price, which is subject to forfeiture if the purchaser terminates the sales contract; provided that, the earnest money deposit shall not be subject to forfeiture by reason of breach or termination of the sales contract on the part of the builder;
- (6) The earnest money deposit must be held in escrow by the Board-regulated institution or an independent party in a fiduciary capacity, and the escrow agreement must provide that in an event of default arising from the cancellation of the sales contract by the purchaser of the residence, the escrow funds shall be used to defray any cost incurred by the Board-regulated institution;
- (7) The builder must incur at least the first 10 percent of the direct costs of construction of the residence (that is, actual costs of the land, labor, and material) before any drawdown is made under the loan;
- (8) The loan may not exceed 80 percent of the sales price of the presold residence; and
- (9) The loan is not more than 90 days past due, or on nonaccrual.

Protection amount (P) means, with respect to an exposure hedged by an eligible guarantee or eligible credit derivative, the effective notional amount of the guarantee or credit derivative, reduced to reflect any currency mismatch, maturity mismatch, or lack of restructuring coverage (as provided in sections 217.36 or 217.134, as appropriate).

Publicly-traded means traded on:

- (1) Any exchange registered with the SEC as a national securities exchange under section 6 of the Securities Exchange Act; 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 instrument in question.

Public sector entity (PSE) means a state, local authority, or other governmental subdivision below the sovereign level.

Qualifying central bank means:

- (1) A Federal Reserve Bank;
- (2) The European Central Bank; and

(3) The central bank of any member country of the Organisation for Economic Co-operation and Development, if:

- (i) Sovereign exposures to the member country would receive a zero percent risk-weight under section 217.32; and
- (ii) The sovereign debt of the member country is not in default or has not been in default during the previous 5 years.

Qualifying central counterparty (QCCP) means a central counterparty that:

- (1) (i) Is a designated financial market utility (FMU) under Title VIII of the Dodd-Frank Act;
- (ii) If not located in the United States, is regulated and supervised in a manner equivalent to a designated FMU; or
- (iii) Meets the following standards:
 - (A) The central counterparty requires all parties to contracts cleared by the counterparty to be fully collateralized on a daily basis;
 - (B) The Board-regulated institution demonstrates to the satisfaction of the Board that the central counterparty:
 - (1) Is in sound financial condition;
 - (2) Is subject to supervision by the Board, the CFTC, or the Securities Exchange Commission (SEC), or, if the central counterparty is not located in the United States, is subject to effective oversight by a national supervisory authority in its home country; and
 - (3) Meets or exceeds the risk-management standards for central counterparties set forth in regulations established by the Board, the CFTC, or the SEC under Title VII or Title VIII of the Dodd-Frank Act; or if the central counterparty is not located in the United States, meets or exceeds similar risk-management standards established under the law of its home country that are consistent with international standards for central counterparty risk management as established by the relevant standard setting body of the Bank of International Settlements; and
- (2) (i) Provides the Board-regulated institu-

tion with the central counterparty's hypothetical capital requirement or the information necessary to calculate such hypothetical capital requirement, and other information the Board-regulated institution is required to obtain under sections 217.35(d)(3) and 217.133(d)(3);

(ii) Makes available to the Board and the CCP's regulator the information described in paragraph (2)(i) of this definition; and

(iii) Has not otherwise been determined by the Board to not be a QCCP due to its financial condition, risk profile, failure to meet supervisory risk management standards, or other weaknesses or supervisory concerns that are inconsistent with the risk weight assigned to qualifying central counterparties under sections 217.35 and 217.133.

(3) *Exception.* A QCCP that fails to meet the requirements of a QCCP in the future may still be treated as a QCCP under the conditions specified in section 217.3(f).

Qualifying master netting agreement means a written, legally enforceable agreement provided that:

(1) The agreement creates a single legal obligation for all individual transactions covered by the agreement upon an event of default following any stay permitted by paragraph (2) of this definition, including upon an event of receivership, conservatorship, insolvency, liquidation, or similar proceeding, of the counterparty;

(2) The agreement provides the Board-regulated institution 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 default, including upon an event of receivership, conservatorship, insolvency, liquidation, or similar proceeding, of the counterparty, provided that, in any such case:

(i) Any exercise of rights under the agreement will not be stayed or avoided under applicable law in the relevant jurisdictions, other than:

(A) In receivership, conservatorship, or resolution under the Federal Deposit

Insurance Act, Title II of the Dodd-Frank Act, or under any similar insolvency law applicable to GSEs, or laws of foreign jurisdictions that are substantially similar⁷ to the U.S. laws referenced in this paragraph (2)(i)(A) in order to facilitate the orderly resolution of the defaulting counterparty; or

(B) Where the agreement is subject by its terms to, or incorporates, any of the laws referenced in paragraph (2)(i)(A) of this definition; and

(ii) The agreement may limit 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 default of the counterparty to the extent necessary for the counterparty to comply with the requirements of subpart I of the Board's Regulation YY (part 252 of this chapter), part 47 of this title, or part 382 of this title, as applicable.

Regulated financial institution means a financial institution subject to consolidated supervision and regulation comparable to that imposed on the following U.S. financial institutions: depository institutions, depository institution holding companies, nonbank financial companies supervised by the Board, designated financial market utilities, securities broker-dealers, credit unions, or insurance companies.

Regulated foreign subsidiary and regulated foreign affiliate means a person described in section 171(a)(6) of the Dodd-Frank Act (12 U.S.C. 5371(a)(6)) and any subsidiary of such a person other than a state-regulated insurer.

Repo-style transaction means a repurchase or reverse repurchase transaction, or a securities borrowing or securities lending transaction, including a transaction in which the Board-regulated institution acts as agent for a customer and indemnifies the customer against loss, provided that:

⁷ The Board expects to evaluate jointly with the OCC and Federal Deposit Insurance Corporation whether foreign special resolution regimes meet the requirements of this paragraph.

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

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

(3) (i) The transaction is a "securities contract" or "repurchase agreement" under section 555 or 559, respectively, of the Bankruptcy Code (11 U.S.C. 555 or 559), a qualified financial contract under section 11(e)(8) of the Federal Deposit Insurance Act, or a netting contract between or among financial institutions under sections 401-407 of the Federal Deposit Insurance Corporation Improvement Act or the Federal Reserve Board's Regulation EE (12 CFR part 231); or

(ii) If the transaction does not meet the criteria set forth in paragraph (3)(i) of this definition, then either:

(A) The transaction is executed under an agreement that provides the Board-regulated institution 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 upon an event of receivership, insolvency, liquidation, or similar proceeding, of the counterparty, provided that, in any such case:

(I) Any exercise of rights under the agreement will not be stayed or avoided under applicable law in the relevant jurisdictions, other than:

(i) In receivership, conservatorship, or resolution under the Federal Deposit Insurance Act, Title II of the Dodd-Frank Act, or under any similar insolvency law applicable to GSEs, or laws of foreign jurisdictions that are substantially similar⁸ to the U.S. laws referenced in this paragraph (3)(ii)(A)(I)(i) in order to facilitate the orderly resolution of the defaulting counterparty;

⁸ The Board expects to evaluate jointly with the OCC and Federal Deposit Insurance Corporation whether foreign special resolution regimes meet the requirements of this paragraph.

(ii) Where the agreement is subject by its terms to, or incorporates, any of the laws referenced in paragraph (3)(ii)(A)(1)(i) of this definition; and

(2) The agreement may limit 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 default of the counterparty to the extent necessary for the counterparty to comply with the requirements of subpart I of the Board's Regulation YY (part 252 of this chapter), part 47 of this title, or part 382 of this title, as applicable; or

(B) The transaction is:

(1) Either overnight or unconditionally cancelable at any time by the Board-regulated institution; and

(2) Executed under an agreement that provides the Board-regulated institution 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 counterparty default; and

(4) In order to recognize an exposure as a repo-style transaction for purposes of this subpart, a Board-regulated institution must comply with the requirements of section 217.3(e) of this part with respect to that exposure.

Resecuritization means a securitization which has more than one underlying exposure and in which one or more of the underlying exposures is a securitization exposure.

Resecuritization exposure means:

(1) An on- or off-balance sheet exposure to a resecuritization;

(2) An exposure that directly or indirectly references a resecuritization exposure.

(3) An exposure to an asset-backed commercial paper program is not a resecuritization exposure if either:

(i) The program-wide credit enhancement does not meet the definition of a resecuritization exposure; or

(ii) The entity sponsoring the program

fully supports the commercial paper through the provision of liquidity so that the commercial paper holders effectively are exposed to the default risk of the sponsor instead of the underlying exposures.

Residential mortgage exposure means an exposure (other than a securitization exposure, equity exposure, statutory multifamily mortgage, or presold construction loan):

(1) (i) That is primarily secured by a first or subsequent lien on one-to-four family residential property; or

(ii) With an original and outstanding amount of \$1 million or less that is primarily secured by a first or subsequent lien on residential property that is not one-to-four family; and

(2) For purposes of calculating capital requirements under subpart E of this part, managed as part of a segment of exposures with homogeneous risk characteristics and not on an individual-exposure basis.

Revenue obligation means a bond or similar obligation that is an obligation of a PSE, but which the PSE is committed to repay with revenues from the specific project financed rather than general tax funds.

Savings and loan holding company means a savings and loan holding company as defined in section 10 of the Home Owners' Loan Act (12 U.S.C. 1467a).

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

Securities Exchange Act means the Securities Exchange Act of 1934 (15 U.S.C. 78).

Securitization exposure means:

(1) An on-balance sheet or off-balance sheet credit exposure (including credit-enhancing representations and warranties) that arises from a traditional securitization or synthetic securitization (including a resecuritization), or

(2) An exposure that directly or indirectly references a securitization exposure described in paragraph (1) of this definition.

Securitization special purpose entity (securiti-

zation SPE) means a corporation, trust, or other entity organized for the specific purpose of holding underlying exposures of a securitization, the activities of which are limited to those appropriate to accomplish this purpose, and the structure of which is intended to isolate the underlying exposures held by the entity from the credit risk of the seller of the underlying exposures to the entity.

Separate account means a legally segregated pool of assets owned and held by an insurance company and maintained separately from the insurance company's general account assets for the benefit of an individual contract holder. To be a separate account:

- (1) The account must be legally recognized as a separate account under applicable law;
- (2) The assets in the account must be insulated from general liabilities of the insurance company under applicable law in the event of the insurance company's insolvency;
- (3) The insurance company must invest the funds within the account as directed by the contract holder in designated investment alternatives or in accordance with specific investment objectives or policies; and
- (4) All investment gains and losses, net of contract fees and assessments, must be passed through to the contract holder, provided that the contract may specify conditions under which there may be a minimum guarantee but must not include contract terms that limit the maximum investment return available to the policyholder.

Servicer cash advance facility means a facility under which the servicer of the underlying exposures of a securitization may advance cash to ensure an uninterrupted flow of payments to investors in the securitization, including advances made to cover foreclosure costs or other expenses to facilitate the timely collection of the underlying exposures.

Significant investment in the capital of an unconsolidated financial institution means an investment by an advanced approaches Board-regulated institution in the capital of an unconsolidated financial institution where the advanced approaches Board-regulated institution owns more than 10 percent of the issued

and outstanding common stock of the unconsolidated financial institution.

Small Business Act means the Small Business Act (15 U.S.C. 632).

Small Business Investment Act means the Small Business Investment Act of 1958 (15 U.S.C. 682).

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

Sovereign default means noncompliance by a sovereign with its external debt service obligations or the inability or unwillingness of a sovereign government to service an existing loan according to its original terms, as evidenced by failure to pay principal and interest timely and fully, arrearages, or restructuring.

Sovereign exposure means:

- (1) A direct exposure to a sovereign; or
- (2) An exposure directly and unconditionally backed by the full faith and credit of a sovereign.

Specific wrong-way risk means wrong-way risk that arises when either:

- (1) The counterparty and issuer of the collateral supporting the transaction; or
- (2) The counterparty and the reference asset of the transaction are affiliates or are the same entity.

Speculative grade means the reference entity has adequate capacity to meet financial commitments in the near term, but is vulnerable to adverse economic conditions, such that should economic conditions deteriorate, the reference entity would present an elevated default risk.

Standardized market risk-weighted assets means the standardized measure for market risk calculated under section 217.204 multiplied by 12.5.

Standardized total risk-weighted assets means:

- (1) The sum of:
 - (i) Total risk-weighted assets for general credit risk as calculated under section 217.31;
 - (ii) Total risk-weighted assets for cleared

- transactions and default fund contributions as calculated under section 217.35;
- (iii) Total risk-weighted assets for unsettled transactions as calculated under section 217.38;
- (iv) Total risk-weighted assets for securitization exposures as calculated under section 217.42;
- (v) Total risk-weighted assets for equity exposures as calculated under sections 217.52 and 217.53; and
- (vi) For a market risk Board-regulated institution only, standardized market risk-weighted assets; minus

(2) Any amount of the Board-regulated institution's allowance for loan and lease losses or adjusted allowance for credit losses, as applicable, that is not included in tier 2 capital and any amount of "allocated transfer risk reserves."

State bank means any bank incorporated by special law of any State, or organized under the general laws of any State, or of the United States, including a Morris Plan bank, or other incorporated banking institution engaged in a similar business.

State member bank or member bank means a state bank that is a member of the Federal Reserve System.

State-regulated insurer means a person regulated by a state insurance regulator as defined in section 1002(22) of the Dodd-Frank Act (12 U.S.C. 5481(22)), and any subsidiary of such a person, other than a regulated foreign subsidiary and regulated foreign affiliate.

Statutory multifamily mortgage means a loan secured by a multifamily residential property that meets the requirements under section 618(b)(1) of the Resolution Trust Corporation Refinancing, Restructuring, and Improvement Act of 1991, and that meets the following criteria:⁹

- (1) The loan is made in accordance with prudent underwriting standards;
- (2) The principal amount of the loan at

⁹The types of loans that qualify as loans secured by multifamily residential properties are listed in the instructions for preparation of the Call Report, for a state member bank, or FR Y-9C, for a bank holding company or savings and loan holding company, as applicable.

- origination does not exceed 80 percent of the value of the property (or 75 percent of the value of the property if the loan is based on an interest rate that changes over the term of the loan) where the value of the property is the lower of the acquisition cost of the property or the appraised (or, if appropriate, evaluated) value of the property;
- (3) All principal and interest payments on the loan must have been made on a timely basis in accordance with the terms of the loan for at least one year prior to applying a 50 percent risk weight to the loan, or in the case where an existing owner is refinancing a loan on the property, all principal and interest payments on the loan being refinanced must have been made on a timely basis in accordance with the terms of the loan for at least one year prior to applying a 50 percent risk weight to the loan;
- (4) Amortization of principal and interest on the loan must occur over a period of not more than 30 years and the minimum original maturity for repayment of principal must not be less than 7 years;
- (5) Annual net operating income (before making any payment on the loan) generated by the property securing the loan during its most recent fiscal year must not be less than 120 percent of the loan's current annual debt service (or 115 percent of current annual debt service if the loan is based on an interest rate that changes over the term of the loan) or, in the case of a cooperative or other not-for-profit housing project, the property must generate sufficient cash flow to provide comparable protection to the Board-regulated institution; and
- (6) The loan is not more than 90 days past due, or on nonaccrual.

Subsidiary means, with respect to a company, a company controlled by that company.

Sub-speculative grade means the reference entity depends on favorable economic conditions to meet its financial commitments, such that should such economic conditions deteriorate the reference entity likely would default on its financial commitments.

Synthetic exposure means an exposure whose value is linked to the value of an investment

in the Board-regulated institution's own capital instrument or to the value of an investment in the capital of an unconsolidated financial institution. For an advanced approaches Board-regulated institution, synthetic exposure includes an exposure whose value is linked to the value of an investment in a covered debt instrument.

Synthetic securitization means a transaction in which:

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

Tier 1 capital means the sum of common equity tier 1 capital and additional tier 1 capital.

Tier 1 minority interest means the tier 1 capital of a consolidated subsidiary of a Board-regulated institution that is not owned by the Board-regulated institution.

Tier 2 capital is defined in section 217.20(d).

Total capital means the sum of tier 1 capital and tier 2 capital.

Total capital minority interest means the total capital of a consolidated subsidiary of a Board-regulated institution that is not owned by the Board-regulated institution.

Total leverage exposure is defined in section 217.10(c)(2).

Traditional securitization means a transaction in which:

- (1) All or a portion of the credit risk of one or more underlying exposures is transferred to one or more third parties other than through the use of credit derivatives or guarantees;
- (2) The credit risk associated with the underlying exposures has been separated into at least two tranches reflecting different levels of seniority;
- (3) Performance of the securitization exposures depends upon the performance of the underlying exposures;
- (4) All or substantially all of the underlying exposures are financial exposures (such as loans, commitments, credit derivatives, guarantees, receivables, asset-backed securities, mortgage-backed securities, other debt securities, or equity securities);
- (5) The underlying exposures are not owned by an operating company;
- (6) The underlying exposures are not owned by a small business investment company defined in section 302 of the Small Business Investment Act;
- (7) The underlying exposures are not owned by a firm an investment in which qualifies as a community development investment under section 24 (Eleventh) of the National Bank Act;
- (8) The Board may determine that a transaction in which the underlying exposures are owned by an investment firm that exercises substantially unfettered control over the size and composition of its assets, liabilities, and off-balance sheet exposures is not a traditional securitization based on the transaction's leverage, risk profile, or economic substance;
- (9) The Board may deem a transaction that meets the definition of a traditional securitization, notwithstanding paragraph (5), (6), or (7) of this definition, to be a traditional securitization based on the transaction's leverage, risk profile,
- (10) The transaction is not:
 - (i) An investment fund;
 - (ii) A collective investment fund (as defined in 12 CFR 208.34);
 - (iii) An employee benefit plan (as defined in paragraphs (3) and (32) of section 3 of ERISA), a "governmental plan" (as defined in 29 U.S.C. 1002(32)) that

complies with the tax deferral qualification requirements provided in the Internal Revenue Code, or any similar employee benefit plan established under the laws of a foreign jurisdiction;

(iv) A synthetic exposure to the capital of a financial institution to the extent deducted from capital under section 217.22; or

(v) Registered with the SEC under the Investment Company Act of 1940 (15 U.S.C. 80a-1) or foreign equivalents thereof.

Tranche means all securitization exposures associated with a securitization that have the same seniority level.

Two-way market means a market where there are independent bona fide offers to buy and sell so that a price reasonably related to the last sales price or current bona fide competitive bid and offer quotations can be determined within one day and settled at that price within a relatively short time frame conforming to trade custom.

Unconditionally cancelable means with respect to a commitment, that a Board-regulated institution may, at any time, with or without cause, refuse to extend credit under the commitment (to the extent permitted under applicable law).

Underlying exposures means one or more exposures that have been securitized in a securitization transaction.

Unregulated financial institution means, for purposes of section 217.131, a financial institution that is not a regulated financial institution, including any financial institution that would meet the definition of “financial institution” under this section but for the ownership interest thresholds set forth in paragraph (4)(i) of that definition.

U.S. Government agency means an instrumentality of the U.S. Government whose obligations are fully and explicitly guaranteed as to the timely payment of principal and interest by the full faith and credit of the U.S. Government.

U.S. intermediate holding company means the company that is required to be established or designated pursuant to 12 CFR 252.153.

Value-at-Risk (VaR) means the estimate of the maximum amount that the value of one or more exposures could decline due to market price or rate movements during a fixed holding period within a stated confidence interval.

Variation margin means financial collateral that is subject to a collateral agreement provided by one party to its counterparty to meet the performance of the first party’s obligations under one or more transactions between the parties as a result of a change in value of such obligations since the last time such financial collateral was provided.

Variation margin agreement means an agreement to collect or post variation margin.

Variation margin amount means the fair value amount of the variation margin, as adjusted by the standard supervisory haircuts under section 217.132(b)(2)(ii), as applicable, that a counterparty to a netting set has posted to a Board-regulated institution less the fair value amount of the variation margin, as adjusted by the standard supervisory haircuts under section 217.132(b)(2)(ii), as applicable, posted by the Board-regulated institution to the counterparty.

Variation margin threshold means the amount of credit exposure of a Board-regulated institution to its counterparty that, if exceeded, would require the counterparty to post variation margin to the Board-regulated institution pursuant to the variation margin agreement.

Volatility derivative contract means a derivative contract in which the payoff of the derivative contract explicitly depends on a measure of the volatility of an underlying risk factor to the derivative contract.

Wrong-way risk means the risk that arises when an exposure to a particular counterparty is positively correlated with the probability of default of such counterparty itself.

3-2102**SECTION 217.3—Operational Requirements for Counterparty Credit Risk**

For purposes of calculating risk-weighted assets under subparts D and E of this part:

(a) *Cleared transaction.* In order to recognize certain exposures as cleared transactions pursuant to paragraphs (1)(ii), (iii), or (iv) of the definition of “cleared transaction” in section 217.2, the exposures must meet the applicable requirements set forth in this paragraph (a).

(1) The offsetting transaction must be identified by the CCP as a transaction for the clearing member client.

(2) The collateral supporting the transaction must be held in a manner that prevents the Board-regulated institution from facing any loss due to an event of default, including from a liquidation, receivership, insolvency, or similar proceeding of either the clearing member or the clearing member’s other clients. Omnibus accounts established under 17 CFR parts 190 and 300 satisfy the requirements of this paragraph (a).

(3) The Board-regulated institution must conduct sufficient legal review to conclude with a well-founded basis (and maintain sufficient written documentation of that legal review) that in the event of a legal challenge (including one resulting from a default or receivership, insolvency, liquidation, or similar proceeding) the relevant court and administrative authorities would find the arrangements of paragraph (a)(2) of this section to be legal, valid, binding and enforceable under the law of the relevant jurisdictions.

(4) The offsetting transaction with a clearing member must be transferable under the transaction documents and applicable laws in the relevant jurisdiction(s) to another clearing member should the clearing member default, become insolvent, or enter receivership, insolvency, liquidation, or similar proceedings.

(b) *Eligible margin loan.* In order to recognize an exposure as an eligible margin loan as defined in section 217.2, a Board-regulated institution must conduct sufficient legal review

to conclude with a well-founded basis (and maintain sufficient written documentation of that legal review) that the agreement underlying the exposure:

(1) Meets the requirements of paragraph (1)(iii) of the definition of eligible margin loan in section 217.2, and

(2) Is legal, valid, binding, and enforceable under applicable law in the relevant jurisdictions.

(c) *Qualifying cross-product master netting agreement.* In order to recognize an agreement as a qualifying cross-product master netting agreement as defined in section 217.101, a Board-regulated institution must obtain a written legal opinion verifying the validity and enforceability of the agreement under applicable law of the relevant jurisdictions if the counterparty fails to perform upon an event of default, including upon receivership, insolvency, liquidation, or similar proceeding.

(d) *Qualifying master netting agreement.* In order to recognize an agreement as a qualifying master netting agreement as defined in section 217.2, a Board-regulated institution must:

(1) Conduct sufficient legal review to conclude with a well-founded basis (and maintain sufficient written documentation of that legal review) that:

(i) The agreement meets the requirements of paragraph (2) of the definition of qualifying master netting agreement in section 217.2; and

(ii) In the event of a legal challenge (including one resulting from default or from receivership, insolvency, liquidation, or similar proceeding) the relevant court and administrative authorities would find the agreement to be legal, valid, binding, and enforceable under the law of the relevant jurisdictions; and

(2) Establish and maintain written procedures to monitor possible changes in relevant law and to ensure that the agreement continues to satisfy the requirements of the definition of qualifying master netting agreement in section 217.2.

(e) *Repo-style transaction.* In order to recognize an exposure as a repo-style transaction as

defined in section 217.2, a Board-regulated institution must conduct sufficient legal review to conclude with a well-founded basis (and maintain sufficient written documentation of that legal review) that the agreement underlying the exposure:

- (1) Meets the requirements of paragraph (3) of the definition of repo-style transaction in section 217.2, and
- (2) Is legal, valid, binding, and enforceable under applicable law in the relevant jurisdictions.

(f) *Failure of a QCCP to satisfy the rule's requirements.* If a Board-regulated institution determines that a CCP ceases to be a QCCP due to the failure of the CCP to satisfy one or more of the requirements set forth in paragraphs (2)(i) through (2)(iii) of the definition of a QCCP in section 217.2, the Board-regulated institution may continue to treat the CCP as a QCCP for up to three months following the determination. If the CCP fails to remedy the relevant deficiency within three months after the initial determination, or the CCP fails to satisfy the requirements set forth in paragraphs (2)(i) through (2)(iii) of the definition of a QCCP continuously for a three-month period after remedying the relevant deficiency, a Board-regulated institution may not treat the CCP as a QCCP for the purposes of this part until after the Board-regulated institution has determined that the CCP has satisfied the requirements in paragraphs (2)(i) through (2)(iii) of the definition of a QCCP for three continuous months.

SECTIONS 217.4–217.9—[Reserved]

3-2110

SUBPART B—CAPITAL RATIO REQUIREMENTS AND BUFFERS

SECTION 217.10—Minimum Capital Requirements

(a) *Minimum capital requirements.*

- (1) A Board-regulated institution must maintain the following minimum capital ratios:
 - (i) A common equity tier 1 capital ratio of 4.5 percent.
 - (ii) A tier 1 capital ratio of 6 percent.

- (iii) A total capital ratio of 8 percent.

- (iv) A leverage ratio of 4 percent.

- (v) For advanced approaches Board-regulated institutions or, for Category III Board-regulated institutions, a supplementary leverage ratio of 3 percent.

- (2) A qualifying community banking organization (as defined in section 217.12), that is subject to the community bank leverage ratio framework (as defined in section 217.12), is considered to have met the minimum capital requirements in this paragraph (a) of this section.

(b) *Standardized capital ratio calculations.* Other than as provided in paragraph (c) of this section:

(1) *Common equity tier 1 capital ratio.* A Board-regulated institution's common equity tier 1 capital ratio is the ratio of the Board-regulated institution's common equity tier 1 capital to standardized total risk-weighted assets;

(2) *Tier 1 capital ratio.* A Board-regulated institution's tier 1 capital ratio is the ratio of the Board-regulated institution's tier 1 capital to standardized total risk-weighted assets;

(3) *Total capital ratio.* A Board-regulated institution's total capital ratio is the ratio of the Board-regulated institution's total capital to standardized total risk-weighted assets; and

(4) *Leverage ratio.* A Board-regulated institution's leverage ratio is the ratio of the Board-regulated institution's tier 1 capital to the Board-regulated institution's average total consolidated assets as reported on the Board-regulated institution's Call Report, for a state member bank, or the Consolidated Financial Statements for Bank Holding Companies (FR Y-9C), for a bank holding company or savings and loan holding company, as applicable minus amounts deducted from tier 1 capital under section 217.22(a), (c) and (d).

(c) *Supplementary leverage ratio.*

(1) A Category III Board-regulated institution or advanced approaches Board-regulated institution must determine its supplementary leverage ratio in accordance with this paragraph, beginning with the cal-

endar quarter immediately following the quarter in which the Board-regulated institution is identified as a Category III Board-regulated institution. An advanced approaches Board-regulated institution's or a Category III Board-regulated institution's supplementary leverage ratio is the ratio of its tier 1 capital to total leverage exposure, the latter of which is calculated as the sum of:

- (i) The mean of the on-balance sheet assets calculated as of each day of the reporting quarter; and
 - (ii) The mean of the off-balance sheet exposures calculated as of the last day of each of the most recent three months, minus the applicable deductions under section 217.22(a), (c), and (d).
- (2) For purposes of this part, *total leverage exposure* means the sum of the items described in paragraphs (c)(2)(i) through (viii) of this section, as adjusted pursuant to paragraph (c)(2)(ix) of this section for a clearing member Board-regulated institution and paragraph (c)(2)(x) of this section for a custodial banking organization:

- (i) The balance sheet carrying value of all of the Board-regulated institution's on-balance sheet assets, *plus* the value of securities sold under a repurchase transaction or a securities lending transaction that qualifies for sales treatment under GAAP, *less* amounts deducted from tier 1 capital under section 217.22(a), (c), and (d), and *less* the value of securities received in security-for-security repo-style transactions, where the Board-regulated institution acts as a securities lender and includes the securities received in its on-balance sheet assets but has not sold or rehypothecated the securities received, and, for a Board-regulated institution that uses the standardized approach for counterparty credit risk under section 217.132(c) for its standardized risk-weighted assets, *less* the fair value of any derivative contracts;
- (ii) (A) For a Board-regulated institution that uses the current exposure methodology under section 217.34(b) for its standardized risk-weighted assets, the potential future credit exposure (PFE)

for each derivative contract or each single-product netting set of derivative contracts (including a cleared transaction except as provided in paragraph (c)(2)(ix) of this section and, at the discretion of the Board-regulated institution, excluding a forward agreement treated as a derivative contract that is part of a repurchase or reverse repurchase or a securities borrowing or lending transaction that qualifies for sales treatment under GAAP), to which the Board-regulated institution is a counterparty as determined under section 217.34, but without regard to section 217.34(c), provided that:

- (1) A Board-regulated institution may choose to exclude the PFE of all credit derivatives or other similar instruments through which it provides credit protection when calculating the PFE under section 217.34, but without regard to section 217.34(c), provided that it does not adjust the net-to-gross ratio (NGR); and
 - (2) A Board-regulated institution that chooses to exclude the PFE of credit derivatives or other similar instruments through which it provides credit protection pursuant to paragraph (c)(2)(ii)(A) of this section must do so consistently over time for the calculation of the PFE for all such instruments; or
- (B) (1) For a Board-regulated institution that uses the standardized approach for counterparty credit risk under section 217.132(c) for its standardized risk-weighted assets, the PFE for each netting set to which the Board-regulated institution is a counterparty (including cleared transactions except as provided in paragraph (c)(2)(ix) of this section and, at the discretion of the Board-regulated institution, excluding a forward agreement treated as a derivative contract that is part of a repurchase or reverse repurchase or a securities borrowing or lending transaction that qualifies for sales

treatment under GAAP), as determined under section 217.132(c)(7), in which the term C in section 217.132(c)(7)(i) equals zero, and, for any counterparty that is not a commercial end-user, multiplied by 1.4. For purposes of this paragraph (c)(2)(ii)(B)(I), a Board-regulated institution may set the value of the term C in section 217.132(c)(7)(i) equal to the amount of collateral posted by a clearing member client of the Board-regulated institution in connection with the client-facing derivative transactions within the netting set; and

(2) A Board-regulated institution may choose to exclude the PFE of all credit derivatives or other similar instruments through which it provides credit protection when calculating the PFE under section 217.132(c), provided that it does so consistently over time for the calculation of the PFE for all such instruments; (iii) (A) (I) For a Board-

regulated institution that uses the current exposure methodology under section 217.34(b) for its standardized risk-weighted assets, the amount of cash collateral that is received from a counterparty to a derivative contract and that has offset the mark-to-fair value of the derivative asset, or cash collateral that is posted to a counterparty to a derivative contract and that has reduced the Board-regulated institution's on-balance sheet assets, unless such cash collateral is all or part of variation margin that satisfies the conditions in paragraphs (c)(2)(iii)(C) through (G) of this section; and

(2) The variation margin is used to reduce the current credit exposure of the derivative contract, calculated as described in section 217.34(b), and not the PFE; and

(3) For the purpose of the calculation of the NGR described in section 217.34(b)(2)(ii)(B), variation margin described in paragraph (c)(2)(iii)(A)(2) of this section may not reduce the net cur-

rent credit exposure or the gross current credit exposure; or

(B) (I) For a Board-regulated institution that uses the standardized approach for counterparty credit risk under section 217.132(c) for its standardized risk-weighted assets, the replacement cost of each derivative contract or single product netting set of derivative contracts to which the Board-regulated institution is a counterparty, calculated according to the following formula, and, for any counterparty that is not a commercial end-user, multiplied by 1.4:

$$\text{Replacement Cost} = \max \{V - CVM_r + CVM_p, 0\}$$

Where:

V equals the fair value for each derivative contract or each single-product netting set of derivative contracts (including a cleared transaction except as provided in paragraph (c)(2)(ix) of this section and, at the discretion of the Board-regulated institution, excluding a forward agreement treated as a derivative contract that is part of a repurchase or reverse repurchase or a securities borrowing or lending transaction that qualifies for sales treatment under GAAP);

CVM_r equals the amount of cash collateral received from a counterparty to a derivative contract and that satisfies the conditions in paragraphs (c)(2)(iii)(C) through (G) of this section, or, in the case of a client-facing derivative transaction, the amount of collateral received from the clearing member client; and

CVM_p equals the amount of cash collateral that is posted to a counterparty to a derivative contract and that has not offset the fair value of the derivative contract and that satisfies the conditions in paragraphs (c)(2)(iii)(C) through (G) of this section, or, in the case of a client-facing derivative transaction, the amount of

collateral posted to the clearing member client;

(2) Notwithstanding paragraph (c)(2)(iii)(B)(*I*) of this section, where multiple netting sets are subject to a single variation margin agreement, a Board-regulated institution must apply the formula for replacement cost provided in section 217.132(c)(10)(i), in which the term CMA may only include cash collateral that satisfies the conditions in paragraphs (c)(2)(iii)(C) through (G) of this section; and

(3) For purposes of paragraph (c)(2)(iii)(B)(*I*), a Board-regulated institution must treat a derivative contract that references an index as if it were multiple derivative contracts each referencing one component of the index if the Board-regulated institution elected to treat the derivative contract as multiple derivative contracts under section 217.132(c)(5)(vi);

(C) For derivative contracts that are not cleared through a QCCP, the cash collateral received by the recipient counterparty is not segregated (by law, regulation, or an agreement with the counterparty);

(D) Variation margin is calculated and transferred on a daily basis based on the mark-to-fair value of the derivative contract;

(E) The variation margin transferred under the derivative contract or the governing rules of the CCP or QCCP for a cleared transaction is the full amount that is necessary to fully extinguish the net current credit exposure to the counterparty of the derivative contracts, subject to the threshold and minimum transfer amounts applicable to the counterparty under the terms of the derivative contract or the governing rules for a cleared transaction;

(F) The variation margin is in the form of cash in the same currency as the currency of settlement set forth in the derivative contract, provided that for the purposes of this paragraph

(c)(2)(iii)(F), currency of settlement means any currency for settlement specified in the governing qualifying master netting agreement and the credit support annex to the qualifying master netting agreement, or in the governing rules for a cleared transaction; and

(G) The derivative contract and the variation margin are governed by a qualifying master netting agreement between the legal entities that are the counterparties to the derivative contract or by the governing rules for a cleared transaction, and the qualifying master netting agreement or the governing rules for a cleared transaction must explicitly stipulate that the counterparties agree to settle any payment obligations on a net basis, taking into account any variation margin received or provided under the contract if a credit event involving either counterparty occurs;

(iv) The effective notional principal amount (that is, the apparent or stated notional principal amount multiplied by any multiplier in the derivative contract) of a credit derivative, or other similar instrument, through which the Board-regulated institution provides credit protection, provided that:

(A) The Board-regulated institution may reduce the effective notional principal amount of the credit derivative by the amount of any reduction in the mark-to-fair value of the credit derivative if the reduction is recognized in common equity tier 1 capital;

(B) The Board-regulated institution may reduce the effective notional principal amount of the credit derivative by the effective notional principal amount of a purchased credit derivative or other similar instrument, provided that the remaining maturity of the purchased credit derivative is equal to or greater than the remaining maturity of the credit derivative through which the Board-regulated institution provides credit protection and that:

(*I*) With respect to a credit derivative that references a single exposure, the reference exposure of the

purchased credit derivative is to the same legal entity and ranks *pari passu* with, or is junior to, the reference exposure of the credit derivative through which the Board-regulated institution provides credit protection; or

(2) With respect to a credit derivative that references multiple exposures, the reference exposures of the purchased credit derivative are to the same legal entities and rank *pari passu* with the reference exposures of the credit derivative through which the Board-regulated institution provides credit protection, and the level of seniority of the purchased credit derivative ranks *pari passu* to the level of seniority of the credit derivative through which the Board-regulated institution provides credit protection;

(3) Where a Board-regulated institution has reduced the effective notional amount of a credit derivative through which the Board-regulated institution provides credit protection in accordance with paragraph (c)(2)(iv)(A) of this section, the Board-regulated institution must also reduce the effective notional principal amount of a purchased credit derivative used to offset the credit derivative through which the Board-regulated institution provides credit protection, by the amount of any increase in the mark-to-fair value of the purchased credit derivative that is recognized in common equity tier 1 capital; and

(4) Where the Board-regulated institution purchases credit protection through a total return swap and records the net payments received on a credit derivative through which the Board-regulated institution provides credit protection in net income, but does not record offsetting deterioration in the mark-to-fair value of the credit derivative through which the Board-regulated institution provides credit protection in net income (ei-

ther through reductions in fair value or by additions to reserves), the Board-regulated institution may not use the purchased credit protection to offset the effective notional principal amount of the related credit derivative through which the Board-regulated institution provides credit protection;

(v) Where a Board-regulated institution acting as a principal has more than one repo-style transaction with the same counterparty and has offset the gross value of receivables due from a counterparty under reverse repurchase transactions by the gross value of payables under repurchase transactions due to the same counterparty, the gross value of receivables associated with the repo-style transactions *less* any on-balance sheet receivables amount associated with these repo-style transactions included under paragraph (c)(2)(i) of this section, unless the following criteria are met:

(A) The offsetting transactions have the same explicit final settlement date under their governing agreements;

(B) The right to offset the amount owed to the counterparty with the amount owed by the counterparty is legally enforceable in the normal course of business and in the event of receivership, insolvency, liquidation, or similar proceeding; and

(C) Under the governing agreements, the counterparties intend to settle net, settle simultaneously, or settle according to a process that is the functional equivalent of net settlement, (that is, the cash flows of the transactions are equivalent, in effect, to a single net amount on the settlement date), where both transactions are settled through the same settlement system, the settlement arrangements are supported by cash or intraday credit facilities intended to ensure that settlement of both transactions will occur by the end of the business day, and the settlement of the underlying securities does not interfere with the net cash settlement;

(vi) The counterparty credit risk of a repo-style transaction, including where the Board-regulated institution acts as an agent for a repo-style transaction and indemnifies the customer with respect to the performance of the customer's counterparty in an amount limited to the difference between the fair value of the security or cash its customer has lent and the fair value of the collateral the borrower has provided, calculated as follows:

(A) If the transaction is not subject to a qualifying master netting agreement, the counterparty credit risk (E^*) for transactions with a counterparty must be calculated on a transaction by transaction basis, such that each transaction i is treated as its own netting set, in accordance with the following formula, where E_i is the fair value of the instruments, gold, or cash that the Board-regulated institution has lent, sold subject to repurchase, or provided as collateral to the counterparty, and C_i is the fair value of the instruments, gold, or cash that the Board-regulated institution has borrowed, purchased subject to resale, or received as collateral from the counterparty:

$$E_i^* = \max \{0, [E_i - C_i]$$

(B) If the transaction is subject to a qualifying master netting agreement, the counterparty credit risk (E^*) must be calculated as the greater of zero and the total fair value of the instruments, gold, or cash that the Board-regulated institution has lent, sold subject to repurchase or provided as collateral to a counterparty for all transactions included in the qualifying master netting agreement ($\sum E_i$), less the total fair value of the instruments, gold, or cash that the Board-regulated institution borrowed, purchased subject to resale or received as collateral from the counterparty for those transactions ($\sum C_i$), in accordance with the following formula:

$$E^* = \max \{0, [\sum E_i - \sum C_i]$$

(vii) If a Board-regulated institution act-

ing as an agent for a repo-style transaction provides a guarantee to a customer of the security or cash its customer has lent or borrowed with respect to the performance of the customer's counterparty and the guarantee is not limited to the difference between the fair value of the security or cash its customer has lent and the fair value of the collateral the borrower has provided, the amount of the guarantee that is greater than the difference between the fair value of the security or cash its customer has lent and the value of the collateral the borrower has provided;

(viii) The credit equivalent amount of all off-balance sheet exposures of the Board-regulated institution, excluding repo-style transactions, repurchase or reverse repurchase or securities borrowing or lending transactions that qualify for sales treatment under GAAP, and derivative transactions, determined using the applicable credit conversion factor under section 217.33(b), provided, however, that the minimum credit conversion factor that may be assigned to an off-balance sheet exposure under this paragraph is 10 percent; and

(ix) For a Board-regulated institution that is a clearing member:

(A) A clearing member Board-regulated institution that guarantees the performance of a clearing member client with respect to a cleared transaction must treat its exposure to the clearing member client as a derivative contract for purposes of determining its total leverage exposure;

(B) A clearing member Board-regulated institution that guarantees the performance of a CCP with respect to a transaction cleared on behalf of a clearing member client must treat its exposure to the CCP as a derivative contract for purposes of determining its total leverage exposure;

(C) A clearing member Board-regulated institution that does not guarantee the performance of a CCP with respect to a transaction cleared on behalf of a clearing member client may

exclude its exposure to the CCP for purposes of determining its total leverage exposure;

(D) A Board-regulated institution that is a clearing member may exclude from its total leverage exposure the effective notional principal amount of credit protection sold through a credit derivative contract, or other similar instrument, that it clears on behalf of a clearing member client through a CCP as calculated in accordance with paragraph (c)(2)(iv) of this section; and

(E) Notwithstanding paragraphs (c)(2)(ix)(A) through (C) of this section, a Board-regulated institution may exclude from its total leverage exposure a clearing member's exposure to a clearing member client for a derivative contract, if the clearing member client and the clearing member are affiliates and consolidated for financial reporting purposes on the Board-regulated institution's balance sheet.

(x) A custodial banking organization shall exclude from its total leverage exposure the lesser of:

(A) The amount of funds that the custodial banking organization has on deposit at a qualifying central bank; and

(B) The amount of funds in deposit accounts at the custodial banking organization that are linked to fiduciary or custodial and safekeeping accounts at the custodial banking organization. For purposes of this paragraph (c)(2)(x), a deposit account is linked to a fiduciary or custodial and safekeeping account if the deposit account is provided to a client that maintains a fiduciary or custodial and safekeeping account with the custodial banking organization, and the deposit account is used to facilitate the administration of the fiduciary or custodial and safekeeping account.

(d) *Advanced approaches capital ratio calculations.* An advanced approaches Board-regulated institution that has completed the parallel run process and received notification from the Board pursuant to section 217.121(d) must determine its regulatory capital ratios as

described in paragraphs (d)(1) through (3) of this section.

(1) *Common equity tier 1 capital ratio.* The Board-regulated institution's common equity tier 1 capital ratio is the lower of:

(i) The ratio of the Board-regulated institution's common equity tier 1 capital to standardized total risk-weighted assets; and

(ii) The ratio of the Board-regulated institution's common equity tier 1 capital to advanced approaches total risk-weighted assets.

(2) *Tier 1 capital ratio.* The Board-regulated institution's tier 1 capital ratio is the lower of:

(i) The ratio of the Board-regulated institution's tier 1 capital to standardized total risk-weighted assets; and

(ii) The ratio of the Board-regulated institution's tier 1 capital to advanced approaches total risk-weighted assets.

(3) *Total capital ratio.* The Board-regulated institution's total capital ratio is the lower of:

(i) The ratio of the Board-regulated institution's total capital to standardized total risk-weighted assets; and

(ii) The ratio of the Board-regulated institution's advanced-approaches-adjusted total capital to advanced approaches total risk-weighted assets. A Board-regulated institution's advanced-approaches-adjusted total capital is the Board-regulated institution's total capital after being adjusted as follows:

(A) An advanced approaches Board-regulated institution must deduct from its total capital any allowance for loan and lease losses or adjusted allowance for credit losses, as applicable, included in its tier 2 capital in accordance with section 217.20(d)(3); and

(B) An advanced approaches Board-regulated institution must add to its total capital any eligible credit reserves that exceed the Board-regulated institution's total expected credit losses to the extent that the excess reserve amount does not exceed 0.6 percent of the Board-regulated institution's credit risk-weighted assets.

(e) *Capital adequacy.*

(1) Notwithstanding the minimum requirements in this part, a Board-regulated institution must maintain capital commensurate with the level and nature of all risks to which the Board-regulated institution is exposed. The supervisory evaluation of the Board-regulated institution's capital adequacy is based on an individual assessment of numerous factors, including the character and condition of the institution's assets and its existing and prospective liabilities and other corporate responsibilities.

(2) A Board-regulated institution must have a process for assessing its overall capital adequacy in relation to its risk profile and a comprehensive strategy for maintaining an appropriate level of capital.

(f) *Insurance depository institution holding companies.* Notwithstanding paragraphs (a) through (d) of this section:

(1) An insurance bank holding company that is a state-regulated insurer, or an insurance savings and loan holding company that is a state-regulated insurer, is not required to meet the minimum capital ratio requirements in paragraphs (a)(1)(i) through (iii) of this section if the company is subject to subpart J of this part; and

(2) A Board-regulated institution that is an insurance bank holding company, insurance savings and loan holding company, or insurance mid-tier holding company is not required to meet the minimum capital ratio requirements in paragraphs (a)(1)(iv) and (v) of this section.

3-2111**SECTION 217.11—Capital Conservation Buffer, Countercyclical Capital Buffer Amount, and GSIB Surcharge**(a) *Capital conservation buffer.*

(1) *Composition of the capital conservation buffer.* The capital conservation buffer is composed solely of common equity tier 1 capital.

(2) *Definitions.* For purposes of this section, the following definitions apply:

(i) *Eligible retained income.* The eligible retained income of a Board-regulated institution is the greater of:

(A) The Board-regulated institution's net income, calculated in accordance with the instructions to the FR Y-9C or Call Report, as applicable, for the four calendar quarters preceding the current calendar quarter, net of any distributions and associated tax effects not already reflected in net income; and

(B) The average of the Board-regulated institution's net income, calculated in accordance with the instructions to the FR Y-9C or Call Report, as applicable, for the four calendar quarters preceding the current calendar quarter.

(ii) *Maximum payout amount.* A Board-regulated institution's maximum payout amount for the current calendar quarter is equal to the Board-regulated institution's eligible retained income, multiplied by its maximum payout ratio.

(iii) *Maximum payout ratio.* The maximum payout ratio is the percentage of eligible retained income that a Board-regulated institution can pay out in the form of distributions and discretionary bonus payments during the current calendar quarter. For a Board-regulated institution that is not subject to 12 CFR 225.8 or 238.170, the maximum payout ratio is determined by the Board-regulated institution's capital conservation buffer, calculated as of the last day of the previous calendar quarter, as set forth in Table 1 to paragraph (a)(4)(iv) of this section. For a Board-regulated institution that is subject to 12 CFR 225.8 or 238.170, the maximum payout ratio is determined under paragraph (c)(1)(ii) of this section.

(iv) *Private sector credit exposure.* Private sector credit exposure means an exposure to a company or an individual that is not an exposure to a sovereign, the Bank for International Settlements, the European Central Bank, the European Commission, the European Stability Mechanism, the European Financial Stability Facility, the International Monetary Fund, a MDB, a PSE, or a GSE.

(v) *Leverage buffer requirement.* A bank holding company's leverage buffer requirement is 2.0 percent.

(vi) *Stress capital buffer requirement.*

(A) The stress capital buffer requirement for a Board-regulated institution subject to 12 CFR 225.8 or 238.170 is the stress capital buffer requirement determined under 12 CFR 225.8 or 238.170 except as provided in paragraph (a)(2)(vi)(B) of this section.

(B) If a Board-regulated institution subject to 12 CFR 225.8 or 238.170 has not yet received a stress capital buffer requirement, its stress capital buffer requirement for purposes of this part is 2.5 percent.

(3) *Calculation of capital conservation buffer.*

(i) A Board-regulated institution that is not subject to 12 CFR 225.8 or 238.170 has a capital conservation buffer equal to the lowest of the following ratios, calculated as of the last day of the previous calendar quarter:

(A) The Board-regulated institution's common equity tier 1 capital ratio minus the Board-regulated institution's minimum common equity tier 1 capital ratio requirement under section 217.10;

(B) The Board-regulated institution's tier 1 capital ratio minus the Board-regulated institution's minimum tier 1 capital ratio requirement under section 217.10; and

(C) The Board-regulated institution's total capital ratio minus the Board-regulated institution's minimum total capital ratio requirement under section 217.10; or

(ii) Notwithstanding paragraphs (a)(3)(i)(A) through (C) of this section, if a Board-regulated institution's common equity tier 1, tier 1 or total capital ratio is less than or equal to the Board-regulated institution's minimum common equity tier 1, tier 1 or total capital ratio requirement under section 217.10, respectively, the Board-regulated institution's capital conservation buffer is zero.

(4) *Limits on distributions and discretionary**bonus payments.*

(i) A Board-regulated institution that is not subject to 12 CFR 225.8 or 238.170 shall not make distributions or discretionary bonus payments or create an obligation to make such distributions or payments during the current calendar quarter that, in the aggregate, exceed its maximum payout amount.

(ii) A Board-regulated institution that is not subject to 12 CFR 225.8 or 238.170 and that has a capital conservation buffer that is greater than 2.5 percent plus 100 percent of its applicable countercyclical capital buffer amount in accordance with paragraph (b) of this section is not subject to a maximum payout amount under paragraph (a)(2)(ii) of this section.

(iii) Except as provided in paragraph (a)(4)(iv) of this section, a Board-regulated institution that is not subject to 12 CFR 225.8 or 238.170 may not make distributions or discretionary bonus payments during the current calendar quarter if the Board-regulated institution's:

(A) Eligible retained income is negative; and

(B) Capital conservation buffer was less than 2.5 percent as of the end of the previous calendar quarter.

(iv) *Prior approval.* Notwithstanding the limitations in paragraphs (a)(4)(i) through (iii) of this section, the Board may permit a Board-regulated institution that is not subject to 12 CFR 225.8 or 238.170 to make a distribution or discretionary bonus payment upon a request of the Board-regulated institution, if the Board determines that the distribution or discretionary bonus payment would not be contrary to the purposes of this section, or to the safety and soundness of the Board-regulated institution. In making such a determination, the Board will consider the nature and extent of the request and the particular circumstances giving rise to the request.

Table 1 to section 217.11(a)(4)(iv)—Calculation of maximum payout amount

Capital conservation buffer	Maximum payout ratio
Greater than 2.5 percent plus 100 percent of the Board-regulated institution's applicable countercyclical capital buffer amount	No payout ratio limitation applies
Less than or equal to 2.5 percent plus 100 percent of the Board-regulated institution's applicable countercyclical capital buffer amount, <i>and</i> greater than 1.875 percent plus 75 percent of the Board-regulated institution's applicable countercyclical capital buffer amount	60 percent
Less than or equal to 1.875 percent plus 75 percent of the Board-regulated institution's applicable countercyclical capital buffer amount, <i>and</i> greater than 1.25 percent plus 50 percent of the Board-regulated institution's applicable countercyclical capital buffer amount	40 percent
Less than or equal to 1.25 percent plus 50 percent of the Board-regulated institution's applicable countercyclical capital buffer amount <i>and</i> greater than 0.625 percent plus 25 percent of the Board-regulated institution's applicable countercyclical capital buffer amount	20 percent
Less than or equal to 0.625 percent plus 25 percent of the Board-regulated institution's applicable countercyclical capital buffer amount	0 percent

(v) *Other limitations on distributions.* Additional limitations on distributions may apply under 12 CFR 225.4 and 263.202 to a Board-regulated institution that is not subject to 12 CFR 225.8 or 238.170.

(b) *Countercyclical capital buffer amount.*

(1) *General.* An advanced approaches Board-regulated institution or a Category III Board-regulated institution must calculate a countercyclical capital buffer amount in accordance with this paragraph (b) for purposes of determining its maximum payout ratio under Table 1 to section 217.11(a)(4)(iv) and, if applicable, Table 2 to section 217.11(c)(4)(iii).

(i) *Extension of capital conservation buffer.* The countercyclical capital buffer amount is an extension of the capital conservation buffer as described in paragraph (a) or (c) of this section, as applicable.

(ii) *Amount.* An advanced approaches Board-regulated institution or a Category III Board-regulated institution has a countercyclical capital buffer amount determined by calculating the weighted av-

erage of the countercyclical capital buffer amounts established for the national jurisdictions where the Board-regulated institution's private sector credit exposures are located, as specified in paragraphs (b)(2) and (3) of this section.

(iii) *Weighting.* The weight assigned to a jurisdiction's countercyclical capital buffer amount is calculated by dividing the total risk-weighted assets for the Board-regulated institution's private sector credit exposures located in the jurisdiction by the total risk-weighted assets for all of the Board-regulated institution's private sector credit exposures. The methodology a Board-regulated institution uses for determining risk-weighted assets for purposes of this paragraph (b) must be the methodology that determines its risk-based capital ratios under section 217.10. Notwithstanding the previous sentence, the risk-weighted asset amount for a private sector credit exposure that is a covered position under subpart F of this part is its specific risk add-on as determined under section 217.210 multiplied by 12.5.

(iv) *Location.*

(A) Except as provided in paragraphs (b)(1)(iv)(B) and (C) of this section, the location of a private sector credit exposure is the national jurisdiction where the borrower is located (that is, where it is incorporated, chartered, or similarly established or, if the borrower is an individual, where the borrower resides).

(B) If, in accordance with subpart D or E of this part, the Board-regulated institution has assigned to a private sector credit exposure a risk weight associated with a protection provider on a guarantee or credit derivative, the location of the exposure is the national jurisdiction where the protection provider is located.

(C) The location of a securitization exposure is the location of the underlying exposures, or, if the underlying exposures are located in more than one national jurisdiction, the national jurisdiction where the underlying exposures with the largest aggregate unpaid principal balance are located. For purposes of this paragraph (b), the location of an underlying exposure shall be the location of the borrower, determined consistent with paragraph (b)(1)(iv)(A) of this section.

(2) *Countercyclical capital buffer amount for credit exposures in the United States.*

(i) *Initial countercyclical capital buffer amount with respect to credit exposures in the United States.* The initial countercyclical capital buffer amount in the United States is zero.

(ii) *Adjustment of the countercyclical capital buffer amount.* The Board will adjust the countercyclical capital buffer amount for credit exposures in the United States in accordance with applicable law.¹

(iii) *Range of countercyclical capital buffer amount.* The Board will adjust the countercyclical capital buffer amount for credit exposures in the United States between zero percent and 2.5 percent of risk-weighted assets.

(iv) *Adjustment determination.* The Board will base its decision to adjust the countercyclical capital buffer amount under this section on a range of macroeconomic, financial, and supervisory information indicating an increase in systemic risk including, but not limited to, the ratio of credit to gross domestic product, a variety of asset prices, other factors indicative of relative credit and liquidity expansion or contraction, funding spreads, credit condition surveys, indices based on credit default swap spreads, options implied volatility, and measures of systemic risk.

(v) *Effective date of adjusted countercyclical capital buffer amount.*

(A) *Increase adjustment.* A determination by the Board under paragraph (b)(2)(ii) of this section to increase the countercyclical capital buffer amount will be effective 12 months from the date of announcement, unless the Board establishes an earlier effective date and includes a statement articulating the reasons for the earlier effective date.

(B) *Decrease adjustment.* A determination by the Board to decrease the established countercyclical capital buffer amount under paragraph (b)(2)(ii) of this section will be effective on the day following announcement of the final determination or the earliest date permissible under applicable law or regulation, whichever is later.

(vi) *Twelve month sunset.* The countercyclical capital buffer amount will return to zero percent 12 months after the effective date that the adjusted countercyclical capital buffer amount is announced, unless the Board announces a decision to maintain the adjusted countercyclical capital buffer amount or adjust it again before the expiration of the 12-month period.

(3) *Countercyclical capital buffer amount for foreign jurisdictions.* The Board will adjust the countercyclical capital buffer amount for private sector credit exposures to reflect decisions made by foreign juris-

¹The Board expects that any adjustment will be based on a determination made jointly by the Board, OCC, and FDIC.

ditions consistent with due process requirements described in paragraph (b)(2) of this section.

(c) *Calculation of buffers for Board-regulated institutions subject to 12 CFR 225.8 or 238.170.*

(1) *Limits on distributions and discretionary bonus payments.*

(i) A Board-regulated institution that is subject to 12 CFR 225.8 or 238.170 shall not make distributions or discretionary bonus payments or create an obligation to make such distributions or payments during the current calendar quarter that, in the aggregate, exceed its maximum payout amount.

(ii) *Maximum payout ratio.* The maximum payout ratio of a Board-regulated institution that is subject to 12 CFR 225.8 or 238.170 is the lowest of the payout ratios determined by its standardized approach capital conservation buffer; if applicable, advanced approaches capital conservation buffer; and, if applicable, leverage buffer; as set forth in Table 2 to section 217.11(c)(4)(iii).

(iii) *Capital conservation buffer requirements.* A Board-regulated institution that is subject to 12 CFR 225.8 or 238.170 has:

(A) A standardized approach capital conservation buffer requirement equal to its stress capital buffer requirement plus its applicable countercyclical capital buffer amount in accordance with paragraph (b) of this section plus its applicable GSIB surcharge in accordance with paragraph (d) of this section; and

(B) If the Board-regulated institution calculates risk-weighted assets under subpart E of this part, an advanced approaches capital conservation buffer requirement equal to 2.5 percent plus the Board-regulated institution's countercyclical capital buffer amount in accordance with paragraph (b) of this section plus its applicable GSIB surcharge in accordance with paragraph (d) of this section.

(iv) *No maximum payout amount limita-*

tion. A Board-regulated institution that is subject to 12 CFR 225.8 or 238.170 is not subject to a maximum payout amount under paragraph (a)(2)(ii) of this section if it has:

(A) A standardized approach capital conservation buffer, calculated under paragraph (c)(2) of this section, that is greater than its standardized approach capital conservation buffer requirement calculated under paragraph (c)(1)(iii)(A) of this section;

(B) If applicable, an advanced approaches capital conservation buffer, calculated under paragraph (c)(3) of this section, that is greater than the Board-regulated institution's advanced approaches capital conservation buffer requirement calculated under paragraph (c)(1)(iii)(B) of this section; and

(C) If applicable, a leverage buffer, calculated under paragraph (c)(4) of this section, that is greater than its leverage buffer requirement as calculated under paragraph (a)(2)(v) of this section.

(v) *Negative eligible retained income.* Except as provided in paragraph (c)(1)(vi) of this section, a Board-regulated institution that is subject to 12 CFR 225.8 or 238.170 may not make distributions or discretionary bonus payments during the current calendar quarter if, as of the end of the previous calendar quarter, the Board-regulated institution's:

(A) Eligible retained income is negative; and

(B) (1) Standardized approach capital conservation buffer was less than its stress capital buffer requirement; or
(2) If applicable, advanced approaches capital conservation buffer was less than 2.5 percent; or

(3) If applicable, leverage buffer was less than its leverage buffer requirement.

(vi) *Prior approval.* Notwithstanding the limitations in paragraphs (c)(1)(i) through (v) of this section, the Board may permit a Board-regulated institution that is subject to 12 CFR 225.8 or 238.170 to make a distribution or discretionary bonus pay-

ment upon a request of the Board-regulated institution, if the Board determines that the distribution or discretionary bonus payment would not be contrary to the purposes of this section, or to the safety and soundness of the Board-regulated institution. In making such a determination, the Board will consider the nature and extent of the request and the particular circumstances giving rise to the request.

(vii) *Other limitations on distributions.* Additional limitations on distributions may apply under 12 CFR 225.4, 225.8, 238.170, 252.63, 252.165, and 263.202 to a Board-regulated institution that is subject to 12 CFR 225.8 or 238.170.

(2) *Standardized approach capital conservation buffer.*

(i) The standardized approach capital conservation buffer for Board-regulated institutions subject to 12 CFR 225.8 or 238.170 is composed solely of common equity tier 1 capital.

(ii) A Board-regulated institution that is subject to 12 CFR 225.8 or 238.170 has a standardized approach capital conservation buffer that is equal to the lowest of the following ratios, calculated as of the last day of the previous calendar quarter:

(A) The ratio calculated by the Board-regulated institution under section 217.10(b)(1) or (c)(1)(i), as applicable, minus the Board-regulated institution's minimum common equity tier 1 capital ratio requirement under section 217.10(a);

(B) The ratio calculated by the Board-regulated institution under section 217.10(b)(2) or (c)(2)(i), as applicable, minus the Board-regulated institution's minimum tier 1 capital ratio requirement under section 217.10(a); and

(C) The ratio calculated by the Board-regulated institution under section 217.10(b)(3) or (c)(3)(i), as applicable, minus the Board-regulated institution's minimum total capital ratio requirement under section 217.10(a).

(iii) Notwithstanding paragraph (c)(2)(ii) of this section, if any of the ratios calculated by the Board-regulated institution

under section 217.10(b)(1), (2), or (3), or if applicable section 217.10(c)(1)(i), (c)(2)(i), or (c)(3)(i) is less than or equal to the Board-regulated institution's minimum common equity tier 1 capital ratio, tier 1 capital ratio, or total capital ratio requirement under section 217.10(a), respectively, the Board-regulated institution's capital conservation buffer is zero.

(3) *Advanced approaches capital conservation buffer.*

(i) The advanced approaches capital conservation buffer is composed solely of common equity tier 1 capital.

(ii) A Board-regulated institution that calculates risk-weighted assets under subpart E has an advanced approaches capital conservation buffer that is equal to the lowest of the following ratios, calculated as of the last day of the previous calendar quarter:

(A) The ratio calculated by the Board-regulated institution under section 217.10(c)(1)(ii) minus the Board-regulated institution's minimum common equity tier 1 capital ratio requirement under section 217.10(a);

(B) The ratio calculated by the Board-regulated institution under section 217.10(c)(2)(ii) minus the Board-regulated institution's minimum tier 1 capital ratio requirement under section 217.10(a); and

(C) The ratio calculated by the Board-regulated institution under section 217.10(c)(3)(ii) minus the Board-regulated institution's minimum total capital ratio requirement under section 217.10(a).

(iii) Notwithstanding paragraph (c)(3)(ii) of this section, if any of the ratios calculated by the Board-regulated institution under section 217.10(c)(1)(ii), (c)(2)(ii), or (c)(3)(ii) is less than or equal to the Board-regulated institution's minimum common equity tier 1 capital ratio, tier 1 capital ratio, or total capital ratio requirement under section 217.10(a), respectively, the Board-regulated institution's advanced approaches capital conservation buffer is zero.

(4) *Leverage buffer.*

- (i) The leverage buffer is composed solely of tier 1 capital.
- (ii) A global systemically important BHC has a leverage buffer that is equal to the global systemically important BHC's supplementary leverage ratio minus 3 percent, calculated as of the last day of the previous calendar quarter.

(iii) Notwithstanding paragraph (c)(4)(ii) of this section, if the global systemically important BHC's supplementary leverage ratio is less than or equal to 3 percent, the global systemically important BHC's leverage buffer is zero.

Table 2 to section 217.11(c)(4)(iii)—Calculation of maximum payout amount

Capital buffer ¹	Payout ratio
Greater than the Board-regulated institution's buffer requirement ²	No payout ratio limitation applies
Less than or equal to 100 percent of the Board-regulated institution's buffer requirement, <i>and</i> greater than 75 percent of the Board-regulated institution's buffer requirement	60 percent
Less than or equal to 75 percent of the Board-regulated institution's buffer requirement, <i>and</i> greater than 50 percent of the bank holding company's buffer requirement	40 percent
Less than or equal to 50 percent of the Board-regulated institution's buffer requirement, <i>and</i> greater than 25 percent of the Board-regulated institution's buffer requirement	20 percent
Less than or equal to 25 percent of the Board-regulated institution's buffer requirement	0 percent

¹ A Board-regulated institution's "capital buffer" means each of, as applicable, its standardized approach capital conservation buffer, advanced approaches capital conservation buffer, and leverage buffer.

² A Board-regulated institution's "buffer requirement" means each of, as applicable, its standardized approach capital conservation buffer requirement, advanced approaches capital conservation buffer requirement, and leverage buffer requirement.

(d) *GSIB surcharge*. A global systemically important BHC must use its GSIB surcharge calculated in accordance with subpart H of this part for purposes of determining its maximum payout ratio under Table 2 to section 217.11(c)(4)(iii).

(e) *Insurance depository institution holding companies*. Notwithstanding any other provision of this section:

- (1) A Board-regulated institution that is an insurance bank holding company that is subject to subpart J of this part calculates its capital conservation buffer in accordance with section 217.604;
- (2) A Board-regulated institution that is an insurance savings and loan holding company that is subject to subpart J of this part calculates its capital conservation buffer in accordance with section 217.604; and
- (3) A Board-regulated institution that is an

insurance mid-tier holding company is not subject to the provisions of this section.

3-2112

SECTION 217.12—Community Bank Leverage Ratio Framework

(a) *Community bank leverage ratio framework*.

- (1) Notwithstanding any other provision in this part, a qualifying community banking organization that has made an election to use the community bank leverage ratio framework under paragraph (a)(3) of this section shall be considered to have met the minimum capital requirements under section 217.10, the capital ratio requirements for the well capitalized capital category under section 208.43(b)(1) of this chapter, and any other capital or leverage requirements to

which the qualifying community banking organization is subject, if it has a leverage ratio greater than 9 percent.

(2) For purposes of this section, a qualifying community banking organization means a Board-regulated institution that is not an advanced approaches Board-regulated institution and that satisfies all of the following criteria:

(i) Has a leverage ratio of greater than 9 percent;

(ii) Has total consolidated assets of less than \$10 billion, calculated in accordance with the reporting instructions to the Call Report or to Form FR Y-9C, as applicable, as of the end of the most recent calendar quarter;

(iii) Has off-balance sheet exposures of 25 percent or less of its total consolidated assets as of the end of the most recent calendar quarter, calculated as the sum of the notional amounts of the exposures listed in paragraphs (a)(2)(iii)(A) through (I) of this section, divided by total consolidated assets, each as of the end of the most recent calendar quarter:

(A) The unused portion of commitments (except for unconditionally cancellable commitments);

(B) Self-liquidating, trade-related contingent items that arise from the movement of goods;

(C) Transaction-related contingent items, including performance bonds, bid bonds, warranties, and performance standby letters of credit;

(D) Sold credit protection through guarantees and credit derivatives;

(E) Credit-enhancing representations and warranties;

(F) Securities lent and borrowed, calculated in accordance with the reporting instructions to the Call Report or to Form FR Y-9C, as applicable;

(G) Financial standby letters of credit;

(H) Forward agreements that are not derivative contracts; and

(I) Off-balance sheet securitization exposures; and

(iv) Has total trading assets and trading liabilities, calculated in accordance with the reporting instructions to the Call Re-

port or to Form FR Y-9C, as applicable, of 5 percent or less of the Board-regulated institution's total consolidated assets, each as of the end of the most recent calendar quarter.

(3) (i) A qualifying community banking organization may elect to use the community bank leverage ratio framework if it makes an opt-in election under this paragraph (a)(3).

(ii) For purposes of this paragraph (a)(3), a qualifying community banking organization makes an election to use the community bank leverage ratio framework by completing the applicable reporting requirements of its Call Report or of its Form FR Y-9C, as applicable.

(iii) (A) A qualifying community banking organization that has elected to use the community bank leverage ratio framework may opt out of the community bank leverage ratio framework by completing the applicable risk-based and leverage ratio reporting requirements necessary to demonstrate compliance with section 217.10(a)(1) in its Call Report or its Form FR Y-9C, as applicable, or by otherwise providing the information to the Board.

(B) A qualifying community banking organization that opts out of the community bank leverage ratio framework pursuant to paragraph (a)(3)(iii)(A) of this section must comply with section 217.10(a)(1) immediately.

(4) *Temporary relief for 2020 and 2021.*

(i) Except as provided in paragraph (a)(4)(ii) of this section, from December 2, 2020, through December 31, 2021, for purposes of determining whether a Board-regulated institution satisfies the criterion in paragraph (a)(2)(ii) of this section, the total consolidated assets of a Board-regulated institution for purposes of paragraph (a)(2)(ii) of this section shall be determined based on the lesser of:

(A) The total consolidated assets reported by the institution in the Call Report, FR Y-9C, or FR Y-9SP, as applicable, as of December 31, 2019; and

(B) The total consolidated assets cal-

culated in accordance with the reporting instructions to the Call Report or to Form FR Y-9C, as applicable, as of the end of the most recent calendar quarter.

(ii) The relief provided under this paragraph (a)(4)(i) does not apply to a Board-regulated institution if the Board determines that permitting the Board-regulated institution to determine its assets in accordance with that paragraph would not be commensurate with the risk profile of the Board-regulated institution. When making this determination, the Board will consider all relevant factors, including the extent of asset growth of the Board-regulated institution since December 31, 2019; the causes of such growth, including whether growth occurred as a result of mergers or acquisitions; whether such growth is likely to be temporary or permanent; whether the Board-regulated institution has become involved in any additional activities since December 31, 2019; the asset size of any parent companies; and the type of assets held by the Board-regulated institution. In making a determination pursuant to this paragraph (a)(4)(ii), the Board will apply notice and response procedures in the same manner and to the same extent as the notice and response procedures in 12 CFR 263.202.

(b) *Calculation of the leverage ratio.* A qualifying community banking organization's leverage ratio is calculated in accordance with section 217.10(b)(4), except that a qualifying community banking organization is not required to:

- (1) Make adjustments and deductions from tier 2 capital for purposes of section 217.22(c); or
- (2) Calculate and deduct from tier 1 capital an amount resulting from insufficient tier 2 capital under section 217.22(f).

(c) *Treatment when ceasing to meet the qualifying community banking organization requirements.*

- (1) Except as provided in paragraphs (c)(5) and (6) of this section, if a Board-regulated institution ceases to meet the definition of a qualifying community banking

organization, the Board-regulated institution has two reporting periods under its Call Report or Form FR Y-9C, as applicable (grace period) either to satisfy the requirements to be a qualifying community banking organization or to comply with section 217.10(a)(1) and report the required capital measures under section 217.10(a)(1) on its Call Report or its Form FR Y-9C, as applicable.

(2) The grace period begins as of the end of the calendar quarter in which the Board-regulated institution ceases to satisfy the criteria to be a qualifying community banking organization provided in paragraph (a)(2) of this section. The grace period ends on the last day of the second consecutive calendar quarter following the beginning of the grace period.

(3) During the grace period, the Board-regulated institution continues to be treated as a qualifying community banking organization for the purpose of this part and must continue calculating and reporting its leverage ratio under this section unless the Board-regulated institution has opted out of using the community bank leverage ratio framework under paragraph (a)(3) of this section.

(4) During the grace period, the qualifying community banking organization continues to be considered to have met the minimum capital requirements under section 217.10(a)(1), the capital ratio requirements for the well capitalized capital category under section 208.43(b)(1)(i)(A) through (D) of this chapter, and any other capital or leverage requirements to which the qualifying community banking organization is subject, and must continue calculating and reporting its leverage ratio under this section.

(5) Notwithstanding paragraphs (c)(1) through (4) of this section, a Board-regulated institution that no longer meets the definition of a qualifying community banking organization as a result of a merger or acquisition has no grace period and immediately ceases to be a qualifying community banking organization. Such a Board-regulated institution must comply with the minimum capital requirements under section 217.10(a)(1) and must report the required

capital measures under section 217.10(a)(1) for the quarter in which it ceases to be a qualifying community banking organization. (6) Notwithstanding paragraphs (c)(1) through (4) of this section, a Board-regulated institution that has a leverage ratio of 8 percent or less does not have a grace period and must comply with the minimum capital requirements under section 217.10(a)(1) and must report the required capital measures under section 217.10(a)(1) for the quarter in which it reports a leverage ratio of 8 percent or less.

SECTIONS 217.13–217.19—[Reserved]

3-2120

SUBPART C—DEFINITION OF CAPITAL

SECTION 217.20—Capital Components and Eligibility Criteria for Regulatory Capital Instruments

(a) *Regulatory capital components.* A Board-regulated institution's regulatory capital components are:

- (1) Common equity tier 1 capital;
- (2) Additional tier 1 capital; and
- (3) Tier 2 capital.

(b) *Common equity tier 1 capital.* Common equity tier 1 capital is the sum of the common equity tier 1 capital elements in this paragraph (b), minus regulatory adjustments and deductions in section 217.22. The common equity tier 1 capital elements are:

- (1) Any common stock instruments (plus any related surplus) issued by the Board-regulated institution, net of treasury stock, and any capital instruments issued by mutual banking organizations, that meet all the following criteria:
 - (i) The instrument is paid-in, issued directly by the Board-regulated institution, and represents the most subordinated claim in a receivership, insolvency, liquidation, or similar proceeding of the Board-regulated institution;
 - (ii) The holder of the instrument is entitled to a claim on the residual assets of the Board-regulated institution that is proportional with the holder's share of

the Board-regulated institution's issued capital after all senior claims have been satisfied in a receivership, insolvency, liquidation, or similar proceeding;

(iii) The instrument has no maturity date, can only be redeemed via discretionary repurchases with the prior approval of the Board to the extent otherwise required by law or regulation, and does not contain any term or feature that creates an incentive to redeem;

(iv) The Board-regulated institution did not create at issuance of the instrument through any action or communication an expectation that it will buy back, cancel, or redeem the instrument, and the instrument does not include any term or feature that might give rise to such an expectation;

(v) Any cash dividend payments on the instrument are paid out of the Board-regulated institution's net income, retained earnings, or surplus related to common stock, and are not subject to a limit imposed by the contractual terms governing the instrument. State member banks are subject to other legal restrictions on reductions in capital resulting from cash dividends, including out of the capital surplus account, under 12 U.S.C. 324 and 12 CFR 208.5.

(vi) The Board-regulated institution has full discretion at all times to refrain from paying any dividends and making any other distributions on the instrument without triggering an event of default, a requirement to make a payment-in-kind, or an imposition of any other restrictions on the Board-regulated institution;

(vii) Dividend payments and any other distributions on the instrument may be paid only after all legal and contractual obligations of the Board-regulated institution have been satisfied, including payments due on more senior claims;

(viii) The holders of the instrument bear losses as they occur equally, proportionately, and simultaneously with the holders of all other common stock instruments before any losses are borne by holders of claims on the Board-regulated institution

with greater priority in a receivership, insolvency, liquidation, or similar proceeding;

(ix) The paid-in amount is classified as equity under GAAP;

(x) The Board-regulated institution, or an entity that the Board-regulated institution controls, did not purchase or directly or indirectly fund the purchase of the instrument;

(xi) The instrument is not secured, not covered by a guarantee of the Board-regulated institution or of an affiliate of the Board-regulated institution, and is not subject to any other arrangement that legally or economically enhances the seniority of the instrument;

(xii) The instrument has been issued in accordance with applicable laws and regulations; and

(xiii) The instrument is reported on the Board-regulated institution's regulatory financial statements separately from other capital instruments.

(2) Retained earnings.

(3) Accumulated other comprehensive income (AOCI) as reported under GAAP.¹¹

(4) Any common equity tier 1 minority interest, subject to the limitations in section 217.21.

(5) Notwithstanding the criteria for common stock instruments referenced above, a Board-regulated institution's common stock issued and held in trust for the benefit of its employees as part of an employee stock ownership plan does not violate any of the criteria in paragraph (b)(1)(iii), paragraph (b)(1)(iv) or paragraph (b)(1)(xi) of this section, provided that any repurchase of the stock is required solely by virtue of ERISA for an instrument of a Board-regulated institution that is not publicly-traded. In addition, an instrument issued by a Board-regulated institution to its employee stock ownership plan does not violate the criterion in paragraph (b)(1)(x) of this section.

(c) *Additional tier 1 capital.* Additional tier 1 capital is the sum of additional tier 1 capital elements and any related surplus, minus the

regulatory adjustments and deductions in section 217.22. Additional tier 1 capital elements are:

(1) Instruments (plus any related surplus) that meet the following criteria:

(i) The instrument is issued and paid-in;

(ii) The instrument is subordinated to depositors, general creditors, and subordinated debt holders of the Board-regulated institution in a receivership, insolvency, liquidation, or similar proceeding;

(iii) The instrument is not secured, not covered by a guarantee of the Board-regulated institution or of an affiliate of the Board-regulated institution, and not subject to any other arrangement that legally or economically enhances the seniority of the instrument;

(iv) The instrument has no maturity date and does not contain a dividend step-up or any other term or feature that creates an incentive to redeem; and

(v) If callable by its terms, the instrument may be called by the Board-regulated institution only after a minimum of five years following issuance, except that the terms of the instrument may allow it to be called earlier than five years upon the occurrence of a regulatory event that precludes the instrument from being included in additional tier 1 capital, a tax event, or if the issuing entity is required to register as an investment company pursuant to the Investment Company Act of 1940 (15 U.S.C. 80a-1 *et seq.*). In addition:

(A) The Board-regulated institution must receive prior approval from the Board to exercise a call option on the instrument.

(B) The Board-regulated institution does not create at issuance of the instrument, through any action or communication, an expectation that the call option will be exercised.

(C) Prior to exercising the call option, or immediately thereafter, the Board-regulated institution must either: replace the instrument to be called with an equal amount of instruments that meet the criteria under paragraph (b)

¹¹ See section 217.22 for specific adjustments related to AOCI.

of this section or this paragraph (c);¹² or demonstrate to the satisfaction of the Board that following redemption, the Board-regulated institution will continue to hold capital commensurate with its risk.

(vi) Redemption or repurchase of the instrument requires prior approval from the Board.

(vii) The Board-regulated institution has full discretion at all times to cancel dividends or other distributions on the instrument without triggering an event of default, a requirement to make a payment-in-kind, or an imposition of other restrictions on the Board-regulated institution except in relation to any distributions to holders of common stock or instruments that are *pari passu* with the instrument.

(viii) Any distributions on the instrument are paid out of the Board-regulated institution's net income, retained earnings, or surplus related to other additional tier 1 capital instruments. State member banks are subject to other legal restrictions on reductions in capital resulting from cash dividends, including out of the capital surplus account, under 12 U.S.C. 324 and 12 CFR 208.5.

(ix) The instrument does not have a credit-sensitive feature, such as a dividend rate that is reset periodically based in whole or in part on the Board-regulated institution's credit quality, but may have a dividend rate that is adjusted periodically independent of the Board-regulated institution's credit quality, in relation to general market interest rates or similar adjustments.

(x) The paid-in amount is classified as equity under GAAP.

(xi) The Board-regulated institution, or an entity that the Board-regulated institution controls, did not purchase or directly or indirectly fund the purchase of the instrument.

(xii) The instrument does not have any features that would limit or discourage

additional issuance of capital by the Board-regulated institution, such as provisions that require the Board-regulated institution to compensate holders of the instrument if a new instrument is issued at a lower price during a specified time frame.

(xiii) If the instrument is not issued directly by the Board-regulated institution or by a subsidiary of the Board-regulated institution that is an operating entity, the only asset of the issuing entity is its investment in the capital of the Board-regulated institution, and proceeds must be immediately available without limitation to the Board-regulated institution or to the Board-regulated institution's top-tier holding company in a form which meets or exceeds all of the other criteria for additional tier 1 capital instruments.¹³

(xiv) For an advanced approaches Board-regulated institution, the governing agreement, offering circular, or prospectus of an instrument issued after the date upon which the Board-regulated institution becomes subject to this part as set forth in section 217.1(f) must disclose that the holders of the instrument may be fully subordinated to interests held by the U.S. government in the event that the Board-regulated institution enters into a receivership, insolvency, liquidation, or similar proceeding.

(2) Tier 1 minority interest, subject to the limitations in section 217.21, that is not included in the Board-regulated institution's common equity tier 1 capital.

(3) (i) Any and all instruments that qualified as tier 1 capital under the Board's general risk-based capital rules under 12 CFR part 208, appendix A or 12 CFR part 225, appendix A, as then in effect, that were issued under the Small Business Jobs Act of 2010¹⁴ or prior to October 4, 2010, under the Emergency Economic Stabilization Act of 2008.¹⁵

¹² Replacement can be concurrent with redemption of existing additional tier 1 capital instruments.

¹³ *De minimis* assets related to the operation of the issuing entity can be disregarded for purposes of this criterion. assets related to the operation of the issuing entity can be disregarded for purposes of this criterion.

¹⁴ Public Law 111-240; 124 Stat. 2504 (2010).

¹⁵ Public Law 110-343; 122 Stat. 3765 (2008).

(ii) Any preferred stock instrument issued under the U.S. Department of the Treasury's Emergency Capital Investment Program pursuant to section 104A of the Community Development Banking and Financial Institutions Act of 1994, added by the Consolidated Appropriations Act, 2021.¹⁶

(4) Notwithstanding the criteria for additional tier 1 capital instruments referenced above:

(i) An instrument issued by a Board-regulated institution and held in trust for the benefit of its employees as part of an employee stock ownership plan does not violate any of the criteria in paragraph (c)(1)(iii) of this section, provided that any repurchase is required solely by virtue of ERISA for an instrument of a Board-regulated institution that is not publicly-traded. In addition, an instrument issued by a Board-regulated institution to its employee stock ownership plan does not violate the criteria in paragraph (c)(1)(v) or paragraph (c)(1)(xi) of this section; and

(ii) An instrument with terms that provide that the instrument may be called earlier than five years upon the occurrence of a rating agency event does not violate the criterion in paragraph (c)(1)(v) of this section provided that the instrument was issued and included in a Board-regulated institution's tier 1 capital prior to January 1, 2014, and that such instrument satisfies all other criteria under this section 217.20(c).

(d) *Tier 2 Capital.* Tier 2 capital is the sum of tier 2 capital elements and any related surplus, minus regulatory adjustments and deductions in section 217.22. Tier 2 capital elements are:

(1) Instruments (plus related surplus) that meet the following criteria:

- (i) The instrument is issued and paid-in;
- (ii) The instrument is subordinated to depositors and general creditors of the Board-regulated institution;
- (iii) The instrument is not secured, not

covered by a guarantee of the Board-regulated institution or of an affiliate of the Board-regulated institution, and not subject to any other arrangement that legally or economically enhances the seniority of the instrument in relation to more senior claims;

(iv) The instrument has a minimum original maturity of at least five years. At the beginning of each of the last five years of the life of the instrument, the amount that is eligible to be included in tier 2 capital is reduced by 20 percent of the original amount of the instrument (net of redemptions) and is excluded from regulatory capital when the remaining maturity is less than one year. In addition, the instrument must not have any terms or features that require, or create significant incentives for, the Board-regulated institution to redeem the instrument prior to maturity;¹⁶ and

(v) The instrument, by its terms, may be called by the Board-regulated institution only after a minimum of five years following issuance, except that the terms of the instrument may allow it to be called sooner upon the occurrence of an event that would preclude the instrument from being included in tier 2 capital, a tax event, or if the issuing entity is required to register as an investment company pursuant to the Investment Company Act of 1940 (15 U.S.C. 80a-1 *et seq.*). In addition:

(A) The Board-regulated institution must receive the prior approval of the Board to exercise a call option on the instrument.

(B) The Board-regulated institution does not create at issuance, through action or communication, an expectation the call option will be exercised.

(C) Prior to exercising the call option, or immediately thereafter, the Board-regulated institution must either: replace any amount called with an equivalent amount of an instrument

¹⁶ Public Law 116-260.

¹⁶ An instrument that by its terms automatically converts into a tier 1 capital instrument prior to five years after issuance complies with the five-year maturity requirement of this criterion.

that meets the criteria for regulatory capital under this section;¹⁷ or demonstrate to the satisfaction of the Board that following redemption, the Board-regulated institution would continue to hold an amount of capital that is commensurate with its risk.

(vi) The holder of the instrument must have no contractual right to accelerate payment of principal or interest on the instrument, except in the event of a receivership, insolvency, liquidation, or similar proceeding of the state member bank or depository institution holding company, as applicable, or of a major subsidiary depository institution of the depository institution holding company.

(vii) The instrument has no credit-sensitive feature, such as a dividend or interest rate that is reset periodically based in whole or in part on the Board-regulated institution's credit standing, but may have a dividend rate that is adjusted periodically independent of the Board-regulated institution's credit standing, in relation to general market interest rates or similar adjustments.

(viii) The Board-regulated institution, or an entity that the Board-regulated institution controls, has not purchased and has not directly or indirectly funded the purchase of the instrument.

(ix) If the instrument is not issued directly by the Board-regulated institution or by a subsidiary of the Board-regulated institution that is an operating entity, the only asset of the issuing entity is its investment in the capital of the Board-regulated institution, and proceeds must be immediately available without limitation to the Board-regulated institution or the Board-regulated institution's top-tier holding company in a form that meets or exceeds all the other criteria for tier 2 capital instruments under this section.¹⁸

(x) Redemption of the instrument prior

to maturity or repurchase requires the prior approval of the Board.

(xi) For an advanced approaches Board-regulated institution, the governing agreement, offering circular, or prospectus of an instrument issued after the date on which the advanced approaches Board-regulated institution becomes subject to this part under section 217.1(f) must disclose that the holders of the instrument may be fully subordinated to interests held by the U.S. government in the event that the Board-regulated institution enters into a receivership, insolvency, liquidation, or similar proceeding.

(2) Total capital minority interest, subject to the limitations set forth in section 217.21, that is not included in the Board-regulated institution's tier 1 capital.

(3) ALLL or AACL, as applicable, up to 1.25 percent of the Board-regulated institution's standardized total risk-weighted assets not including any amount of the ALLL or AACL, as applicable (and excluding in the case of a market risk Board-regulated institution, its standardized market risk-weighted assets).

(4) (i) Any instrument that qualified as tier 2 capital under the Board's general risk-based capital rules under 12 CFR part 208, appendix A, 12 CFR part 225, appendix A as then in effect, that were issued under the Small Business Jobs Act of 2010,¹⁹ or prior to October 4, 2010, under the Emergency Economic Stabilization Act of 2008.²⁰

(ii) Any debt instrument issued under the U.S. Department of the Treasury's Emergency Capital Investment Program pursuant to section 104A of the Community Development Banking and Financial Institutions Act of 1994, added by the Consolidated Appropriations Act, 2021.²¹

(5) For a Board-regulated institution that makes an AOCI opt-out election (as defined in paragraph (b)(2) of section 217.22), 45 percent of pretax net unrealized gains on available-for-sale preferred stock classified

¹⁷ A Board-regulated institution may replace tier 2 capital instruments concurrent with the redemption of existing tier 2 capital instruments.

¹⁸ A Board-regulated institution may disregard *de minimis* assets related to the operation of the issuing entity for purposes of this criterion.

¹⁹ Pub. L. 111-240; 124 Stat. 2504 (2010).

²⁰ Pub. L. 110-343; 122 Stat. 3765 (2008).

²¹ Public Law 116-260.

as an equity security under GAAP and available-for-sale equity exposures.

(6) Notwithstanding the criteria for tier 2 capital instruments referenced above, an instrument with terms that provide that the instrument may be called earlier than five years upon the occurrence of a rating agency event does not violate the criterion in paragraph (d)(1)(v) of this section provided that the instrument was issued and included in a Board-regulated institution's tier 1 or tier 2 capital prior to January 1, 2014, and that such instrument satisfies all other criteria under this paragraph (d).

(e) *Board approval of a capital element.*

(1) A Board-regulated institution must receive Board prior approval to include a capital element (as listed in this section) in its common equity tier 1 capital, additional tier 1 capital, or tier 2 capital unless the element:

(i) Was included in a Board-regulated institution's tier 1 capital or tier 2 capital prior to May 19, 2010 in accordance with the Board's risk-based capital rules that were effective as of that date and the underlying instrument may continue to be included under the criteria set forth in this section; or

(ii) Is equivalent, in terms of capital quality and ability to absorb losses with respect to all material terms, to a regulatory capital element the Board determined may be included in regulatory capital pursuant to paragraph (e)(3) of this section.

(2) When considering whether a Board-regulated institution may include a regulatory capital element in its common equity tier 1 capital, additional tier 1 capital, or tier 2 capital, the Federal Reserve Board will consult with the FDIC and OCC.

(3) After determining that a regulatory capital element may be included in a Board-regulated institution's common equity tier 1 capital, additional tier 1 capital, or tier 2 capital, the Board will make its decision publicly available, including a brief description of the material terms of the regulatory capital element and the rationale for the determination.

(f) A Board-regulated institution may not repurchase or redeem any common equity tier 1 capital, additional tier 1, or tier 2 capital instrument without the prior approval of the Board to the extent such prior approval is required by paragraph (b), (c), or (d) of this section, as applicable.

3-2121

SECTION 217.21—Minority Interest

(a) (1) *Applicability.* For purposes of section 217.20, a Board-regulated institution that is not an advanced approaches Board-regulated institution is subject to the minority interest limitations in this paragraph (a) if a consolidated subsidiary of the Board-regulated institution has issued regulatory capital that is not owned by the Board-regulated institution.

(2) *Common equity tier 1 minority interest includable in the common equity tier 1 capital of the Board-regulated institution.*

The amount of common equity tier 1 minority interest that a Board-regulated institution may include in common equity tier 1 capital must be no greater than 10 percent of the sum of all common equity tier 1 capital elements of the Board-regulated institution (not including the common equity tier 1 minority interest itself), less any common equity tier 1 capital regulatory adjustments and deductions in accordance with section 217.22 (a) and (b).

(3) *Tier 1 minority interest includable in the tier 1 capital of the Board-regulated institution.* The amount of tier 1 minority interest that a Board-regulated institution may include in tier 1 capital must be no greater than 10 percent of the sum of all tier 1 capital elements of the Board-regulated institution (not including the tier 1 minority interest itself), less any tier 1 capital regulatory adjustments and deductions in accordance with section 217.22(a) and (b).

(4) *Total capital minority interest includable in the total capital of the Board-regulated institution.* The amount of total capital minority interest that a Board-regulated institution may include in total capital must be no greater than 10 percent of the sum of all total capital elements of the Board-regulated institution (not includ-

ing the total capital minority interest itself), less any total capital regulatory adjustments and deductions in accordance with section 217.22(a) and (b).

(b) (1) *Applicability.* For purposes of section 217.20, an advanced approaches Board-regulated institution is subject to the minority interest limitations in this paragraph (b) if:

(i) A consolidated subsidiary of the advanced approaches Board-regulated institution has issued regulatory capital that is not owned by the Board-regulated institution; and

(ii) For each relevant regulatory capital ratio of the consolidated subsidiary, the ratio exceeds the sum of the subsidiary's minimum regulatory capital requirements plus its capital conservation buffer.

(2) *Difference in capital adequacy standards at the subsidiary level.* For purposes of the minority interest calculations in this section, if the consolidated subsidiary issuing the capital is not subject to capital adequacy standards similar to those of the advanced approaches Board-regulated institution, the advanced approaches Board-regulated institution must assume that the capital adequacy standards of the advanced approaches Board-regulated institution apply to the subsidiary.

(3) *Common equity tier 1 minority interest includable in the common equity tier 1 capital of the Board-regulated institution.* For each consolidated subsidiary of an advanced approaches Board-regulated institution, the amount of common equity tier 1 minority interest the advanced approaches Board-regulated institution may include in common equity tier 1 capital is equal to:

(i) The common equity tier 1 minority interest of the subsidiary; minus

(ii) The percentage of the subsidiary's common equity tier 1 capital that is not owned by the advanced approaches Board-regulated institution, multiplied by the difference between the common equity tier 1 capital of the subsidiary and the lower of:

(A) The amount of common equity tier 1 capital the subsidiary must hold,

or would be required to hold pursuant to this paragraph (b), to avoid restrictions on distributions and discretionary bonus payments under section 217.11 or equivalent standards established by the subsidiary's home country supervisor; or

(B) (1) The standardized total risk-weighted assets of the advanced approaches Board-regulated institution that relate to the subsidiary multiplied by

(2) The common equity tier 1 capital ratio the subsidiary must maintain to avoid restrictions on distributions and discretionary bonus payments under section 217.11 or equivalent standards established by the subsidiary's home country supervisor.

(4) *Tier 1 minority interest includable in the tier 1 capital of the advanced approaches Board-regulated institution.* For each consolidated subsidiary of the advanced approaches Board-regulated institution, the amount of tier 1 minority interest the advanced approaches Board-regulated institution may include in tier 1 capital is equal to:

(i) The tier 1 minority interest of the subsidiary; minus

(ii) The percentage of the subsidiary's tier 1 capital that is not owned by the advanced approaches Board-regulated institution multiplied by the difference between the tier 1 capital of the subsidiary and the lower of:

(A) The amount of tier 1 capital the subsidiary must hold, or would be required to hold pursuant to this paragraph (b), to avoid restrictions on distributions and discretionary bonus payments under section 217.11 or equivalent standards established by the subsidiary's home country supervisor, or

(B) (1) The standardized total risk-weighted assets of the advanced approaches Board-regulated institution that relate to the subsidiary multiplied by

(2) The tier 1 capital ratio the sub-

subsidiary must maintain to avoid restrictions on distributions and discretionary bonus payments under section 217.11 or equivalent standards established by the subsidiary's home country supervisor.

(5) *Total capital minority interest includable in the total capital of the Board-regulated institution.* For each consolidated subsidiary of the advanced approaches Board-regulated institution, the amount of total capital minority interest the advanced approaches Board-regulated institution may include in total capital is equal to:

- (i) The total capital minority interest of the subsidiary; minus
- (ii) The percentage of the subsidiary's total capital that is not owned by the advanced approaches Board-regulated institution multiplied by the difference between the total capital of the subsidiary and the lower of:

(A) The amount of total capital the subsidiary must hold, or would be required to hold pursuant to this paragraph (b), to avoid restrictions on distributions and discretionary bonus payments under section 217.11 or equivalent standards established by the subsidiary's home country supervisor, or

(B) (1) The standardized total risk-weighted assets of the advanced approaches Board-regulated institution that relate to the subsidiary multiplied by

(2) The total capital ratio the subsidiary must maintain to avoid restrictions on distributions and discretionary bonus payments under section 217.11 or equivalent standards established by the subsidiary's home country supervisor.

(1) Goodwill, net of associated deferred tax liabilities (DTLs) in accordance with paragraph (e) of this section, including goodwill that is embedded in the valuation of a significant investment in the capital of an unconsolidated financial institution in the form of common stock (and that is reflected in the consolidated financial statements of the Board-regulated institution), in accordance with paragraph (d) of this section;

(i) Goodwill, net of associated deferred tax liabilities (DTLs) in accordance with paragraph (e) of this section; and

(ii) For an advanced approaches Board-regulated institution, goodwill that is embedded in the valuation of a significant investment in the capital of an unconsolidated financial institution in the form of common stock (and that is reflected in the consolidated financial statements of the advanced approaches Board-regulated institution), in accordance with paragraph (d) of this section;

(2) Intangible assets, other than MSAs, net of associated DTLs in accordance with paragraph (e) of this section;

(3) Deferred tax assets (DTAs) that arise from net operating loss and tax credit carryforwards net of any related valuation allowances and net of DTLs in accordance with paragraph (e) of this section;

(4) Any gain-on-sale in connection with a securitization exposure;

(5) (i) Any defined benefit pension fund net asset, net of any associated DTL in accordance with paragraph (e) of this section, held by a depository institution holding company. With the prior approval of the Board, this deduction is not required for any defined benefit pension fund net asset to the extent the depository institution holding company has unrestricted and unfettered access to the assets in that fund.

(ii) For an insured depository institution, no deduction is required.

(iii) A Board-regulated institution must risk weight any portion of the defined benefit pension fund asset that is not deducted under paragraphs (a)(5)(i) or (a)(5)(ii) of this section as if the Board-regulated institution directly holds a pro-

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SECTION 217.22—Regulatory Capital Adjustments and Deductions

(a) *Regulatory capital deductions from common equity tier 1 capital.* A Board-regulated institution must deduct from the sum of its common equity tier 1 capital elements the items set forth in this paragraph (a):

portional ownership share of each exposure in the defined benefit pension fund.

(6) For an advanced approaches Board-regulated institution that has completed the parallel run process and that has received notification from the Board pursuant to section 217.121(d), the amount of expected credit loss that exceeds its eligible credit reserves; and

(7) *Financial subsidiaries.*

(i) A state member bank must deduct the aggregate amount of its outstanding equity investment, including retained earnings, in its financial subsidiaries (as defined in 12 CFR 208.77) and may not consolidate the assets and liabilities of a financial subsidiary with those of the state member bank.

(ii) No other deduction is required under section 217.22(c) for investments in the capital instruments of financial subsidiaries.

(b) *Regulatory adjustments to common equity tier 1 capital.*

(1) A Board-regulated institution must adjust the sum of common equity tier 1 capital elements pursuant to the requirements set forth in this paragraph (b). Such adjustments to common equity tier 1 capital must be made net of the associated deferred tax effects.

(i) A Board-regulated institution that makes an AOCI opt-out election (as defined in paragraph (b)(2) of this section), must make the adjustments required under section 217.22(b)(2)(i).

(ii) A Board-regulated institution that is an advanced approaches Board-regulated institution, and a Board-regulated institution that has not made an AOCI opt-out election (as defined in paragraph (b)(2) of this section), must deduct any accumulated net gains and add any accumulated net losses on cash flow hedges included in AOCI that relate to the hedging of items that are not recognized at fair value on the balance sheet.

(iii) A Board-regulated institution must deduct any net gain and add any net loss related to changes in the fair value of liabilities that are due to changes in the

Board-regulated institution's own credit risk. An advanced approaches Board-regulated institution must deduct the difference between its credit spread premium and the risk-free rate for derivatives that are liabilities as part of this adjustment.

(2) *AOCI opt-out election.*

(i) A Board-regulated institution that is not an advanced approaches Board-regulated institution may make a one-time election to opt out of the requirement to include all components of AOCI (with the exception of accumulated net gains and losses on cash flow hedges related to items that are not fair-valued on the balance sheet) in common equity tier 1 capital (AOCI opt-out election). A Board-regulated institution that makes an AOCI opt-out election in accordance with this paragraph (b)(2) must adjust common equity tier 1 capital as follows:

(A) Subtract any net unrealized gains and add any net unrealized losses on available-for-sale securities;

(B) Subtract any net unrealized losses on available-for-sale preferred stock classified as an equity security under GAAP and available-for-sale equity exposures;

(C) Subtract any accumulated net gains and add any accumulated net losses on cash flow hedges;

(D) Subtract any amounts recorded in AOCI attributed to defined benefit postretirement plans resulting from the initial and subsequent application of the relevant GAAP standards that pertain to such plans (excluding, at the Board-regulated institution's option, the portion relating to pension assets deducted under paragraph (a)(5) of this section); and

(E) Subtract any net unrealized gains and add any net unrealized losses on held-to-maturity securities that are included in AOCI.

(ii) A Board-regulated institution that is not an advanced approaches Board-regulated institution must make its AOCI opt-out election in the Call Report, for a state member bank, FR Y-9C, for bank

holding companies or savings and loan holding companies:

(A) If the Board-regulated institution is a Category III Board-regulated institution or Category IV Board-regulated institution, during the first reporting period after the Board-regulated institution meets the definition of a Category III Board-regulated institution or Category IV Board-regulated institution in section 217.2; or

(B) If the A Board-regulated institution is not a Category III Board-regulated institution and not a Category IV Board-regulated institution, during the first reporting period after the Board-regulated institution is required to comply with subpart A of this part as set forth in section 217.1(f).

(iii) Each depository institution subsidiary of a Board-regulated institution that is not an advanced approaches Board-regulated institution must elect the same option as the Board-regulated institution pursuant to paragraph (b)(2).

(iv) With prior notice to the Board, a Board-regulated institution resulting from a merger, acquisition, or purchase transaction may make a new AOCI optout election in the Call Report (for a state member bank), or FR Y-9C or FR Y-9SP, as applicable (for bank holding companies or savings and loan holding companies) filed by the resulting Board-regulated institution for the first reporting period after it is required to comply with subpart A of this part as set forth in section 217.1(f) if:

(A) Other than as set forth in paragraph (b)(2)(iv)(C) of this section, the merger, acquisition, or purchase transaction involved the acquisition or purchase of all or substantially all of either the assets or voting stock of another banking organization that is subject to regulatory capital requirements issued by the Board of Governors of the Federal Reserve, the Federal Deposit Insurance Corporation, or

the Office of the Comptroller of the Currency;²²

(B) Prior to the merger, acquisition, or purchase transaction, only one of the banking organizations involved in the transaction made an AOCI opt-out election under this section; and

(C) A Board-regulated institution may, with the prior approval of the Board, change its AOCI opt-out election under this paragraph (b) in the case of a merger, acquisition, or purchase transaction that meets the requirements set forth at paragraph (b)(2)(iv)(B) of this section, but does not meet the requirements of paragraph (b)(2)(iv)(A). In making such a determination, the Board may consider the terms of the merger, acquisition, or purchase transaction, as well as the extent of any changes to the risk profile, complexity, and scope of operations of the Board-regulated institution resulting from the merger, acquisition, or purchase transaction.

(3) *Regulatory capital requirement for insurance underwriting risks.* A bank holding company or savings and loan holding company must deduct an amount equal to the regulatory capital requirement for insurance underwriting risks established by the regulator of any insurance underwriting activities of the company. The bank holding company or savings and loan holding company must take the deduction 50 percent from tier 1 capital and 50 percent from tier 2 capital. If the amount deductible from tier 2 capital exceeds the Board-regulated institution's tier 2 capital, the Board-regulated institution must deduct the excess from tier 1 capital.

(c) *Deductions from regulatory capital related to investments in capital instruments or covered debt instruments.*²³

(1) *Investment in the Board-regulated insti-*

²² These rules include the regulatory capital requirements set forth at 12 CFR part 3 (OCC); 12 CFR part 225 (Board); 12 CFR part 325, and 12 CFR part 390 (FDIC).

²³ The Board-regulated institution must calculate amounts deducted under paragraphs (c) through (f) of this section after it calculates the amount of ALLL or AACL, as applicable, includable in tier 2 capital under section 217.20(d)(3).

tution's own capital or covered debt instruments. A Board-regulated institution must deduct an investment in the Board-regulated institution's own capital instruments, and an advanced approaches Board-regulated institution also must deduct an investment in the Board-regulated institution's own covered debt instruments, as follows:

- (i) A Board-regulated institution must deduct an investment in the Board-regulated institution's own common stock instruments from its common equity tier 1 capital elements to the extent such instruments are not excluded from regulatory capital under section 217.20(b)(1);
- (ii) A Board-regulated institution must deduct an investment in the Board-regulated institution's own additional tier 1 capital instruments from its additional tier 1 capital elements;
- (iii) A Board-regulated institution must deduct an investment in the Board-regulated institution's own tier 2 capital instruments from its tier 2 capital elements; and
- (iv) An advanced approaches Board-regulated institution must deduct an investment in the institution's own covered debt instruments from its tier 2 capital elements, as applicable. If the advanced approaches Board-regulated institution does not have a sufficient amount of tier 2 capital to effect this deduction, the institution must deduct the shortfall amount from the next higher (that is, more subordinated) component of regulatory capital.

(2) *Corresponding deduction approach.* For purposes of subpart C of this part, the corresponding deduction approach is the methodology used for the deductions from regulatory capital related to reciprocal cross holdings (as described in paragraph (c)(3) of this section), investments in the capital of unconsolidated financial institutions for a Board-regulated institution that is not an advanced approaches Board-regulated institution (as described in paragraph (c)(4) of this section), nonsignificant investments in the capital of unconsolidated financial institutions for an advanced approaches Board-regulated institution (as described in paragraph (c)(5) of this section), and non-

common stock significant investments in the capital of unconsolidated financial institutions for an advanced approaches Board-regulated institution (as described in paragraph (c)(6) of this section). Under the corresponding deduction approach, a Board-regulated institution must make deductions from the component of capital for which the underlying instrument would qualify if it were issued by the Board-regulated institution itself, as described in paragraphs (c)(2)(i) through (iii) of this section. If the Board-regulated institution does not have a sufficient amount of a specific component of capital to effect the required deduction, the shortfall must be deducted according to paragraph (f) of this section.

(i) If an investment is in the form of an instrument issued by a financial institution that is not a regulated financial institution, the Board-regulated institution must treat the instrument as:

(A) A common equity tier 1 capital instrument if it is common stock or represents the most subordinated claim in a liquidation of the financial institution; and

(B) An additional tier 1 capital instrument if it is subordinated to all creditors of the financial institution and is senior in liquidation only to common shareholders.

(ii) If an investment is in the form of an instrument issued by a regulated financial institution and the instrument does not meet the criteria for common equity tier 1, additional tier 1 or tier 2 capital instruments under section 217.20, the Board-regulated institution must treat the instrument as:

(A) A common equity tier 1 capital instrument if it is common stock included in GAAP equity or represents the most subordinated claim in liquidation of the financial institution;

(B) An additional tier 1 capital instrument if it is included in GAAP equity, subordinated to all creditors of the financial institution, and senior in a receivership, insolvency, liquidation, or similar proceeding only to common shareholders;

(C) A tier 2 capital instrument if it is not included in GAAP equity but considered regulatory capital by the primary supervisor of the financial institution; and

(D) For an advanced approaches Board-regulated institution, a tier 2 capital instrument if it is a covered debt instrument.

(iii) If an investment is in the form of a non-qualifying capital instrument (as defined in section 217.300(c)), the Board-regulated institution must treat the instrument as:

(A) An additional tier 1 capital instrument if such instrument was included in the issuer's tier 1 capital prior to May 19, 2010; or

(B) A tier 2 capital instrument if such instrument was included in the issuer's tier 2 capital (but not includable in tier 1 capital) prior to May 19, 2010.

(3) *Reciprocal cross holdings in the capital of financial institutions.*

(i) A Board-regulated institution must deduct an investment in the capital of other financial institutions that it holds reciprocally, where such reciprocal cross holdings result from a formal or informal arrangement to swap, exchange, or otherwise intend to hold each other's capital instruments, by applying the corresponding deduction approach in paragraph (c)(2) of this section.

(ii) An advanced approaches Board-regulated institution must deduct an investment in any covered debt instrument that the institution holds reciprocally with another financial institution, where such reciprocal cross holdings result from a formal or informal arrangement to swap, exchange, or otherwise intend to hold each other's capital or covered debt instruments, by applying the corresponding deduction approach in paragraph (c)(2) of this section.

(4) *Investments in the capital of unconsolidated financial institutions.* A Board-regulated institution that is not an advanced approaches Board-regulated institution must deduct its investments in the capital of unconsolidated financial institutions (as de-

finied in section 217.2) that exceed 25 percent of the sum of the Board-regulated institution's common equity tier 1 capital elements minus all deductions from and adjustments to common equity tier 1 capital elements required under paragraphs (a) through (c)(3) of this section by applying the corresponding deduction approach in paragraph (c)(2) of this section.²⁴ The deductions described in this section are net of associated DTLs in accordance with paragraph (e) of this section. In addition, with the prior written approval of the Board, a Board-regulated institution that underwrites a failed underwriting, for the period of time stipulated by the Board, is not required to deduct an investment in the capital of an unconsolidated financial institution pursuant to this paragraph (c) to the extent the investment is related to the failed underwriting.²⁵

(5) *Non-significant investments in the capital of unconsolidated financial institutions.*

(i) An advanced approaches Board-regulated institution must deduct its non-significant investments in the capital of unconsolidated financial institutions (as defined in section 217.2) that, in the aggregate and together with any investment in a covered debt instrument (as defined in section 217.2) issued by a financial institution in which the Board-regulated institution does not have a significant investment in the capital of the unconsolidated financial institution (as defined in section 217.2), exceeds 10 percent of the sum of the advanced approaches Board-regulated institution's common equity tier 1 capital elements minus all deductions from and adjustments to common equity

²⁴ With the prior written approval of the Board, for the period of time stipulated by the Board, a Board-regulated institution that is not an advanced approaches Board-regulated institution is not required to deduct an investment in the capital of an unconsolidated financial institution pursuant to this paragraph if the financial institution is in distress and if such investment is made for the purpose of providing financial support to the financial institution, as determined by the Board.

²⁵ Any investments in the capital of unconsolidated financial institutions that do not exceed the 25 percent threshold for investments in the capital of unconsolidated financial institutions under this section must be assigned the appropriate risk weight under subparts D or F of this part, as applicable.

tier 1 capital elements required under paragraphs (a) through (c)(3) of this section (the 10 percent threshold for non-significant investments) by applying the corresponding deduction approach in paragraph (c)(2) of this section.²⁶ The deductions described in this paragraph are net of associated DTLs in accordance with paragraph (e) of this section. In addition, with the prior written approval of the Board, an advanced approaches Board-regulated institution that underwrites a failed underwriting, for the period of time stipulated by the Board, is not required to deduct from capital a non-significant investment in the capital of an unconsolidated financial institution or an investment in a covered debt instrument pursuant to this paragraph (c)(5) to the extent the investment is related to the failed underwriting.²⁷ For any calculation under this paragraph (c)(5)(i), an advanced approaches Board-regulated institution may exclude the amount of an investment in a covered debt instrument under paragraph (c)(5)(iii) or (iv) of this section, as applicable.

(ii) For an advanced approaches Board-regulated institution, the amount to be deducted under this paragraph (c)(5) from a specific capital component is equal to:

(A) The advanced approaches Board-regulated institution's aggregate non-significant investments in the capital of an unconsolidated financial institution and, if applicable, any investments in a covered debt instrument subject to deduction under this paragraph (c)(5), exceeding the 10 percent threshold for non-significant investments, multiplied by

(B) The ratio of the advanced approaches Board-regulated institution's aggregate non-significant investments in the capital of an unconsolidated financial institution (in the form of such capital component) to the advanced approaches Board-regulated institution's total non-significant investments in unconsolidated financial institutions, with an investment in a covered debt instrument being treated as tier 2 capital for this purpose.

(iii) For purposes of applying the deduction under paragraph (c)(5)(i) of this section, an advanced approaches Board-regulated institution that is not a global systemically important BHC or a subsidiary of a global systemically important banking organization, as defined in 12 CFR 252.2, may exclude from the deduction the amount of the Board-regulated institution's gross long position, in accordance with section 217.22(h)(2), in investments in covered debt instruments issued by financial institutions in which the Board-regulated institution does not have a significant investment in the capital of the unconsolidated financial institutions up to an amount equal to 5 percent of the sum of the Board-regulated institution's common equity tier 1 capital elements minus all deductions from and adjustments to common equity tier 1 capital elements required under paragraphs (a) through (c)(3) of this section, net of associated DTLs in accordance with paragraph (e) of this section.

(iv) Prior to applying the deduction under paragraph (c)(5)(i) of this section:

(A) A global systemically important BHC or a Board-regulated institution that is a subsidiary of a global systemically important BHC may designate any investment in a covered debt instrument as an excluded covered debt instrument, as defined in section 217.2.

(B) A global systemically important BHC or a Board-regulated institution that is a subsidiary of a global systemically important BHC must deduct, according to the corresponding deduction approach in paragraph (c)(2) of this

²⁶ With the prior written approval of the Board, for the period of time stipulated by the Board, an advanced approaches Board-regulated institution is not required to deduct a non-significant investment in the capital of an unconsolidated financial institution or an investment in a covered debt instrument pursuant to this paragraph if the financial institution is in distress and if such investment is made for the purpose of providing financial support to the financial institution, as determined by the Board.

²⁷ Any non-significant investment in the capital of an unconsolidated financial institution or any investment in a covered debt instrument that is not required to be deducted under this paragraph (c)(5) or otherwise under this section must be assigned the appropriate risk weight under subparts D, E, or F of this part, as applicable.

section, its gross long position, calculated in accordance with paragraph (h)(2) of this section, in a covered debt instrument that was originally designated as an excluded covered debt instrument, in accordance with paragraph (c)(5)(iv)(A) of this section, but no longer qualifies as an excluded covered debt instrument.

(C) A global systemically important BHC or a Board-regulated institution that is a subsidiary of a global systemically important BHC must deduct according to the corresponding deduction approach in paragraph (c)(2) of this section the amount of its gross long position, calculated in accordance with paragraph (h)(2) of this section, in a direct or indirect investment in a covered debt instrument that was originally designated as an excluded covered debt instrument, in accordance with paragraph (c)(5)(iv)(A) of this section, and has been held for more than thirty business days.

(D) A global systemically important BHC or a Board-regulated institution that is a subsidiary of a global systemically important BHC must deduct according to the corresponding deduction approach in paragraph (c)(2) of this section its gross long position, calculated in accordance with paragraph (h)(2) of this section, of its aggregate position in excluded covered debt instruments that exceeds 5 percent of the sum of the Board-regulated institution's common equity tier 1 capital elements minus all deductions from and adjustments to common equity tier 1 capital elements required under paragraphs (a) through (c)(3) of this section, net of associated DTLs in accordance with paragraph (e) of this section.

(6) *Significant investments in the capital of unconsolidated financial institutions that are not in the form of common stock.* If an advanced approaches Board-regulated institution has a significant investment in the capital of an unconsolidated financial institution, the advanced approaches Board-

regulated institution must deduct from capital any such investment issued by the unconsolidated financial institution that is held by the Board-regulated institution other than an investment in the form of common stock, as well as any investment in a covered debt instrument issued by the unconsolidated financial institution, by applying the corresponding deduction approach in paragraph (c)(2) of this section.²⁸ The deductions described in this section are net of associated DTLs in accordance with paragraph (e) of this section. In addition, with the prior written approval of the Board, for the period of time stipulated by the Board, an advanced approaches Board-regulated institution that underwrites a failed underwriting is not required to deduct the significant investment in the capital of an unconsolidated financial institution or an investment in a covered debt instrument pursuant to this paragraph (c)(6) if such investment is related to such failed underwriting.

(d) *MSAs and certain DTAs subject to common equity tier 1 capital deduction thresholds.*

(1) A Board-regulated institution that is not an advanced approaches Board-regulated institution must make deductions from regulatory capital as described in this paragraph (d)(1).

(i) The Board-regulated institution must deduct from common equity tier 1 capital elements the amount of each of the items set forth in this paragraph (d)(1) that, individually, exceeds 25 percent of the sum of the Board-regulated institution's common equity tier 1 capital elements, less adjustments to and deductions from common equity tier 1 capital required under paragraphs (a) through (c)(3) of this section (the 25 percent common equity tier 1 capital deduction threshold).²⁹

²⁸ With prior written approval of the Board, for the period of time stipulated by the Board, an advanced approaches Board-regulated institution is not required to deduct a significant investment in the capital of an unconsolidated financial institution, including an investment in a covered debt instrument, under this paragraph (c)(6) or otherwise under this section if such investment is made for the purpose of providing financial support to the financial institution as determined by the Board.

²⁹ The amount of the items in paragraph (d)(1) of this

Continued

(ii) The Board-regulated institution must deduct from common equity tier 1 capital elements the amount of DTAs arising from temporary differences that the Board-regulated institution could not realize through net operating loss carrybacks, net of any related valuation allowances and net of DTLs, in accordance with paragraph (e) of this section. A Board-regulated institution is not required to deduct from the sum of its common equity tier 1 capital elements DTAs (net of any related valuation allowances and net of DTLs, in accordance with section 217.22(e)) arising from timing differences that the Board-regulated institution could realize through net operating loss carrybacks. The Board-regulated institution must risk weight these assets at 100 percent. For a state member bank that is a member of a consolidated group for tax purposes, the amount of DTAs that could be realized through net operating loss carrybacks may not exceed the amount that the state member bank could reasonably expect to have refunded by its parent holding company.

(iii) The Board-regulated institution must deduct from common equity tier 1 capital elements the amount of MSAs net of associated DTLs, in accordance with paragraph (e) of this section.

(iv) For purposes of calculating the amount of DTAs subject to deduction pursuant to paragraph (d)(1) of this section, a Board-regulated institution may exclude DTAs and DTLs relating to adjustments made to common equity tier 1 capital under paragraph (b) of this section. A Board-regulated institution that elects to exclude DTAs relating to adjustments under paragraph (b) of this section also must exclude DTLs and must do so consistently in all future calculations. A Board-regulated institution may change its exclusion preference only after obtaining the prior approval of the Board.

(2) An advanced approaches Board-regulated institution must make deductions from regulatory capital as described in this paragraph (d)(2).

(i) An advanced approaches Board-regulated institution must deduct from common equity tier 1 capital elements the amount of each of the items set forth in this paragraph (d)(2) that, individually, exceeds 10 percent of the sum of the advanced approaches Board-regulated institution's common equity tier 1 capital elements, less adjustments to and deductions from common equity tier 1 capital required under paragraphs (a) through (c) of this section (the 10 percent common equity tier 1 capital deduction threshold).

(A) DTAs arising from temporary differences that the advanced approaches Board-regulated institution could not realize through net operating loss carrybacks, net of any related valuation allowances and net of DTLs, in accordance with paragraph (e) of this section. An advanced approaches Board-regulated institution is not required to deduct from the sum of its common equity tier 1 capital elements DTAs (net of any related valuation allowances and net of DTLs, in accordance with section 217.22(e)) arising from timing differences that the advanced approaches Board-regulated institution could realize through net operating loss carrybacks. The advanced approaches Board-regulated institution must risk weight these assets at 100 percent. For a state member bank that is a member of a consolidated group for tax purposes, the amount of DTAs that could be realized through net operating loss carrybacks may not exceed the amount that the state member bank could reasonably expect to have refunded by its parent holding company.

(B) MSAs net of associated DTLs, in accordance with paragraph (e) of this section.

(C) Significant investments in the capital of unconsolidated financial institutions in the form of common stock, net of associated DTLs in accor-

Continued
 section that is not deducted from common equity tier 1 capital must be included in the risk-weighted assets of the Board-regulated institution and assigned a 250 percent risk weight.

dance with paragraph (e) of this section.³⁰ Significant investments in the capital of unconsolidated financial institutions in the form of common stock subject to the 10 percent common equity tier 1 capital deduction threshold may be reduced by any goodwill embedded in the valuation of such investments deducted by the advanced approaches Board-regulated institution pursuant to paragraph (a)(1) of this section. In addition, with the prior written approval of the Board, for the period of time stipulated by the Board, an advanced approaches Board-regulated institution that underwrites a failed underwriting is not required to deduct a significant investment in the capital of an unconsolidated financial institution in the form of common stock pursuant to this paragraph (d)(2) if such investment is related to such failed underwriting.

(ii) An advanced approaches Board-regulated institution must deduct from common equity tier 1 capital elements the items listed in paragraph (d)(2)(i) of this section that are not deducted as a result of the application of the 10 percent common equity tier 1 capital deduction threshold, and that, in aggregate, exceed 17.65 percent of the sum of the advanced approaches Board-regulated institution's common equity tier 1 capital elements, minus adjustments to and deductions from common equity tier 1 capital required under paragraphs (a) through (c) of this section, minus the items listed in paragraph (d)(2)(i) of this section (the 15 percent common equity tier 1 capital deduction threshold). Any goodwill that has been deducted under paragraph (a)(1) of this section can be excluded from the significant investments in the capital of

unconsolidated financial institutions in the form of common stock.³¹

(iii) For purposes of calculating the amount of DTAs subject to the 10 and 15 percent common equity tier 1 capital deduction thresholds, an advanced approaches Board-regulated institution may exclude DTAs and DTLs relating to adjustments made to common equity tier 1 capital under paragraph (b) of this section. An advanced approaches Board-regulated institution that elects to exclude DTAs relating to adjustments under paragraph (b) of this section also must exclude DTLs and must do so consistently in all future calculations. An advanced approaches Board-regulated institution may change its exclusion preference only after obtaining the prior approval of the Board.

(e) *Netting of DTLs against assets subject to deduction.*

(1) Except as described in paragraph (e)(3) of this section, netting of DTLs against assets that are subject to deduction under this section is permitted, but not required, if the following conditions are met:

- (i) The DTL is associated with the asset; and
- (ii) The DTL would be extinguished if the associated asset becomes impaired or is derecognized under GAAP.

(2) A DTL may only be netted against a single asset.

(3) For purposes of calculating the amount of DTAs subject to the threshold deduction in paragraph (d) of this section, the amount of DTAs that arise from net operating loss and tax credit carryforwards, net of any related valuation allowances, and of DTAs arising from temporary differences that the Board-regulated institution could not realize through net operating loss carrybacks, net of any related valuation allowances, may be offset by DTLs (that have not been netted against assets subject to deduction pursuant

³⁰ With the prior written approval of the Board, for the period of time stipulated by the Board, an advanced approaches Board-regulated institution is not required to deduct a significant investment in the capital instrument of an unconsolidated financial institution in distress in the form of common stock pursuant to this section if such investment is made for the purpose of providing financial support to the financial institution as determined by the Board.

³¹ The amount of the items in paragraph (d)(2) of this section that is not deducted from common equity tier 1 capital pursuant to this section must be included in the risk-weighted assets of the advanced approaches Board-regulated institution and assigned a 250 percent risk weight.

to paragraph (e)(1) of this section) subject to the conditions set forth in this paragraph (e).

(i) Only the DTAs and DTLs that relate to taxes levied by the same taxation authority and that are eligible for offsetting by that authority may be offset for purposes of this deduction.

(ii) The amount of DTLs that the Board-regulated institution nets against DTAs that arise from net operating loss and tax credit carryforwards, net of any related valuation allowances, and against DTAs arising from temporary differences that the Board-regulated institution could not realize through net operating loss carrybacks, net of any related valuation allowances, must be allocated in proportion to the amount of DTAs that arise from net operating loss and tax credit carryforwards (net of any related valuation allowances, but before any offsetting of DTLs) and of DTAs arising from temporary differences that the Board-regulated institution could not realize through net operating loss carrybacks (net of any related valuation allowances, but before any offsetting of DTLs), respectively.

(4) A Board-regulated institution may offset DTLs embedded in the carrying value of a leveraged lease portfolio acquired in a business combination that are not recognized under GAAP against DTAs that are subject to paragraph (d) of this section in accordance with this paragraph (e).

(5) A Board-regulated institution must net DTLs against assets subject to deduction under this section in a consistent manner from reporting period to reporting period. A Board-regulated institution may change its preference regarding the manner in which it nets DTLs against specific assets subject to deduction under this section only after obtaining the prior approval of the Board.

(f) *Insufficient amounts of a specific regulatory capital component to effect deductions.* Under the corresponding deduction approach, if a Board-regulated institution does not have a sufficient amount of a specific component of capital to effect the full amount of any deduc-

tion from capital required under paragraph (d) of this section, the Board-regulated institution must deduct the shortfall amount from the next higher (that is, more subordinated) component of regulatory capital. Any investment by an advanced approaches Board-regulated institution in a covered debt instrument must be treated as an investment in the tier 2 capital for purposes of this paragraph (f). Notwithstanding any other provision of this section, a qualifying community banking organization (as defined in section 217.12) that has elected to use the community bank leverage ratio framework pursuant to section 217.12 is not required to deduct any shortfall of tier 2 capital from its additional tier 1 capital or common equity tier 1 capital.

(g) *Treatment of assets that are deducted.* A Board-regulated institution must exclude from standardized total risk-weighted assets and, as applicable, advanced approaches total risk-weighted assets any item that is required to be deducted from regulatory capital.

(h) *Net long position.*

(1) *In general.* For purposes of calculating the amount of a Board-regulated institution's investment in the Board regulated institution's own capital instrument, investment in the capital of an unconsolidated financial institution, and investment in a covered debt instrument under this section, the institution's net long position is the gross long position in the underlying instrument determined in accordance with paragraph (h)(2) of this section, as adjusted to recognize any short position by the Board-regulated institution in the same instrument subject to paragraph (h)(3) of this section.

(2) *Gross long position.* A gross long position is determined as follows:

(i) For an equity exposure that is held directly by the Board-regulated institution, the adjusted carrying value of the exposure as that term is defined in section 217.51(b);

(ii) For an exposure that is held directly and that is not an equity exposure or a securitization exposure, the exposure amount as that term is defined in section 217.2;

(iii) For each indirect exposure, the

Board-regulated institution's carrying value of its investment in an investment fund or, alternatively:

(A) A Board-regulated institution may, with the prior approval of the Board, use a conservative estimate of the amount of its indirect investment in the Board-regulated institution's own capital instruments, its indirect investment in the capital of an unconsolidated financial institution, or its indirect investment in a covered debt instrument held through a position in an index, as applicable; or

(B) A Board-regulated institution may calculate the gross long position for an indirect exposure to the Board-regulated institution's own capital instruments, the capital of an unconsolidated financial institution, or a covered debt instrument by multiplying the Board-regulated institution's carrying value of its investment in the investment fund by either:

(1) The highest stated investment limit (in percent) for an investment in the Board-regulated institution's own capital instruments, an investment in the capital of an unconsolidated financial institution, or an investment in a covered debt instrument, as applicable, as stated in the prospectus, partnership agreement, or similar contract defining permissible investments of the investment fund; or

(2) The investment fund's actual holdings (in percent) of the investment in the Board-regulated institution's own capital instruments, investment in the capital of an unconsolidated financial institution, or investment in a covered debt instrument, as applicable; and

(iv) For a synthetic exposure, the amount of the Board-regulated institution's loss on the exposure if the reference capital or covered debt instrument were to have a value of zero.

(3) *Adjustments to reflect a short position.*

In order to adjust the gross long position to recognize a short position in the same in-

strument under paragraph (h)(1) of this section, the following criteria must be met:

(i) The maturity of the short position must match the maturity of the long position, or the short position must have a residual maturity of at least one year (maturity requirement); or

(ii) For a position that is a trading asset or trading liability (whether on- or off-balance sheet) as reported on the Board-regulated institution's Call Report, for a state member bank, or FR Y-9C, for a bank holding company, savings and loan holding company, or intermediate holding company, as applicable, if the Board-regulated institution has a contractual right or obligation to sell the long position at a specific point in time and the counterparty to the contract has an obligation to purchase the long position if the Board-regulated institution exercises its right to sell, this point in time may be treated as the maturity of the long position such that the maturity of the long position and short position are deemed to match for purposes of the maturity requirement, even if the maturity of the short position is less than one year; and

(iii) For an investment in a Board-regulated institution's own capital instrument under paragraph (c)(1) of this section, an investment in the capital of an unconsolidated financial institution under paragraphs (c)(4) through (6) and (d) of this section (as applicable), and an investment in a covered debt instrument under paragraphs (c)(1), (5), and (6) of this section:

(A) The Board-regulated institution may only net a short position against a long position in an investment in the Board-regulated institution's own capital instrument or own covered debt instrument under paragraph (c)(1) of this section if the short position involves no counterparty credit risk;

(B) A gross long position in an investment in the Board-regulated institution's own capital instrument, an investment in the capital of an unconsolidated financial institution, or an investment in a covered debt instru-

ment due to a position in an index may be netted against a short position in the same index;

(C) Long and short positions in the same index without maturity dates are considered to have matching maturities; and

(D) A short position in an index that is hedging a long cash or synthetic position in an investment in the Board-regulated institution's own capital instrument, an investment in the capital instrument of an unconsolidated financial institution, or an investment in a covered debt instrument can be decomposed to provide recognition of the hedge. More specifically, the portion of the index that is composed of the same underlying instrument that is being hedged may be used to offset the long position if both the long position being hedged and the short position in the index are reported as a trading asset or trading liability (whether on- or off-balance sheet) on the Board-regulated institution's Call Report, for a state member bank, or FR Y-9C, for a bank holding company, savings and loan holding company, or intermediate holding company, as applicable, and the hedge is deemed effective by the Board-regulated institution's internal control processes, which have not been found to be inadequate by the Board.

SECTIONS 217.23–217.29—[Reserved]

3-2130

SUBPART D—RISK-WEIGHTED ASSETS—STANDARDIZED APPROACH

SECTION 217.30—Applicability

(a) This subpart sets forth methodologies for determining risk-weighted assets for purposes of the generally applicable risk-based capital requirements for all Board-regulated institutions.

(b) Notwithstanding paragraph (a) of this section, a market risk Board-regulated institution

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

3-2131

RISK-WEIGHTED ASSETS FOR GENERAL CREDIT RISK

SECTION 217.31—Mechanics for Calculating Risk-Weighted Assets for General Credit Risk

(a) *General risk-weighting requirements.* A Board-regulated institution must apply risk weights to its exposures as follows:

(1) A Board-regulated institution must determine the exposure amount of each on-balance sheet exposure, each OTC derivative contract, and each off-balance sheet commitment, trade and transaction-related contingency, guarantee, repo-style transaction, financial standby letter of credit, forward agreement, or other similar transaction that is not:

- (i) An unsettled transaction subject to section 217.38;
- (ii) A cleared transaction subject to section 217.35;
- (iii) A default fund contribution subject to section 217.35;
- (iv) A securitization exposure subject to sections 217.41 through 217.45; or
- (v) An equity exposure (other than an equity OTC derivative contract) subject to sections 217.51 through 217.53.

(2) The Board-regulated institution must multiply each exposure amount by the risk weight appropriate to the exposure based on the exposure type or counterparty, eligible guarantor, or financial collateral to determine the risk-weighted asset amount for each exposure.

(b) Total risk-weighted assets for general credit risk equals the sum of the risk-weighted asset amounts calculated under this section.

3-2132

SECTION 217.32—General Risk Weights

(a) *Sovereign exposures.*(1) *Exposures to the U.S. government.*

(i) Notwithstanding any other requirement in this subpart, a Board-regulated institution must assign a zero percent risk weight to:

(A) An exposure to the U.S. government, its central bank, or a U.S. government agency; and

(B) The portion of an exposure that is directly and unconditionally guaranteed by the U.S. government, its central bank, or a U.S. government agency. This includes a deposit or other exposure, or the portion of a deposit or other exposure, that is insured or otherwise unconditionally guaranteed by the FDIC or National Credit Union Administration.

(ii) A Board-regulated institution must assign a 20 percent risk weight to the portion of an exposure that is conditionally guaranteed by the U.S. government, its central bank, or a U.S. government agency. This includes an exposure, or the portion of an exposure, that is conditionally guaranteed by the FDIC or National Credit Union Administration.

(iii) A Board-regulated institution must assign a zero percent risk weight to a Paycheck Protection Program covered loan as defined in section 7(a)(36) of the Small Business Act (15 U.S.C. 636(a)(36)).

(2) *Other sovereign exposures.* In accordance with Table 1 to section 217.32, a Board-regulated institution must assign a risk weight to a sovereign exposure based on the CRC applicable to the sovereign or the sovereign's OECD membership status if there is no CRC applicable to the sovereign.

Table 1 to section 217.32—Risk weights for sovereign exposures

		Risk weight (in percent)
CRC	0-1	0
	2	20
	3	50
	4-6	100
	7	150
OECD member with no CRC		0
Non-OECD member with no CRC		100
Sovereign default		150

(3) *Certain sovereign exposures.* Notwithstanding paragraph (a)(2) of this section, a Board-regulated institution may assign to a sovereign exposure a risk weight that is lower than the applicable risk weight in Table 1 to section 217.32 if:

(i) The exposure is denominated in the sovereign's currency;

(ii) The Board-regulated institution has at least an equivalent amount of liabilities in that currency; and

(iii) The risk weight is not lower than the risk weight that the home country supervisor allows Board-regulated institutions under its jurisdiction to assign to the same exposures to the sovereign.

(4) *Exposures to a non-OECD member sovereign with no CRC.* Except as provided in paragraphs (a)(3), (a)(5) and (a)(6) of this section, a Board-regulated institution must assign a 100 percent risk weight to an exposure to a sovereign if the sovereign does not have a CRC.

(5) *Exposures to an OECD member sovereign with no CRC.* Except as provided in paragraph (a)(6) of this section, a Board-regulated institution must assign a 0 percent risk weight to an exposure to a sovereign that is a member of the OECD if the sovereign does not have a CRC.

(6) *Sovereign default.* A Board-regulated institution must assign a 150 percent risk weight to a sovereign exposure immediately upon determining that an event of sovereign default has occurred, or if an event of sovereign default has occurred during the previous five years.

(b) *Certain supranational entities and multi-lateral development banks (MDBs).* A Board-regulated institution must assign a zero percent risk weight to an exposure to the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, the European Stability Mechanism, the European Financial Stability Facility, or an MDB.

(c) *Exposures to GSEs.*

(1) A Board-regulated institution must assign a 20 percent risk weight to an exposure to a GSE other than an equity exposure or preferred stock.

(2) A Board-regulated institution must assign a 100 percent risk weight to preferred stock issued by a GSE.

(d) *Exposures to depository institutions, foreign banks, and credit unions.*

(1) *Exposures to U.S. depository institutions and credit unions.* A Board-regulated institution must assign a 20 percent risk weight to an exposure to a depository institution or credit union that is organized under the laws of the United States or any state thereof, except as otherwise provided under paragraph (d)(3) of this section.

(2) *Exposures to foreign banks.*

(i) Except as otherwise provided under paragraphs (d)(2)(iii), (d)(2)(v), and (d)(3) of this section, a Board-regulated institution must assign a risk weight to an exposure to a foreign bank, in accordance with Table 2 to section 217.32, based on the CRC that corresponds to the foreign bank's home country or the OECD membership status of the foreign bank's home country if there is no CRC applicable to the foreign bank's home country.

Table 2 to section 217.32—Risk weights for exposures to foreign banks

		Risk weight (in percent)
CRC	0-1	20
	2	50
	3	100
	4-7	150
OECD member with no CRC		20
Non-OECD member with no CRC		100
Sovereign default		150

(ii) A Board-regulated institution must assign a 20 percent risk weight to an exposure to a foreign bank whose home country is a member of the OECD and does not have a CRC.

(iii) A Board-regulated institution must assign a 20 percent risk-weight to an exposure that is a self-liquidating, trade-related contingent item that arises from the movement of goods and that has a maturity of three months or less to a foreign bank whose home country has a CRC of 0, 1, 2, or 3, or is an OECD member with no CRC.

(iv) A Board-regulated institution must assign a 100 percent risk weight to an exposure to a foreign bank whose home country is not a member of the OECD and does not have a CRC, with the exception of self-liquidating, trade-related contingent items that arise from the movement of goods, and that have a maturity of three months or less, which may be assigned a 20 percent risk weight.

(v) A Board-regulated institution must assign a 150 percent risk weight to an exposure to a foreign bank immediately upon determining that an event of sovereign default has occurred in the bank's home country, or if an event of sovereign default has occurred in the foreign bank's home country during the previous five years.

(3) A Board-regulated institution must assign a 100 percent risk weight to an exposure to a financial institution if the exposure may be included in that financial institution's capital unless the exposure is:

(i) An equity exposure;

(ii) A significant investment in the capital of an unconsolidated financial institution in the form of common stock pursuant to section 217.22(d)(2)(i)(C);

(iii) Deducted from regulatory capital under section 217.22; or

(iv) Subject to a 150 percent risk weight under paragraph (d)(2)(iv) or Table 2 of paragraph (d)(2) of this section.

(e) *Exposures to public sector entities (PSEs).*

(1) *Exposures to U.S. PSEs.*

(i) A Board-regulated institution must as-

sign a 20 percent risk weight to a general obligation exposure to a PSE that is organized under the laws of the United States or any state or political subdivision thereof.

(ii) A Board-regulated institution must assign a 50 percent risk weight to a revenue obligation exposure to a PSE that is organized under the laws of the United States or any state or political subdivision thereof.

(2) *Exposures to foreign PSEs.*

(i) Except as provided in paragraphs (e)(1) and (e)(3) of this section, a Board-regulated institution must assign a risk weight to a general obligation exposure to a PSE, in accordance with Table 3 to section 217.32, based on the CRC that corresponds to the PSE's home country or the OECD membership status of the PSE's home country if there is no CRC applicable to the PSE's home country.

(ii) Except as provided in paragraphs (e)(1) and (e)(3) of this section, a Board-regulated institution must assign a risk weight to a revenue obligation exposure to a PSE, in accordance with Table 4 to section 217.32, based on the CRC that corresponds to the PSE's home country; or the OECD membership status of the PSE's home country if there is no CRC applicable to the PSE's home country.

(3) A Board-regulated institution may assign a lower risk weight than would otherwise apply under Tables 3 or 4 to section 217.32 to an exposure to a foreign PSE if:

(i) The PSE's home country supervisor allows banks under its jurisdiction to assign a lower risk weight to such exposures; and

(ii) The risk weight is not lower than the risk weight that corresponds to the PSE's home country in accordance with Table 1 to section 217.32.

Table 3 to section 217.32—Risk weights for non-U.S. PSE general obligations

		Risk weight (in percent)
CRC	0-1	20
	2	50
	3	100
	4-7	150
OECD member with no CRC		20
Non-OECD member with no CRC		100
Sovereign default		150

Table 4 to section 217.32—Risk weights for non-U.S. PSE revenue obligations

		Risk weight (in percent)
CRC	0-1	50
	2-3	100
	4-7	150
OECD member with no CRC		50
Non-OECD member with no CRC		100
Sovereign default		150

(4) *Exposures to PSEs from an OECD member sovereign with no CRC.*

(i) A Board-regulated institution must assign a 20 percent risk weight to a general obligation exposure to a PSE whose home country is an OECD member sovereign with no CRC.

(ii) A Board-regulated institution must assign a 50 percent risk weight to a revenue obligation exposure to a PSE whose home country is an OECD member sovereign with no CRC.

(5) *Exposures to PSEs whose home country is not an OECD member sovereign with no CRC.* A Board-regulated institution must assign a 100 percent risk weight to an exposure to a PSE whose home country is not a member of the OECD and does not have a CRC.

(6) A Board-regulated institution must assign a 150 percent risk weight to a PSE exposure immediately upon determining that an event of sovereign default has occurred in a PSE's home country or if an event of sovereign default has occurred in the PSE's home country during the previous five years.

(f) *Corporate exposures.*

(1) A Board-regulated institution must assign a 100 percent risk weight to all its corporate exposures, except as provided in paragraph (f)(2) of this section.

(2) A Board-regulated institution must assign a 2 percent risk weight to an exposure to a QCCP arising from the Board-regulated institution posting cash collateral to the QCCP in connection with a cleared transaction that meets the requirements of section 217.35(b)(3)(i)(A) and a 4 percent risk weight to an exposure to a QCCP arising from the Board-regulated institution posting cash collateral to the QCCP in connection with a cleared transaction that meets the requirements of section 217.35(b)(3)(i)(B).

(3) A Board-regulated institution must assign a 2 percent risk weight to an exposure to a QCCP arising from the Board-regulated institution posting cash collateral to the QCCP in connection with a cleared transaction that meets the requirements of section 217.35(c)(3)(i).

(g) *Residential mortgage exposures.*

(1) A Board-regulated institution must assign a 50 percent risk weight to a first-lien residential mortgage exposure that:

- (i) Is secured by a property that is either owner-occupied or rented;
- (ii) Is made in accordance with prudent underwriting standards, including relating to the loan amount as a percent of the appraised value of the property. A Board-regulated institution must base all estimates of a property's value on an appraisal or evaluation of the property that satisfies subpart E of 12 CFR part 208.
- (iii) Is not 90 days or more past due or carried in nonaccrual status; and
- (iv) Is not restructured or modified.

(2) A Board-regulated institution must assign a 100 percent risk weight to a first-lien residential mortgage exposure that does not meet the criteria in paragraph (g)(1) of this section, and to junior-lien residential mortgage exposures.

(3) For the purpose of this paragraph (g), if a Board-regulated institution holds the first-lien and junior-lien(s) residential mortgage exposures, and no other party holds an in-

tervening lien, the Board-regulated institution must combine the exposures and treat them as a single first-lien residential mortgage exposure.

(4) A loan modified or restructured solely pursuant to the U.S. Treasury's Home Affordable Mortgage Program is not modified or restructured for purposes of this section.

(h) *Pre-sold construction loans.* A Board-regulated institution must assign a 50 percent risk weight to a pre-sold construction loan unless the purchase contract is cancelled, in which case a Board-regulated institution must assign a 100 percent risk weight.

(i) *Statutory multifamily mortgages.* A Board-regulated institution must assign a 50 percent risk weight to a statutory multifamily mortgage.

(j) *High-volatility commercial real estate (HVCRE) exposures.* A Board-regulated institution must assign a 150 percent risk weight to an HVCRE exposure.

(k) *Past due exposures.* Except for an exposure to a sovereign entity or a residential mortgage exposure or a policy loan, if an exposure is 90 days or more past due or on nonaccrual:

- (1) A Board-regulated institution must assign a 150 percent risk weight to the portion of the exposure that is not guaranteed or that is unsecured;
- (2) A Board-regulated institution may assign a risk weight to the guaranteed portion of a past due exposure based on the risk weight that applies under section 217.36 if the guarantee or credit derivative meets the requirements of that section; and
- (3) A Board-regulated institution may assign a risk weight to the collateralized portion of a past due exposure based on the risk weight that applies under section 217.37 if the collateral meets the requirements of that section.

(l) *Other assets.*

(1) (i) A bank holding company or savings and loan holding company must assign a zero percent risk weight to cash owned and held in all offices of subsidiary depository institutions or in transit, and to

gold bullion held in a subsidiary depository institution's own vaults, or held in another depository institution's vaults on an allocated basis, to the extent the gold bullion assets are offset by gold bullion liabilities.

- (ii) A state member bank must assign a zero percent risk weight to cash owned and held in all offices of the state member bank or in transit; to gold bullion held in the state member bank's own vaults or held in another depository institution's vaults on an allocated basis, to the extent the gold bullion assets are offset by gold bullion liabilities; and to exposures that arise from the settlement of cash transactions (such as equities, fixed income, spot foreign exchange and spot commodities) with a central counterparty where there is no assumption of ongoing counterparty credit risk by the central counterparty after settlement of the trade and associated default fund contributions.
- (2) A Board-regulated institution must assign a 20 percent risk weight to cash items in the process of collection.
- (3) A Board-regulated institution must assign a 100 percent risk weight to DTAs arising from temporary differences that the Board-regulated institution could realize through net operating loss carrybacks.
- (4) A Board-regulated institution must assign a 250 percent risk weight to the portion of each of the following items to the extent it is not deducted from common equity tier 1 capital pursuant to section 217.22(d):
 - (i) MSAs; and
 - (ii) DTAs arising from temporary differences that the Board-regulated institution could not realize through net operating loss carrybacks.
- (5) A Board-regulated institution must assign a 100 percent risk weight to all assets not specifically assigned a different risk weight under this subpart and that are not deducted from tier 1 or tier 2 capital pursuant to section 217.22.
- (6) Notwithstanding the requirements of this section, a state member bank may assign an asset that is not included in one of the categories provided in this section to the

risk weight category applicable under the capital rules applicable to bank holding companies and savings and loan holding companies under this part, provided that all of the following conditions apply:

- (i) The Board-regulated institution is not authorized to hold the asset under applicable law other than debt previously contracted or similar authority; and
 - (ii) The risks associated with the asset are substantially similar to the risks of assets that are otherwise assigned to a risk weight category of less than 100 percent under this subpart.
- (m) *Insurance assets.*
- (1) *Assets held in a separate account.*
 - (i) A bank holding company or savings and loan holding company must risk-weight the individual assets held in a separate account that does not qualify as a non-guaranteed separate account as if the individual assets were held directly by the bank holding company or savings and loan holding company.
 - (ii) A bank holding company or savings and loan holding company must assign a zero percent risk weight to an asset that is held in a non-guaranteed separate account.
 - (2) *Policy loans.* A bank holding company or savings and loan holding company must assign a 20 percent risk weight to a policy loan.

3-2133

SECTION 217.33—Off-Balance Sheet Exposures

- (a) *General.*
 - (1) A Board-regulated institution must calculate the exposure amount of an off-balance sheet exposure using the credit conversion factors (CCFs) in paragraph (b) of this section.
 - (2) Where a Board-regulated institution commits to provide a commitment, the Board-regulated institution may apply the lower of the two applicable CCFs.
 - (3) Where a Board-regulated institution provides a commitment structured as a syndication or participation, the Board-regulated institution is only required to cal-

culate the exposure amount for its pro rata share of the commitment.

(4) Where a Board-regulated institution provides a commitment, enters into a repurchase agreement, or provides a credit-enhancing representation and warranty, and such commitment, repurchase agreement, or credit-enhancing representation and warranty is not a securitization exposure, the exposure amount shall be no greater than the maximum contractual amount of the commitment, repurchase agreement, or credit-enhancing representation and warranty, as applicable.

(b) *Credit conversion factors.*

(1) *Zero percent CCF.* A Board-regulated institution must apply a zero percent CCF to the unused portion of a commitment that is unconditionally cancelable by the Board-regulated institution.

(2) *20 percent CCF.* A Board-regulated institution must apply a 20 percent CCF to the amount of:

- (i) Commitments with an original maturity of one year or less that are not unconditionally cancelable by the Board-regulated institution; and
- (ii) Self-liquidating, trade-related contingent items that arise from the movement of goods, with an original maturity of one year or less.

(3) *50 percent CCF.* A Board-regulated institution must apply a 50 percent CCF to the amount of:

- (i) Commitments with an original maturity of more than one year that are not unconditionally cancelable by the Board-regulated institution; and
- (ii) Transaction-related contingent items, including performance bonds, bid bonds, warranties, and performance standby letters of credit.

(4) *100 percent CCF.* A Board-regulated institution must apply a 100 percent CCF to the amount of the following off-balance-sheet items and other similar transactions:

- (i) Guarantees;
- (ii) Repurchase agreements (the off balance sheet component of which equals the sum of the current fair values of all

positions the Board-regulated institution has sold subject to repurchase);

(iii) Credit-enhancing representations and warranties that are not securitization exposures;

(iv) Off-balance sheet securities lending transactions (the off-balance sheet component of which equals the sum of the current fair values of all positions the Board-regulated institution has lent under the transaction);

(v) Off-balance sheet securities borrowing transactions (the off-balance sheet component of which equals the sum of the current fair values of all non-cash positions the Board-regulated institution has posted as collateral under the transaction);

(vi) Financial standby letters of credit; and

(vii) Forward agreements.

3-2134

SECTION 217.34—Derivative Contracts

(a) *Exposure amount for derivative contracts.*

(1) *Board-regulated institution that is not an advanced approaches Board-regulated institution.*

(i) A Board-regulated institution that is not an advanced approaches Board-regulated institution must use the current exposure methodology (CEM) described in paragraph (b) of this section to calculate the exposure amount for all its OTC derivative contracts, unless the Board-regulated institution makes the election provided in paragraph (a)(1)(ii) of this section.

(ii) A Board-regulated institution that is not an advanced approaches Board-regulated institution may elect to calculate the exposure amount for all its OTC derivative contracts under the standardized approach for counterparty credit risk (SA-CCR) in section 217.132(c) by notifying the Board, rather than calculating the exposure amount for all its derivative contracts using CEM. A Board-regulated institution that elects under this paragraph (a)(1)(ii) to calculate the exposure amount for its OTC derivative contracts under SA-CCR must apply the treatment

of cleared transactions under section 217.133 to its derivative contracts that are cleared transactions and to all default fund contributions associated with such derivative contracts, rather than applying section 217.35. A Board-regulated institution that is not an advanced approaches Board-regulated institution must use the same methodology to calculate the exposure amount for all its derivative contracts and, if a Board-regulated institution has elected to use SA-CCR under this paragraph (a)(1)(ii), the Board-regulated institution may change its election only with prior approval of the Board.

(2) *Advanced approaches Board-regulated institution.* An advanced approaches Board-regulated institution must calculate the exposure amount for all its derivative contracts using SA-CCR in section 217.132(c) for purposes of standardized total risk-weighted assets. An advanced approaches Board-regulated institution must apply the treatment of cleared transactions under section 217.133 to its derivative contracts that are cleared transactions and to all default fund contributions associated with such de-

derivative contracts for purposes of standardized total risk-weighted assets.

(b) *Current exposure methodology exposure amount.*

(1) *Single OTC derivative contract.* Except as modified by paragraph (c) of this section, the exposure amount for a single OTC derivative contract that is not subject to a qualifying master netting agreement is equal to the sum of the Board-regulated institution's current credit exposure and potential future credit exposure (PFE) on the OTC derivative contract.

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

(ii) *PFE.*

(A) The PFE for a single OTC derivative contract, including an OTC derivative contract with a negative fair value, is calculated by multiplying the notional principal amount of the OTC derivative contract by the appropriate conversion factor in Table 1 to this section.

Table 1 to section 217.34—Conversion factor matrix for derivative contracts¹

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

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

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

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

(B) For purposes of calculating either the PFE under this paragraph (b)(1)(ii)

or the gross PFE under paragraph (b)(2)(ii)(A) of this section for ex-

change rate contracts and other similar contracts in which the notional principal amount is equivalent to the cash flows, notional principal amount is the net receipts to each party falling due on each value date in each currency.

(C) For an OTC derivative contract that does not fall within one of the specified categories in Table 1 to this section, the PFE must be calculated using the appropriate “other” conversion factor.

(D) A Board-regulated institution must use an OTC derivative contract’s effective notional principal amount (that is, the apparent or stated notional principal amount multiplied by any multiplier in the OTC derivative contract) rather than the apparent or stated notional principal amount in calculating PFE.

(E) The PFE of the protection provider of a credit derivative is capped at the net present value of the amount of unpaid premiums.

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

(i) *Net current credit exposure.* The net current credit exposure is the greater of the net sum of all positive and negative fair values of the individual OTC derivative contracts subject to the qualifying master netting agreement or zero.

(ii) *Adjusted sum of the PFE amounts.* The adjusted sum of the PFE amounts, A_{net} , is calculated as $A_{net} = (0.4 \times A_{gross}) + (0.6 \times NGR \times A_{gross})$, where:

(A) A_{gross} = the gross PFE (that is, the sum of the PFE amounts as determined under paragraph (b)(1)(ii) of this section for each individual derivative contract subject to the qualifying master netting agreement); and

(B) Net-to-gross Ratio (NGR) = the ratio of the net current credit exposure to the gross current credit exposure. In calculating the NGR, the gross current credit exposure equals the sum of the positive current credit exposures (as determined under paragraph (b)(1)(i) of this section) of all individual derivative contracts subject to the qualifying master netting agreement.

(c) *Recognition of credit risk mitigation of collateralized OTC derivative contracts.*

(1) A Board-regulated institution using CEM under paragraph (b) of this section may recognize the credit risk mitigation benefits of financial collateral that secures an OTC derivative contract or multiple OTC derivative contracts subject to a qualifying master netting agreement (netting set) by using the simple approach in section 217.37(b).

(2) As an alternative to the simple approach, a Board-regulated institution using CEM under paragraph (b) of this section may recognize the credit risk mitigation benefits of financial collateral that secures such a contract or netting set if the financial collateral is marked-to-fair value on a daily basis and subject to a daily margin maintenance requirement by applying a risk weight to the uncollateralized portion of the exposure, after adjusting the exposure amount calculated under paragraph (b)(1) or (2) of this section using the collateral haircut approach in section 217.37(c). The Board-regulated institution must substitute the exposure amount calculated under paragraph (b)(1) or (2) of this section for SE in the equation in section 217.37(c)(2).

(d) *Counterparty credit risk for credit derivatives.*

(1) *Protection purchasers.* A Board-regulated institution that purchases a credit derivative that is recognized under section 217.36 as a credit risk mitigant for an exposure that is not a covered position under subpart F of this part is not required to compute a separate counterparty credit risk capital requirement under this subpart provided that the Board-regulated institution does so consistently for all such credit de-

rivatives. The Board-regulated institution must either include all or exclude all such credit derivatives that are subject to a qualifying master netting agreement from any measure used to determine counterparty credit risk exposure to all relevant counterparties for risk-based capital purposes.

(2) *Protection providers.*

(i) A Board-regulated institution that is the protection provider under a credit derivative must treat the credit derivative as an exposure to the underlying reference asset. The Board-regulated institution is not required to compute a counterparty credit risk capital requirement for the credit derivative under this subpart, provided that this treatment is applied consistently for all such credit derivatives. The Board-regulated institution must either include all or exclude all such credit derivatives that are subject to a qualifying master netting agreement from any measure used to determine counterparty credit risk exposure.

(ii) The provisions of this paragraph (d)(2) apply to all relevant counterparties for risk-based capital purposes unless the Board-regulated institution is treating the credit derivative as a covered position under subpart F of this part, in which case the Board-regulated institution must compute a supplemental counterparty credit risk capital requirement under this section.

(e) *Counterparty credit risk for equity derivatives.*

(1) A Board-regulated institution must treat an equity derivative contract as an equity exposure and compute a risk-weighted asset amount for the equity derivative contract under sections 217.51 through 217.53 (unless the Board-regulated institution is treating the contract as a covered position under subpart F of this part).

(2) In addition, the Board-regulated institution must also calculate a risk-based capital requirement for the counterparty credit risk of an equity derivative contract under this section if the Board-regulated institution is

treating the contract as a covered position under subpart F of this part.

(3) If the Board-regulated institution risk weights the contract under the Simple Risk-Weight Approach (SRWA) in section 217.52, the Board-regulated institution may choose not to hold risk-based capital against the counterparty credit risk of the equity derivative contract, as long as it does so for all such contracts. Where the equity derivative contracts are subject to a qualified master netting agreement, a Board-regulated institution using the SRWA must either include all or exclude all of the contracts from any measure used to determine counterparty credit risk exposure.

(f) *Clearing member Board-regulated institution's exposure amount.* The exposure amount of a clearing member Board-regulated institution using CEM under paragraph (b) of this section for a client-facing derivative transaction or netting set of client-facing derivative transactions equals the exposure amount calculated according to paragraph (b)(1) or (2) of this section multiplied by the scaling factor the square root of $\frac{1}{2}$ (which equals 0.707107). If the Board-regulated institution determines that a longer period is appropriate, the Board-regulated institution must use a larger scaling factor to adjust for a longer holding period as follows:

$$\text{Scaling factor} = \sqrt{\frac{H}{10}}$$

Where H = the holding period greater than or equal to five days.

Additionally, the Board may require the Board-regulated institution to set a longer holding period if the Board determines that a longer period is appropriate due to the nature, structure, or characteristics of the transaction or is commensurate with the risks associated with the transaction.

3-2135

SECTION 217.35—Cleared Transactions

(a) *General requirements.*

(1) *Clearing member clients.* A Board-regulated institution that is a clearing member client must use the methodologies de-

scribed in paragraph (b) of this section to calculate risk-weighted assets for a cleared transaction.

(2) *Clearing members.* A Board-regulated institution that is a clearing member must use the methodologies described in paragraph (c) of this section to calculate its risk-weighted assets for a cleared transaction and paragraph (d) of this section to calculate its risk-weighted assets for its default fund contribution to a CCP.

(3) *Alternate requirements.* Notwithstanding any other provision of this section, an advanced approaches Board-regulated institution or a Board-regulated institution that is not an advanced approaches Board-regulated institution and that has elected to use SA-CCR under section 217.34(a)(1) must apply section 217.133 to its derivative contracts that are cleared transactions rather than this section.

(b) *Clearing member client Board-regulated institutions.*

(1) *Risk-weighted assets for cleared transactions.*

(i) To determine the risk-weighted asset amount for a cleared transaction, a Board-regulated institution that is a clearing member client must multiply the trade exposure amount for the cleared transaction, calculated in accordance with paragraph (b)(2) of this section, by the risk weight appropriate for the cleared transaction, determined in accordance with paragraph (b)(3) of this section.

(ii) A clearing member client Board-regulated institution's total risk-weighted assets for cleared transactions is the sum of the risk-weighted asset amounts for all its cleared transactions.

(2) *Trade exposure amount.*

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

(A) The exposure amount for the derivative contract or netting set of derivative contracts, calculated using the methodology used to calculate exposure amount for OTC derivative contracts under section 217.34; plus

(B) The fair value of the collateral posted by the clearing member client Board-regulated institution and held by the CCP, clearing member, or custodian in a manner that is not bankruptcy remote.

(ii) For a cleared transaction that is a repo-style transaction or netting set of repo-style transactions, the trade exposure amount equals:

(A) The exposure amount for the repo-style transaction calculated using the methodologies under section 217.37(c); plus

(B) The fair value of the collateral posted by the clearing member client Board-regulated institution and held by the CCP, clearing member, or custodian in a manner that is not bankruptcy remote.

(3) *Cleared transaction risk weights.*

(i) For a cleared transaction with a QCCP, a clearing member client Board-regulated institution must apply a risk weight of:

(A) 2 percent if the collateral posted by the Board-regulated institution to the QCCP or clearing member is subject to an arrangement that prevents any losses to the clearing member client Board-regulated institution due to the joint default or a concurrent insolvency, liquidation, or receivership proceeding of the clearing member and any other clearing member clients of the clearing member; and the clearing member client Board-regulated institution has conducted sufficient legal review to conclude with a well-founded basis (and maintains sufficient written documentation of that legal review) that in the event of a legal challenge (including one resulting from an event of default or from liquidation, insolvency, or receivership proceedings) the relevant court and administrative authorities would find the arrangements to be legal, valid, binding and enforceable under the law of the relevant jurisdictions; or

(B) 4 percent if the requirements of section 217.35(b)(3)(A) are not met.

(ii) For a cleared transaction with a CCP that is not a QCCP, a clearing member client Board-regulated institution must apply the risk weight appropriate for the CCP according to this subpart D.

(4) *Collateral.*

(i) Notwithstanding any other requirements in this section, collateral posted by a clearing member client Board-regulated institution that is held by a custodian (in its capacity as custodian) in a manner that is bankruptcy remote from the CCP, clearing member, and other clearing member clients of the clearing member, is not subject to a capital requirement under this section.

(ii) A clearing member client Board-regulated institution must calculate a risk-weighted asset amount for any collateral provided to a CCP, clearing member, or custodian in connection with a cleared transaction in accordance with the requirements under this subpart D.

(c) *Clearing member Board-regulated institutions.*

(1) *Risk-weighted assets for cleared transactions.*

(i) To determine the risk-weighted asset amount for a cleared transaction, a clearing member Board-regulated institution must multiply the trade exposure amount for the cleared transaction, calculated in accordance with paragraph (c)(2) of this section, by the risk weight appropriate for the cleared transaction, determined in accordance with paragraph (c)(3) of this section.

(ii) A clearing member Board-regulated institution's total risk-weighted assets for cleared transactions is the sum of the risk-weighted asset amounts for all of its cleared transactions.

(2) *Trade exposure amount.* A clearing member Board-regulated institution must calculate its trade exposure amount for a cleared transaction as follows:

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

(A) The exposure amount for the de-

ivative contract, calculated using the methodology to calculate exposure amount for OTC derivative contracts under section 217.34; plus

(B) The fair value of the collateral posted by the clearing member Board-regulated institution and held by the CCP in a manner that is not bankruptcy remote.

(ii) For a cleared transaction that is a repo-style transaction or netting set of repo-style transactions, trade exposure amount equals:

(A) The exposure amount for repo-style transactions calculated using methodologies under section 217.37(c); plus

(B) The fair value of the collateral posted by the clearing member Board-regulated institution and held by the CCP in a manner that is not bankruptcy remote.

(3) *Cleared transaction risk weight.*

(i) A clearing member Board-regulated institution must apply a risk weight of 2 percent to the trade exposure amount for a cleared transaction with a QCCP.

(ii) For a cleared transaction with a CCP that is not a QCCP, a clearing member Board-regulated institution must apply the risk weight appropriate for the CCP according to this subpart D.

(iii) Notwithstanding paragraphs (c)(3)(i) and (ii) of this section, a clearing member Board-regulated institution may apply a risk weight of zero percent to the trade exposure amount for a cleared transaction with a CCP where the clearing member Board-regulated institution is acting as a financial intermediary on behalf of a clearing member client, the transaction offsets another transaction that satisfies the requirements set forth in section 217.3(a), and the clearing member Board-regulated institution is not obligated to reimburse the clearing member client in the event of the CCP default.

(4) *Collateral.*

(i) Notwithstanding any other requirement in this section, collateral posted by a clearing member Board-regulated institution that is held by a custodian in a

manner that is bankruptcy remote from the CCP is not subject to a capital requirement under this section.

(ii) A clearing member Board-regulated institution must calculate a risk-weighted asset amount for any collateral provided to a CCP, clearing member, or a custodian in connection with a cleared transaction in accordance with requirements under this subpart D.

(d) *Default fund contributions.*

(1) *General requirement.* A clearing member Board-regulated institution must determine the risk-weighted asset amount for a default fund contribution to a CCP at least quarterly, or more frequently if, in the opinion of the Board-regulated institution or the Board, there is a material change in the financial condition of the CCP.

(2) *Risk-weighted asset amount for default fund contributions to non-qualifying CCPs.*

A clearing member Board-regulated institution's risk-weighted asset amount for default fund contributions to CCPs that are not QCCPs equals the sum of such default fund contributions multiplied by 1,250 percent, or an amount determined by the Board, based on factors such as size, structure and membership characteristics of the CCP and riskiness of its transactions, in cases where such default fund contributions may be unlimited.

(3) *Risk-weighted asset amount for default fund contributions to QCCPs.* A clearing member Board-regulated institution's risk-weighted asset amount for default fund contributions to QCCPs equals the sum of its capital requirement, K_{CM} for each QCCP, as calculated under the methodology set forth in paragraphs (d)(3)(i) through (iii) of this section (Method 1), multiplied by 1,250 percent or in paragraphs (d)(3)(iv) of this section (Method 2).

(i) *Method 1.* The hypothetical capital requirement of a QCCP (K_{CCP}) equals:

$$K_{CCP} = \sum_{\text{clearing member } i} \max(EBRM_i - VM_i - IM_i - DF_i; 0) \times RW \times 0.08$$

Where

(A) $EBRM_i$ = the exposure amount for each transaction cleared through the

QCCP by clearing member i , calculated in accordance with section 217.34 for OTC derivative contracts and section 217.37(c)(2) for repo-style transactions, provided that:

(1) For purposes of this section, in calculating the exposure amount the Board-regulated institution may replace the formula provided in section 217.34(a)(2)(ii) with the following: $A_{Net} = (0.15 \times A_{gross}) + (0.85 \times NGR \times A_{gross})$; and

(2) For option derivative contracts that are cleared transactions, the PFE described in section 217.34(a)(1)(ii) must be adjusted by multiplying the notional principal amount of the derivative contract by the appropriate conversion factor in Table 1 to section 217.34 and the absolute value of the option's delta, that is, the ratio of the change in the value of the derivative contract to the corresponding change in the price of the underlying asset.

(3) For repo-style transactions, when applying section 217.37(c)(2), the Board-regulated institution must use the methodology in section 217.37(c)(3);

(B) VM_i = any collateral posted by clearing member i to the QCCP that it is entitled to receive from the QCCP, but has not yet received, and any collateral that the QCCP has actually received from clearing member i ;

(C) IM_i = the collateral posted as initial margin by clearing member i to the QCCP;

(D) DF_i = the funded portion of clearing member i 's default fund contribution that will be applied to reduce the QCCP's loss upon a default by clearing member i ;

(E) RW = 20 percent, except when the Board has determined that a higher risk weight is more appropriate based on the specific characteristics of the QCCP and its clearing members; and

(F) Where a QCCP has provided its K_{CCP} , a Board-regulated institution must rely on such disclosed figure in-

stead of calculating K_{CCP} under this paragraph (d), unless the Board-regulated institution determines that a more conservative figure is appropriate based on the nature, structure, or characteristics of the QCCP.

(ii) For a Board-regulated institution that is a clearing member of a QCCP with a default fund supported by funded commitments, K_{CM} equals:

$$K_{CM_i} = \left(1 + \beta \cdot \frac{N}{N-2}\right) \cdot \frac{DF_i}{DF_{CM}} \cdot K_{CM}^*$$

$$K_{CM}^* = \begin{cases} c_2 \cdot \mu \cdot (K_{CCP} - DF) + c_2 \cdot DF_{CM} & \text{if } DF' < K_{CCP} \quad (i) \\ c_2 \cdot (K_{CCP} - DF_{CCP}) + c_1 \cdot (DF' - K_{CCP}) & \text{if } DF_{CCP} < K_{CCP} \leq DF' \quad (ii) \\ c_1 \cdot DF_{CM} & \text{if } K_{CCP} \leq DF_{CCP} \quad (iii) \end{cases}$$

Where

$$(A) \beta = \frac{A_{Net,1} + A_{Net,2}}{\sum_i A_{Net,i}}$$

Subscripts 1 and 2 denote the clearing members with the two largest A_{Net} values. For purposes of this paragraph (d), for derivatives A_{Net} is defined in section 217.34(a)(2)(ii) and for repo-style transactions, A_{Net} means the exposure amount as defined in section 217.37(c)(2) using the methodology in section 217.37(c)(3);

(B) N = the number of clearing members in the QCCP;

(C) DF_{CCP} = the QCCP's own funds and other financial resources that would be used to cover its losses before clearing members' default fund contributions are used to cover losses;

(D) DF_{CM} = funded default fund contributions from all clearing members and any other clearing member contributed financial resources that are available to absorb mutualized QCCP losses;

(E) $DF = DF_{CCP} + DF_{CM}$ (that is, the total funded default fund contribution);

(F) \overline{DF}_i = average \overline{DF}_i = the average funded default fund contribution from an individual clearing member;

$$(G) DF'_{CM} = DF_{CM} - 2 \cdot \overline{DF}_i = \sum_i DF_i - 2 \cdot \overline{DF}_i$$

(that is, the funded default fund contri-

bution from surviving clearing members assuming that two average clearing members have defaulted and their default fund contributions and initial margins have been used to absorb the resulting losses);

(H) $DF' = DF_{CCP} + DF'_{CM} = DF - 2 \cdot \overline{DF}_i$ (that is, the total funded default fund contributions from the QCCP and the surviving clearing members that are available to mutualize losses, assuming that two average clearing members have defaulted);

$$(I) c_1 = \text{Max} \left\{ \frac{1.6\%}{(DF'/K_{CCP})^{0.3}}; 0.16\% \right\}$$

(that is, a decreasing capital factor, between 1.6 percent and 0.16 percent, applied to the excess funded default funds provided by clearing members);

(J) $c_2 = 100$ percent; and

(K) $\mu = 1.2$;

(iii) (A) For a Board-regulated institution that is a clearing member of a QCCP with a default fund supported by unfunded commitments, K_{CM} equals:

$$K_{CM_i} = \frac{DF_i}{DF_{CM}} \cdot K_{CM}^*$$

Where

(1) DF_i = the Board-regulated institution's unfunded commitment to the default fund;

(2) DF_{CM} = the total of all clearing members' unfunded commitment to the default fund; and

(3) K_{CM}^* as defined in paragraph (d)(3)(ii) of this section.

(B) For a Board-regulated institution that is a clearing member of a QCCP with a default fund supported by unfunded commitments and is unable to calculate K_{CM} using the methodology described in paragraph (d)(3)(iii) of this section, K_{CM} equals:

$$K_{CM_i} = \frac{IM_i}{IM_{CM}} \cdot K_{CM}^*$$

Where

(1) IM_i = the Board-regulated institution's initial margin posted to the QCCP;

(2) IM_{CM} = the total of initial margin posted to the QCCP; and

(3) K^*_{CM} as defined in paragraph (d)(3)(ii) of this section.

(iv) *Method 2*. A clearing member Board-regulated institution's risk-weighted asset amount for its default fund contribution to a QCCP, RWA_{DF} , equals:

$$RWA_{DF} = \text{Min} \{ 12.5 * DF; 0.18 * TE \}$$

Where

(A) TE = the Board-regulated institution's trade exposure amount to the QCCP, calculated according to section 35(c)(2);

(B) DF = the funded portion of the Board-regulated institution's default fund contribution to the QCCP.

(4) *Total risk-weighted assets for default fund contributions*. Total risk-weighted assets for default fund contributions is the sum of a clearing member Board-regulated institution's risk-weighted assets for all of its default fund contributions to all CCPs of which the Board-regulated institution is a clearing member.

3-2136

SECTION 217.36—Guarantees and Credit Derivatives: Substitution Treatment

(a) *Scope*.

(1) *General*. A Board-regulated institution may recognize the credit risk mitigation benefits of an eligible guarantee or eligible credit derivative by substituting the risk weight associated with the protection provider for the risk weight assigned to an exposure, as provided under this section.

(2) This section applies to exposures for which:

(i) Credit risk is fully covered by an eligible guarantee or eligible credit derivative; or

(ii) Credit risk is covered on a pro rata basis (that is, on a basis in which the

Board-regulated institution and the protection provider share losses proportionately) by an eligible guarantee or eligible credit derivative.

(3) Exposures on which there is a tranching of credit risk (reflecting at least two different levels of seniority) generally are securitization exposures subject to sections 217.41 through 217.45.

(4) If multiple eligible guarantees or eligible credit derivatives cover a single exposure described in this section, a Board-regulated institution may treat the hedged exposure as multiple separate exposures each covered by a single eligible guarantee or eligible credit derivative and may calculate a separate risk-weighted asset amount for each separate exposure as described in paragraph (c) of this section.

(5) If a single eligible guarantee or eligible credit derivative covers multiple hedged exposures described in paragraph (a)(2) of this section, a Board-regulated institution must treat each hedged exposure as covered by a separate eligible guarantee or eligible credit derivative and must calculate a separate risk-weighted asset amount for each exposure as described in paragraph (c) of this section.

(b) *Rules of recognition*.

(1) A Board-regulated institution may only recognize the credit risk mitigation benefits of eligible guarantees and eligible credit derivatives.

(2) A Board-regulated institution may only recognize the credit risk mitigation benefits of an eligible credit derivative to hedge an exposure that is different from the credit derivative's reference exposure used for determining the derivative's cash settlement value, deliverable obligation, or occurrence of a credit event if:

(i) The reference exposure ranks *pari passu* with, or is subordinated to, the hedged exposure; and

(ii) The reference exposure and the hedged exposure are to the same legal entity, and legally enforceable cross-default or cross-acceleration clauses are in place to ensure payments under the credit derivative are triggered when the

obligated party of the hedged exposure fails to pay under the terms of the hedged exposure.

(c) *Substitution approach.*

(1) *Full coverage.* If an eligible guarantee or eligible credit derivative meets the conditions in paragraphs (a) and (b) of this section and the protection amount (P) of the guarantee or credit derivative is greater than or equal to the exposure amount of the hedged exposure, a Board-regulated institution may recognize the guarantee or credit derivative in determining the risk-weighted asset amount for the hedged exposure by substituting the risk weight applicable to the guarantor or credit derivative protection provider under this subpart D for the risk weight assigned to the exposure.

(2) *Partial coverage.* If an eligible guarantee or eligible credit derivative meets the conditions in paragraphs (a) and (b) of this section and the protection amount (P) of the guarantee or credit derivative is less than the exposure amount of the hedged exposure, the Board-regulated institution must treat the hedged exposure as two separate exposures (protected and unprotected) in order to recognize the credit risk mitigation benefit of the guarantee or credit derivative.

(i) The Board-regulated institution may calculate the risk-weighted asset amount for the protected exposure under this subpart D, where the applicable risk weight is the risk weight applicable to the guarantor or credit derivative protection provider.

(ii) The Board-regulated institution must calculate the risk-weighted asset amount for the unprotected exposure under this subpart D, where the applicable risk weight is that of the unprotected portion of the hedged exposure.

(iii) The treatment provided in this section is applicable when the credit risk of an exposure is covered on a partial pro rata basis and may be applicable when an adjustment is made to the effective notional amount of the guarantee or credit derivative under paragraphs (d), (e), or (f) of this section.

(d) *Maturity mismatch adjustment.*

(1) A Board-regulated institution that recognizes an eligible guarantee or eligible credit derivative in determining the risk-weighted asset amount for a hedged exposure must adjust the effective notional amount of the credit risk mitigant to reflect any maturity mismatch between the hedged exposure and the credit risk mitigant.

(2) A maturity mismatch occurs when the residual maturity of a credit risk mitigant is less than that of the hedged exposure(s).

(3) The residual maturity of a hedged exposure is the longest possible remaining time before the obligated party of the hedged exposure is scheduled to fulfil its obligation on the hedged exposure. If a credit risk mitigant has embedded options that may reduce its term, the Board-regulated institution (protection purchaser) must use the shortest possible residual maturity for the credit risk mitigant. If a call is at the discretion of the protection provider, the residual maturity of the credit risk mitigant is at the first call date. If the call is at the discretion of the Board-regulated institution (protection purchaser), but the terms of the arrangement at origination of the credit risk mitigant contain a positive incentive for the Board-regulated institution to call the transaction before contractual maturity, the remaining time to the first call date is the residual maturity of the credit risk mitigant.

(4) A credit risk mitigant with a maturity mismatch may be recognized only if its original maturity is greater than or equal to one year and its residual maturity is greater than three months.

(5) When a maturity mismatch exists, the Board-regulated institution must apply the following adjustment to reduce the effective notional amount of the credit risk mitigant:

$P_m = E \times (t-0.25)/(T-0.25)$, where:

(i) P_m = effective notional amount of the credit risk mitigant, adjusted for maturity mismatch;

(ii) E = effective notional amount of the credit risk mitigant;

(iii) t = the lesser of T or the residual maturity of the credit risk mitigant, expressed in years; and

(iv) T = the lesser of five or the residual

maturity of the hedged exposure, expressed in years.

(e) *Adjustment for credit derivatives without restructuring as a credit event.* If a Board-regulated institution recognizes an eligible credit derivative that does not include as a credit event a restructuring of the hedged exposure involving forgiveness or postponement of principal, interest, or fees that results in a credit loss event (that is, a charge-off, specific provision, or other similar debit to the profit and loss account), the Board-regulated institution must apply the following adjustment to reduce the effective notional amount of the credit derivative: $Pr = Pm \times 0.60$, where:

- (1) Pr = effective notional amount of the credit risk mitigant, adjusted for lack of restructuring event (and maturity mismatch, if applicable); and
- (2) Pm = effective notional amount of the credit risk mitigant (adjusted for maturity mismatch, if applicable).

(f) *Currency mismatch adjustment.*

(1) If a Board-regulated institution recognizes an eligible guarantee or eligible credit derivative that is denominated in a currency different from that in which the hedged exposure is denominated, the Board-regulated institution must apply the following formula to the effective notional amount of the guarantee or credit derivative: $Pc = Pr \times (1 - H_{FX})$, where:

- 2(i) Pc = effective notional amount of the credit risk mitigant, adjusted for currency mismatch (and maturity mismatch and lack of restructuring event, if applicable);
- (ii) Pr = effective notional amount of the credit risk mitigant (adjusted for maturity mismatch and lack of restructuring event, if applicable); and
- (iii) H_{FX} = haircut appropriate for the currency mismatch between the credit risk mitigant and the hedged exposure.

(2) A Board-regulated institution must set H_{FX} equal to eight percent unless it qualifies for the use of and uses its own internal estimates of foreign exchange volatility based on a ten-business-day holding period. A Board-regulated institution qualifies for the use of its own internal estimates of for-

ign exchange volatility if it qualifies for the use of its own-estimates haircuts in section 217.37(c)(4).

(3) A Board-regulated institution must adjust H_{FX} calculated in paragraph (f)(2) of this section upward if the Board-regulated institution revalues the guarantee or credit derivative less frequently than once every 10 business days using the following square root of time formula:

$$H_{FX} = 8\% \sqrt{\frac{T_M}{10}},$$

where T_M equals the greater of 10 or the number of days between revaluation.

3-2137

SECTION 217.37—Collateralized Transactions

(a) *General.*

(1) To recognize the risk-mitigating effects of financial collateral, a Board-regulated institution may use:

- (i) The simple approach in paragraph (b) of this section for any exposure; or
- (ii) The collateral haircut approach in paragraph (c) of this section for repo-style transactions, eligible margin loans, collateralized derivative contracts, and single-product netting sets of such transactions.

(2) A Board-regulated institution may use any approach described in this section that is valid for a particular type of exposure or transaction; however, it must use the same approach for similar exposures or transactions.

(b) *The simple approach.*

(1) *General requirements.*

(i) A Board-regulated institution may recognize the credit risk mitigation benefits of financial collateral that secures any exposure.

(ii) To qualify for the simple approach, the financial collateral must meet the following requirements:

- (A) The collateral must be subject to a collateral agreement for at least the life of the exposure;
- (B) The collateral must be revalued at least every six months; and

(C) The collateral (other than gold) and the exposure must be denominated in the same currency.

(2) *Risk weight substitution.*

(i) A Board-regulated institution may apply a risk weight to the portion of an exposure that is secured by the fair value of financial collateral (that meets the requirements of paragraph (b)(1) of this section) based on the risk weight assigned to the collateral under this subpart D. For repurchase agreements, reverse repurchase agreements, and securities lending and borrowing transactions, the collateral is the instruments, gold, and cash the Board-regulated institution has borrowed, purchased subject to resale, or taken as collateral from the counterparty under the transaction. Except as provided in paragraph (b)(3) of this section, the risk weight assigned to the collateralized portion of the exposure may not be less than 20 percent.

(ii) A Board-regulated institution must apply a risk weight to the unsecured portion of the exposure based on the risk weight applicable to the exposure under this subpart.

(3) *Exceptions to the 20 percent risk-weight floor and other requirements.* Notwithstanding paragraph (b)(2)(i) of this section:

(i) A Board-regulated institution may assign a zero percent risk weight to an exposure to an OTC derivative contract that is marked-to-market on a daily basis and subject to a daily margin maintenance requirement, to the extent the contract is collateralized by cash on deposit.

(ii) A Board-regulated institution may assign a 10 percent risk weight to an exposure to an OTC derivative contract that is marked-to-market daily and subject to a daily margin maintenance requirement, to the extent that the contract is collateralized by an exposure to a sovereign that qualifies for a zero percent risk weight under section 217.32.

(iii) A Board-regulated institution may assign a zero percent risk weight to the collateralized portion of an exposure where:

(A) The financial collateral is cash on deposit; or

(B) The financial collateral is an exposure to a sovereign that qualifies for a zero percent risk weight under section 217.32, and the Board-regulated institution has discounted the fair value of the collateral by 20 percent.

(c) *Collateral haircut approach.*

(1) *General.* A Board-regulated institution may recognize the credit risk mitigation benefits of financial collateral that secures an eligible margin loan, repo-style transaction, collateralized derivative contract, or single-product netting set of such transactions, and of any collateral that secures a repo-style transaction that is included in the Board-regulated institution's VaR-based measure under subpart F of this part by using the collateral haircut approach in this section. A Board-regulated institution may use the standard supervisory haircuts in paragraph (c)(3) of this section or, with prior written approval of the Board, its own estimates of haircuts according to paragraph (c)(4) of this section.

(2) *Exposure amount equation.* A Board-regulated institution must determine the exposure amount for an eligible margin loan, repo-style transaction, collateralized derivative contract, or a single-product netting set of such transactions by setting the exposure amount equal to $\max \{0, [(\Sigma E - \Sigma C) + \Sigma(E_s \times H_s) + \Sigma(E_{fx} \times H_{fx})]\}$, where:

(i) (A) For eligible margin loans and repo-style transactions and netting sets thereof, ΣE equals the value of the exposure (the sum of the current fair values of all instruments, gold, and cash the Board-regulated institution has lent, sold subject to repurchase, or posted as collateral to the counterparty under the transaction (or netting set)); and

(B) For collateralized derivative contracts and netting sets thereof, ΣE equals the exposure amount of the OTC derivative contract (or netting set) calculated under section 217.34 (b)(1) or (2).

(ii) ΣC equals the value of the collateral

(the sum of the current fair values of all instruments, gold and cash the Board-regulated institution has borrowed, purchased subject to resale, or taken as collateral from the counterparty under the transaction (or netting set));

(iii) E_s equals the absolute value of the net position in a given instrument or in gold (where the net position in the instrument or gold equals the sum of the current fair values of the instrument or gold the Board-regulated institution has lent, sold subject to repurchase, or posted as collateral to the counterparty minus the sum of the current fair values of that same instrument or gold the Board-regulated institution has borrowed, purchased subject to resale, or taken as collateral from the counterparty);

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

(v) E_{fx} equals the absolute value of the net position of instruments and cash in a

currency that is different from the settlement currency (where the net position in a given currency equals the sum of the current fair values of any instruments or cash in the currency the Board-regulated institution has lent, sold subject to repurchase, or posted as collateral to the counterparty minus the sum of the current fair values of any instruments or cash in the currency the Board-regulated institution has borrowed, purchased subject to resale, or taken as collateral from the counterparty); and

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

(3) *Standard supervisory haircuts.*

(i) A Board-regulated institution must use the haircuts for market price volatility (H_s) provided in Table 1 to section 217.37, as adjusted in certain circumstances in accordance with the requirements of paragraphs (c)(3)(iii) and (iv) of this section.

Table 1 to section 217.37—Standard supervisory market price volatility haircuts¹

Residual maturity	Haircut (in percent) assigned based on:						Investment grade securitization exposures (in percent)
	Sovereign issuers risk weight under section 217.32 (in percent) ²			Non-sovereign issuers risk weight under section 217.32 (in percent)			
	Zero	20 or 50	100	20	50	100	
Less than or equal to 1 year	0.5	1.0	15.0	1.0	2.0	4.0	4.0
Greater than 1 year and less than or equal to 5 years	2.0	3.0	15.0	4.0	6.0	8.0	12.0
Greater than 5 years	4.0	6.0	15.0	8.0	12.0	16.0	24.0
Main index equities (including convertible bonds) and gold	15.0						
Other publicly traded equities (including convertible bonds)	25.0						
Mutual funds	Highest haircut applicable to any security in which the fund can invest						
Cash collateral held	Zero						
Other exposure types	25.0						

¹ The market price volatility haircuts in Table 1 to section 217.37 are based on a 10 business-day holding period.

² Includes a foreign PSE that receives a zero percent risk weight.

(ii) For currency mismatches, a Board-regulated institution must use a haircut for foreign exchange rate volatility (H_{fx}) of 8.0 percent, as adjusted in certain cir-

cumstances under paragraphs (c)(3)(iii) and (iv) of this section.

(iii) For repo-style transactions and client-facing derivative transactions, a Board-regulated institution may multiply

the standard supervisory haircuts provided in paragraphs (c)(3)(i) and (ii) of this section by the square root of $\frac{1}{2}$ (which equals 0.707107). For client-facing derivative transactions, if a larger scaling factor is applied under section 217.34(f), the same factor must be used to adjust the supervisory haircuts.

(iv) If the number of trades in a netting set exceeds 5,000 at any time during a quarter, a Board-regulated institution must adjust the supervisory haircuts provided in paragraphs (c)(3)(i) and (ii) of this section upward on the basis of a holding period of twenty business days for the following quarter except in the calculation of the exposure amount for purposes of section 217.35. If a netting set contains one or more trades involving illiquid collateral or an OTC derivative that cannot be easily replaced, a Board-regulated institution must adjust the supervisory haircuts upward on the basis of a holding period of twenty business days. If over the two previous quarters more than two margin disputes on a netting set have occurred that lasted more than the holding period, then the Board-regulated institution must adjust the supervisory haircuts upward for that netting set on the basis of a holding period that is at least two times the minimum holding period for that netting set. A Board-regulated institution must adjust the standard supervisory haircuts upward using the following formula:

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

where

(A) T_M equals a holding period of longer than 10 business days for eligible margin loans and derivative contracts other than client-facing derivative transactions or longer than 5 business days for repo-style transactions and client-facing derivative transactions;

(B) H_S equals the standard supervisory haircut; and

(C) T_S equals 10 business days for eligible margin loans and derivative con-

tracts other than client-facing derivative transactions or 5 business days for repo-style transactions and client-facing derivative transactions.

(v) If the instrument a Board-regulated institution has lent, sold subject to repurchase, or posted as collateral does not meet the definition of financial collateral, the Board-regulated institution must use a 25.0 percent haircut for market price volatility (H_s).

(4) *Own internal estimates for haircuts.* With the prior written approval of the Board, a Board-regulated institution may calculate haircuts (H_s and H_{fx}) using its own internal estimates of the volatilities of market prices and foreign exchange rates:

(i) To receive Board approval to use its own internal estimates, a Board-regulated institution must satisfy the following minimum standards:

(A) A Board-regulated institution must use a 99th percentile one-tailed confidence interval.

(B) The minimum holding period for a repo-style transaction and client-facing derivative transaction is five business days and for an eligible margin loan and a derivative contract other than a client-facing derivative transaction is ten business days except for transactions or netting sets for which paragraph (c)(4)(i)(C) of this section applies. When a Board-regulated institution calculates an own-estimates haircut on a T_N -day holding period, which is different from the minimum holding period for the transaction type, the applicable haircut (H_M) is calculated using the following square root of time formula:

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

where

(1) T_M equals 5 for repo-style transactions and client-facing derivative transactions and 10 for eligible margin loans and derivative contracts other than client-facing derivative transactions;

(2) T_N equals the holding period

used by the Board-regulated institution to derive H_N ; and

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

(C) If the number of trades in a netting set exceeds 5,000 at any time during a quarter, a Board-regulated institution must calculate the haircut using a minimum holding period of twenty business days for the following quarter except in the calculation of the exposure amount for purposes of section 217.35. If a netting set contains one or more trades involving illiquid collateral or an OTC derivative that cannot be easily replaced, a Board-regulated institution must calculate the haircut using a minimum holding period of twenty business days. If over the two previous quarters more than two margin disputes on a netting set have occurred that lasted more than the holding period, then the Board-regulated institution must calculate the haircut for transactions in that netting set on the basis of a holding period that is at least two times the minimum holding period for that netting set.

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

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

(F) Nothing in this section prevents the Board from requiring a Board-regulated institution to use a different

period of significant financial stress in the calculation of own internal estimates for haircuts.

(G) A Board-regulated institution must update its data sets and calculate haircuts no less frequently than quarterly and must also reassess data sets and haircuts whenever market prices change materially.

(ii) With respect to debt securities that are investment grade, a Board-regulated institution may calculate haircuts for categories of securities. For a category of securities, the Board-regulated institution must calculate the haircut on the basis of internal volatility estimates for securities in that category that are representative of the securities in that category that the Board-regulated institution has lent, sold subject to repurchase, posted as collateral, borrowed, purchased subject to resale, or taken as collateral. In determining relevant categories, the Board-regulated institution must at a minimum take into account:

- (A) The type of issuer of the security;
- (B) The credit quality of the security;
- (C) The maturity of the security; and
- (D) The interest rate sensitivity of the security.

(iii) With respect to debt securities that are not investment grade and equity securities, a Board-regulated institution must calculate a separate haircut for each individual security.

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

(v) A Board-regulated institution's own estimates of market price and foreign exchange rate volatilities may not take into account the correlations among securities and foreign exchange rates on either the exposure or collateral side of a transac-

tion (or netting set) or the correlations among securities and foreign exchange rates between the exposure and collateral sides of the transaction (or netting set).

3-2138

RISK-WEIGHTED ASSETS FOR UNSETTLED TRANSACTIONS

SECTION 217.38—Unsettled Transactions

(a) *Definitions.* For purposes of this section:

(1) Delivery-versus-payment (DvP) transaction means a securities or commodities transaction in which the buyer is obligated to make payment only if the seller has made delivery of the securities or commodities and the seller is obligated to deliver the securities or commodities only if the buyer has made payment.

(2) Payment-versus-payment (PvP) transaction means a foreign exchange transaction in which each counterparty is obligated to make a final transfer of one or more currencies only if the other counterparty has made a final transfer of one or more currencies.

(3) A transaction has a normal settlement period if the contractual settlement period for the transaction is equal to or less than the market standard for the instrument underlying the transaction and equal to or less than five business days.

(4) Positive current exposure of a Board-regulated institution for a transaction is the difference between the transaction value at the agreed settlement price and the current market price of the transaction, if the difference results in a credit exposure of the Board-regulated institution to the counterparty.

(b) *Scope.* This section applies to all transactions involving securities, foreign exchange instruments, and commodities that have a risk of delayed settlement or delivery. This section does not apply to:

(1) Cleared transactions that are marked-to-market daily and subject to daily receipt and payment of variation margin;

(2) Repo-style transactions, including unsettled repo-style transactions;

(3) One-way cash payments on OTC derivative contracts; or

(4) Transactions with a contractual settlement period that is longer than the normal settlement period (which are treated as OTC derivative contracts as provided in section 217.34).

(c) *System-wide failures.* In the case of a system-wide failure of a settlement, clearing system or central counterparty, the Board may waive risk-based capital requirements for unsettled and failed transactions until the situation is rectified.

(d) *Delivery-versus-payment (DvP) and payment-versus-payment (PvP) transactions.* A Board-regulated institution must hold risk-based capital against any DvP or PvP transaction with a normal settlement period if the Board-regulated institution's counterparty has not made delivery or payment within five business days after the settlement date. The Board-regulated institution must determine its risk-weighted asset amount for such a transaction by multiplying the positive current exposure of the transaction for the Board-regulated institution by the appropriate risk weight in Table 1 to section 217.38.

Table 1 to section 217.38—Risk weights for unsettled DvP and PvP transactions

Number of business days after contractual settlement date	Risk weight to be applied to positive current exposure (in percent)
From 5 to 15	100.0
From 16 to 30	625.0
From 31 to 45	937.5
46 or more	1,250.0

(e) *Non-DvP/non-PvP (non-delivery-versus-payment/non-payment-versus-payment) transactions.*

(1) A Board-regulated institution must hold risk-based capital against any non-DvP/non-PvP transaction with a normal settlement period if the Board-regulated institution has delivered cash, securities, commodities, or currencies to its counterparty but has not received its corresponding deliverables by the end of the same business day. The Board-regulated institution must continue to

hold risk-based capital against the transaction until the Board-regulated institution has received its corresponding deliverables.

(2) From the business day after the Board-regulated institution has made its delivery until five business days after the counterparty delivery is due, the Board-regulated institution must calculate the risk-weighted asset amount for the transaction by treating the current fair value of the deliverables owed to the Board-regulated institution as an exposure to the counterparty and using the applicable counterparty risk weight under this subpart D.

(3) If the Board-regulated institution has not received its deliverables by the fifth business day after counterparty delivery is due, the Board-regulated institution must assign a 1,250 percent risk weight to the current fair value of the deliverables owed to the Board-regulated institution.

(f) *Total risk-weighted assets for unsettled transactions.* Total risk-weighted assets for unsettled transactions is the sum of the risk-weighted asset amounts of all DvP, PvP, and non-DvP/non-PvP transactions.

SECTIONS 217.39–217.40—[Reserved]

3-2141

RISK-WEIGHTED ASSETS FOR SECURITIZATION EXPOSURES

SECTION 217.41—Operational Requirements for Securitization Exposures

(a) *Operational criteria for traditional securitizations.* A Board-regulated institution that transfers exposures it has originated or purchased to a securitization SPE or other third party in connection with a traditional securitization may exclude the exposures from the calculation of its risk-weighted assets only if each condition in this section is satisfied. A Board-regulated institution that meets these conditions must hold risk-based capital against any credit risk it retains in connection with the securitization. A Board-regulated institution that fails to meet these conditions must hold risk-based capital against the transferred

exposures as if they had not been securitized and must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from the transaction. The conditions are:

- (1) The exposures are not reported on the Board-regulated institution's consolidated balance sheet under GAAP;
- (2) The Board-regulated institution has transferred to one or more third parties credit risk associated with the underlying exposures;
- (3) Any clean-up calls relating to the securitization are eligible clean-up calls; and
- (4) The securitization does not:
 - (i) Include one or more underlying exposures in which the borrower is permitted to vary the drawn amount within an agreed limit under a line of credit; and
 - (ii) Contain an early amortization provision.

(b) *Operational criteria for synthetic securitizations.* For synthetic securitizations, a Board-regulated institution may recognize for risk-based capital purposes the use of a credit risk mitigant to hedge underlying exposures only if each condition in this paragraph (b) is satisfied. A Board-regulated institution that meets these conditions must hold risk-based capital against any credit risk of the exposures it retains in connection with the synthetic securitization. A Board-regulated institution that fails to meet these conditions or chooses not to recognize the credit risk mitigant for purposes of this section must instead hold risk-based capital against the underlying exposures as if they had not been synthetically securitized. The conditions are:

- (1) The credit risk mitigant is:
 - (i) Financial collateral;
 - (ii) A guarantee that meets all criteria as set forth in the definition of “eligible guarantee” in section 217.2, except for the criteria in paragraph (3) of that definition; or
 - (iii) A credit derivative that meets all criteria as set forth in the definition of “eligible credit derivative” in section 217.2, except for the criteria in paragraph (3) of the definition of “eligible guarantee” in section 217.2.
- (2) The Board-regulated institution transfers

credit risk associated with the underlying exposures to one or more third parties, and the terms and conditions in the credit risk mitigants employed do not include provisions that:

- (i) Allow for the termination of the credit protection due to deterioration in the credit quality of the underlying exposures;
 - (ii) Require the Board-regulated institution to alter or replace the underlying exposures to improve the credit quality of the underlying exposures;
 - (iii) Increase the Board-regulated institution's cost of credit protection in response to deterioration in the credit quality of the underlying exposures;
 - (iv) Increase the yield payable to parties other than the Board-regulated institution in response to a deterioration in the credit quality of the underlying exposures; or
 - (v) Provide for increases in a retained first loss position or credit enhancement provided by the Board-regulated institution after the inception of the securitization;
- (3) The Board-regulated institution obtains a well-reasoned opinion from legal counsel that confirms the enforceability of the credit risk mitigant in all relevant jurisdictions; and
- (4) Any clean-up calls relating to the securitization are eligible clean-up calls.

(c) *Due diligence requirements for securitization exposures.*

- (1) Except for exposures that are deducted from common equity tier 1 capital and exposures subject to section 217.42(h), if a Board-regulated institution is unable to demonstrate to the satisfaction of the Board a comprehensive understanding of the features of a securitization exposure that would materially affect the performance of the exposure, the Board-regulated institution must assign the securitization exposure a risk weight of 1,250 percent. The Board-regulated institution's analysis must be commensurate with the complexity of the securitization exposure and the materiality of the exposure in relation to its capital.
- (2) A Board-regulated institution must dem-

onstrate its comprehensive understanding of a securitization exposure under paragraph (c)(1) of this section, for each securitization exposure by:

- (i) Conducting an analysis of the risk characteristics of a securitization exposure prior to acquiring the exposure, and documenting such analysis within three business days after acquiring the exposure, considering:

- (A) Structural features of the securitization that would materially impact the performance of the exposure, for example, the contractual cash flow waterfall, waterfall-related triggers, credit enhancements, liquidity enhancements, fair value triggers, the performance of organizations that service the exposure, and deal-specific definitions of default;
- (B) Relevant information regarding the performance of the underlying credit exposure(s), for example, the percentage of loans 30, 60, and 90 days past due; default rates; prepayment rates; loans in foreclosure; property types; occupancy; average credit score or other measures of creditworthiness; average LTV ratio; and industry and geographic diversification data on the underlying exposure(s);

- (C) Relevant market data of the securitization, for example, bid-ask spread, most recent sales price and historic price volatility, trading volume, implied market rating, and size, depth and concentration level of the market for the securitization; and

- (D) For resecuritization exposures, performance information on the underlying securitization exposures, for example, the issuer name and credit quality, and the characteristics and performance of the exposures underlying the securitization exposures; and

- (ii) On an on-going basis (no less frequently than quarterly), evaluating, reviewing, and updating as appropriate the analysis required under paragraph (c)(1) of this section for each securitization exposure.

3-2142**SECTION 217.42—Risk-Weighted Assets for Securitization Exposures**

(a) *Securitization risk weight approaches.* Except as provided elsewhere in this section or in section 217.41:

(1) A Board-regulated institution must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from a securitization and apply a 1,250 percent risk weight to the portion of a CEIO that does not constitute after-tax gain-on-sale.

(2) If a securitization exposure does not require deduction under paragraph (a)(1) of this section, a Board-regulated institution may assign a risk weight to the securitization exposure using the simplified supervisory formula approach (SSFA) in accordance with sections 217.43(a) through 217.43(d) and subject to the limitation under paragraph (e) of this section. Alternatively, a Board-regulated institution that is not subject to subpart F of this part may assign a risk weight to the securitization exposure using the gross-up approach in accordance with section 217.43(e), provided, however, that such Board-regulated institution must apply either the SSFA or the gross-up approach consistently across all of its securitization exposures, except as provided in paragraphs (a)(1), (a)(3), and (a)(4) of this section.

(3) If a securitization exposure does not require deduction under paragraph (a)(1) of this section and the Board-regulated institution cannot, or chooses not to apply the SSFA or the gross-up approach to the exposure, the Board-regulated institution must assign a risk weight to the exposure as described in section 217.44.

(4) If a securitization exposure is a derivative contract (other than protection provided by a Board-regulated institution in the form of a credit derivative) that has a first priority claim on the cash flows from the underlying exposures (notwithstanding amounts due under interest rate or currency derivative contracts, fees due, or other similar payments), a Board-regulated institution may choose to set the risk-weighted asset amount of the exposure equal to the amount

of the exposure as determined in paragraph (c) of this section.

(b) *Total risk-weighted assets for securitization exposures.* A Board-regulated institution's total risk-weighted assets for securitization exposures equals the sum of the risk-weighted asset amount for securitization exposures that the Board-regulated institution risk weights under sections 217.41(c), 217.42(a)(1), and 217.43, 217.44, or 217.45, and paragraphs (e) through (j) of this section, as applicable.

(c) *Exposure amount of a securitization exposure.*

(1) *On-balance sheet securitization exposures.* The exposure amount of an on-balance sheet securitization exposure (excluding an available-for-sale or held-to-maturity security where the Board-regulated institution has made an AOCI opt-out election under section 217.22(b)(2), a repo-style transaction, eligible margin loan, OTC derivative contract, or cleared transaction) is equal to the carrying value of the exposure.

(2) *On-balance sheet securitization exposures held by a Board-regulated institution that has made an AOCI opt-out election.* The exposure amount of an on-balance sheet securitization exposure that is an available-for-sale or held-to-maturity security held by a Board-regulated institution that has made an AOCI opt-out election under section 217.22(b)(2) is the Board-regulated institution's carrying value (including net accrued but unpaid interest and fees), less any net unrealized gains on the exposure and plus any net unrealized losses on the exposure.

(3) *Off-balance sheet securitization exposures.*

(i) Except as provided in paragraph (j) of this section, the exposure amount of an off-balance sheet securitization exposure that is not a repo-style transaction, eligible margin loan, cleared transaction (other than a credit derivative), or an OTC derivative contract (other than a credit derivative) is the notional amount of the exposure. For an off-balance sheet securitization exposure to an ABCP program, such as an eligible ABCP liquidity facility, the notional amount may be re-

duced to the maximum potential amount that the Board-regulated institution could be required to fund given the ABCP program's current underlying assets (calculated without regard to the current credit quality of those assets).

(ii) A Board-regulated institution must determine the exposure amount of an eligible ABCP liquidity facility for which the SSFA does not apply by multiplying the notional amount of the exposure by a CCF of 50 percent.

(iii) A Board-regulated institution must determine the exposure amount of an eligible ABCP liquidity facility for which the SSFA applies by multiplying the notional amount of the exposure by a CCF of 100 percent.

(4) *Repo-style transactions, eligible margin loans, and derivative contracts.* The exposure amount of a securitization exposure that is a repo-style transaction, eligible margin loan, or derivative contract (other than a credit derivative) is the exposure amount of the transaction as calculated under section 217.34 or section 217.37, as applicable.

(d) *Overlapping exposures.* If a Board-regulated institution has multiple securitization exposures that provide duplicative coverage to the underlying exposures of a securitization (such as when a Board-regulated institution provides a program-wide credit enhancement and multiple pool-specific liquidity facilities to an ABCP program), the Board-regulated institution is not required to hold duplicative risk-based capital against the overlapping position. Instead, the Board-regulated institution may apply to the overlapping position the applicable risk-based capital treatment that results in the highest risk-based capital requirement.

(e) *Implicit support.* If a Board-regulated institution provides support to a securitization in excess of the Board-regulated institution's contractual obligation to provide credit support to the securitization (implicit support):

(1) The Board-regulated institution must include in risk-weighted assets all of the underlying exposures associated with the securitization as if the exposures had not been securitized and must deduct from common

equity tier 1 capital any after-tax gain-on-sale resulting from the securitization; and

(2) The Board-regulated institution must disclose publicly:

(i) That it has provided implicit support to the securitization; and

(ii) The risk-based capital impact to the Board-regulated institution of providing such implicit support.

(f) *Undrawn portion of a servicer cash advance facility.*

(1) Notwithstanding any other provision of this subpart, a Board-regulated institution that is a servicer under an eligible servicer cash advance facility is not required to hold risk-based capital against potential future cash advance payments that it may be required to provide under the contract governing the facility.

(2) For a Board-regulated institution that acts as a servicer, the exposure amount for a servicer cash advance facility that is not an eligible servicer cash advance facility is equal to the amount of all potential future cash advance payments that the Board-regulated institution may be contractually required to provide during the subsequent 12 month period under the contract governing the facility.

(g) *Interest-only mortgage-backed securities.* Regardless of any other provisions in this subpart, the risk weight for a non-credit-enhancing interest-only mortgage-backed security may not be less than 100 percent.

(h) *Small-business loans and leases on personal property transferred with retained contractual exposure.*

(1) Regardless of any other provision of this subpart, a Board-regulated institution that has transferred small-business loans and leases on personal property (small-business obligations) with recourse must include in risk-weighted assets only its contractual exposure to the small-business obligations if all the following conditions are met:

(i) The transaction must be treated as a sale under GAAP.

(ii) The Board-regulated institution establishes and maintains, pursuant to GAAP,

a non-capital reserve sufficient to meet the Board-regulated institution's reasonably estimated liability under the contractual obligation.

(iii) The small-business obligations are to businesses that meet the criteria for a small-business concern established by the Small Business Administration under section 3(a) of the Small Business Act (15 U.S.C. 632 *et seq.*).

(iv) (A) In the case of a state member bank, the bank is well capitalized, as defined in 12 CFR 208.43. For purposes of determining whether a state member bank is well capitalized for purposes of this paragraph (h), the state member bank's capital ratios must be calculated without regard to the capital treatment for transfers of small-business obligations under this paragraph (h).

(B) In the case of a bank holding company or savings and loan holding company, the bank holding company or savings and loan holding company is well capitalized, as defined in 12 CFR 225.2. For purposes of determining whether a bank holding company or savings and loan holding company is well capitalized for purposes of this paragraph (h), the bank holding company or savings and loan holding company's capital ratios must be calculated without regard to the capital treatment for transfers of small-business obligations with recourse specified in paragraph (k)(1) of this section.

(2) The total outstanding amount of contractual exposure retained by a Board-regulated institution on transfers of small-business obligations receiving the capital treatment specified in paragraph (h)(1) of this section cannot exceed 15 percent of the Board-regulated institution's total capital.

(3) If a Board-regulated institution ceases to be well capitalized under 12 CFR 208.43 or exceeds the 15 percent capital limitation provided in paragraph (h)(2) of this section, the capital treatment under paragraph (h)(1) of this section will continue to apply to any transfers of small-business obligations with retained contractual exposure that occurred

during the time that the Board-regulated institution was well capitalized and did not exceed the capital limit.

(4) The risk-based capital ratios of the Board-regulated institution must be calculated without regard to the capital treatment for transfers of small-business obligations specified in paragraph (h)(1) of this section for purposes of:

- (i) Determining whether a Board-regulated institution is adequately capitalized, undercapitalized, significantly undercapitalized, or critically undercapitalized under the Board's prompt corrective action regulations; and
- (ii) Reclassifying a well-capitalized Board-regulated institution to adequately capitalized and requiring an adequately capitalized Board-regulated institution to comply with certain mandatory or discretionary supervisory actions as if the Board-regulated institution were in the next lower prompt-corrective-action category.

(i) *Nth-to-default credit derivatives.*

(1) *Protection provider.* A Board-regulated institution may assign a risk weight using the SSFA in section 217.43 to an nth-to-default credit derivative in accordance with this paragraph (i). A Board-regulated institution must determine its exposure in the nth-to-default credit derivative as the largest notional amount of all the underlying exposures.

(2) For purposes of determining the risk weight for an nth-to-default credit derivative using the SSFA, the Board-regulated institution must calculate the attachment point and detachment point of its exposure as follows:

- (i) The attachment point (parameter A) is the ratio of the sum of the notional amounts of all underlying exposures that are subordinated to the Board-regulated institution's exposure to the total notional amount of all underlying exposures. The ratio is expressed as a decimal value between zero and one. In the case of a first-to-default credit derivative, there are no underlying exposures that are subordinated to the Board-regulated institution's exposure. In the case of a second-or-

subsequent-to-default credit derivative, the smallest (n-1) notional amounts of the underlying exposure(s) are subordinated to the Board-regulated institution's exposure.

(ii) The detachment point (parameter D) equals the sum of parameter A plus the ratio of the notional amount of the Board-regulated institution's exposure in the nth-to-default credit derivative to the total notional amount of all underlying exposures. The ratio is expressed as a decimal value between zero and one.

(3) A Board-regulated institution that does not use the SSFA to determine a risk weight for its nth-to-default credit derivative must assign a risk weight of 1,250 percent to the exposure.

(4) *Protection purchaser.*

(i) *First-to-default credit derivatives.* A Board-regulated institution that obtains credit protection on a group of underlying exposures through a first-to-default credit derivative that meets the rules of recognition of section 217.36(b) must determine its risk-based capital requirement for the underlying exposures as if the Board-regulated institution synthetically securitized the underlying exposure with the smallest risk-weighted asset amount and had obtained no credit risk mitigant on the other underlying exposures. A Board-regulated institution must calculate a risk-based capital requirement for counterparty credit risk according to section 217.34 for a first-to-default credit derivative that does not meet the rules of recognition of section 217.36(b).

(ii) *Second-or-subsequent-to-default credit derivatives.*

(A) A Board-regulated institution that obtains credit protection on a group of underlying exposures through a nth-to-default credit derivative that meets the rules of recognition of section 217.36(b) (other than a first-to-default credit derivative) may recognize the credit risk mitigation benefits of the derivative only if:

(1) The Board-regulated institution also has obtained credit protection on the same underlying exposures in

the form of first-through-(n-1)-to-default credit derivatives; or

(2) If n-1 of the underlying exposures have already defaulted.

(B) If a Board-regulated institution satisfies the requirements of paragraph (i)(4)(ii)(A) of this section, the Board-regulated institution must determine its risk-based capital requirement for the underlying exposures as if the Board-regulated institution had only synthetically securitized the underlying exposure with the nth smallest risk-weighted asset amount and had obtained no credit risk mitigant on the other underlying exposures.

(C) A Board-regulated institution must calculate a risk-based capital requirement for counterparty credit risk according to section 217.34 for a nth-to-default credit derivative that does not meet the rules of recognition of section 217.36(b).

(j) *Guarantees and credit derivatives other than nth-to-default credit derivatives.*

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

(2) *Protection purchaser.*

(i) A Board-regulated institution that purchases a guarantee or OTC credit derivative (other than an nth-to-default credit derivative) that is recognized under section 217.45 as a credit risk mitigant (including via collateral recognized under section 217.37) is not required to compute a separate counterparty credit risk capital requirement under section 217.31, in accordance with 34(c).

(ii) If a Board-regulated institution cannot, or chooses not to, recognize a purchased credit derivative as a credit risk mitigant under section 217.45, the Board-

regulated institution must determine the exposure amount of the credit derivative under section 217.34.

(A) If the Board-regulated institution purchases credit protection from a counterparty that is not a securitization SPE, the Board-regulated institution must determine the risk weight for the exposure according to this subpart D.

(B) If the Board-regulated institution purchases the credit protection from a counterparty that is a securitization SPE, the Board-regulated institution must determine the risk weight for the exposure according to section 217.42, including section 217.42(a)(4) for a credit derivative that has a first priority claim on the cash flows from the underlying exposures of the securitization SPE (notwithstanding amounts due under interest rate or currency derivative contracts, fees due, or other similar payments).

3-2143

SECTION 217.43—Simplified Supervisory Formula Approach (SSFA) and the Gross-Up Approach

(a) *General requirements for the SSFA.* To use the SSFA to determine the risk weight for a securitization exposure, a Board-regulated institution must have data that enables it to assign accurately the parameters described in paragraph (b) of this section. Data used to assign the parameters described in paragraph (b) of this section must be the most currently available data; if the contracts governing the underlying exposures of the securitization require payments on a monthly or quarterly basis, the data used to assign the parameters described in paragraph (b) of this section must be no more than 91 calendar days old. A Board-regulated institution that does not have the appropriate data to assign the parameters described in paragraph (b) of this section must assign a risk weight of 1,250 percent to the exposure.

(b) *SSFA parameters.* To calculate the risk weight for a securitization exposure using the SSFA, a Board-regulated institution must have

accurate information on the following five inputs to the SSFA calculation:

(1) K_G is the weighted-average (with unpaid principal used as the weight for each exposure) total capital requirement of the underlying exposures calculated using this subpart. K_G is expressed as a decimal value between zero and one (that is, an average risk weight of 100 percent represents a value of K_G equal to 0.08).

(2) Parameter W is expressed as a decimal value between zero and one. Parameter W is the ratio of the sum of the dollar amounts of any underlying exposures of the securitization that meet any of the criteria as set forth in paragraphs (b)(2)(i) through (vi) of this section to the balance, measured in dollars, of underlying exposures:

- (i) Ninety days or more past due;
- (ii) Subject to a bankruptcy or insolvency proceeding;
- (iii) In the process of foreclosure;
- (iv) Held as real estate owned;
- (v) Has contractually deferred payments for 90 days or more, other than principal or interest payments deferred on:

(A) Federally-guaranteed student loans, in accordance with the terms of those guarantee programs; or

(B) Consumer loans, including non-federally-guaranteed student loans, provided that such payments are deferred pursuant to provisions included in the contract at the time funds are disbursed that provide for period(s) of deferral that are not initiated based on changes in the creditworthiness of the borrower; or

- (vi) Is in default.

(3) Parameter A is the attachment point for the exposure, which represents the threshold at which credit losses will first be allocated to the exposure. Except as provided in section 217.42(i) for n^{th} -to-default credit derivatives, parameter A equals the ratio of the current dollar amount of underlying exposures that are subordinated to the exposure of the Board-regulated institution to the current dollar amount of underlying exposures. Any reserve account funded by the accumulated cash flows from the underlying exposures that is subordinated to the Board-

regulated institution's securitization exposure may be included in the calculation of parameter A to the extent that cash is present in the account. Parameter A is expressed as a decimal value between zero and one.

(4) Parameter D is the detachment point for the exposure, which represents the threshold at which credit losses of principal allocated to the exposure would result in a total loss of principal. Except as provided in section 42(i) for n^{th} -to-default credit derivatives, parameter D equals parameter A plus the ratio of the current dollar amount of the securitization exposures that are *pari passu* with the exposure (that is, have equal seniority with respect to credit risk) to the current dollar amount of the underlying exposures. Parameter D is expressed as a decimal value between zero and one.

(5) A supervisory calibration parameter, p , is equal to 0.5 for securitization exposures that are not resecuritization exposures and equal to 1.5 for resecuritization exposures.

(c) *Mechanics of the SSFA.* K_G and W are used to calculate K_A , the augmented value of K_G , which reflects the observed credit quality of the underlying exposures. K_A is defined in paragraph (d) of this section. The values of parameters A and D, relative to K_A determine the risk weight assigned to a securitization exposure as described in paragraph (d) of this section. The risk weight assigned to a securitization exposure, or portion of a securitization exposure, as appropriate, is the larger of the risk weight determined in accordance with this paragraph (c) or paragraph (d) of this section and a risk weight of 20 percent.

(1) When the detachment point, parameter D, for a securitization exposure is less than or equal to K_A , the exposure must be assigned a risk weight of 1,250 percent.

(2) When the attachment point, parameter A, for a securitization exposure is greater than or equal to K_A , the Board-regulated institution must calculate the risk weight in accordance with paragraph (d) of this section.

(3) When A is less than K_A and D is greater than K_A , the risk weight is a weighted-average of 1,250 percent and 1,250 percent times K_{SSFA} calculated in ac-

cordance with paragraph (d) of this section. For the purpose of this weighted-average calculation:

(i) The weight assigned to 1,250 percent equals $\frac{K_A - A}{D - A}$.

(ii) The weight assigned to 1,250 percent times K_{SSFA} equals $\frac{D - K_A}{D - A}$.

(iii) The risk weight will be set equal to:

$$RW = \left[\left(\frac{K_A - A}{D - A} \right) \cdot 1,250 \text{ percent} \right] + \left[\left(\frac{D - K_A}{D - A} \right) \cdot 1,250 \text{ percent} \cdot K_{SSFA} \right]$$

(d) *SSFA equation.*

(1) The Board-regulated institution must define the following parameters:

$$K_A = (1 - W) \cdot K_G + (0.5 \cdot W)$$

$$a = -\frac{1}{p \cdot K_A}$$

$$u = D - K_A$$

$$l = \max(A - K_A, 0)$$

$$e = 2.71828,$$

the base of the natural logarithms.

(2) Then the Board-regulated institution must calculate K_{SSFA} according to the following equation:

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

(3) The risk weight for the exposure (expressed as a percent) is equal to $K_{SSFA} \times 1,250$.

(e) *Gross-up approach.*

(1) *Applicability.* A Board-regulated institution that is not subject to subpart F of this part may apply the gross-up approach set forth in this section instead of the SSFA to determine the risk weight of its securitization exposures, provided that it applies the gross-up approach to all of its securitization exposures, except as otherwise provided for certain securitization exposures in sections 217.44 and 217.45.

(2) To use the gross-up approach, a Board-regulated institution must calculate the following four inputs:

(i) Pro rata share, which is the par value of the Board-regulated institution's secu-

- ritization exposure as a percent of the par value of the tranche in which the securitization exposure resides;
- (ii) Enhanced amount, which is the par value of tranches that are more senior to the tranche in which the Board-regulated institution's securitization resides;
- (iii) Exposure amount of the Board-regulated institution's securitization exposure calculated under section 217.42(c); and
- (iv) Risk weight, which is the weighted-average risk weight of underlying exposures of the securitization as calculated under this subpart.
- (3) *Credit equivalent amount.* The credit equivalent amount of a securitization exposure under this section equals the sum of:
- (i) The exposure amount of the Board-regulated institution's securitization exposure; and
- (ii) The pro rata share multiplied by the enhanced amount, each calculated in accordance with paragraph (e)(2) of this section.
- (4) *Risk-weighted assets.* To calculate risk-weighted assets for a securitization exposure under the gross-up approach, a Board-regulated institution must apply the risk weight required under paragraph (e)(2) of this section to the credit equivalent amount calculated in paragraph (e)(3) of this section.
- (f) *Limitations.* Notwithstanding any other provision of this section, a Board-regulated institution must assign a risk weight of not less than 20 percent to a securitization exposure.

3-2144**SECTION 217.44—Securitization Exposures to Which the SSFA and Gross-Up Approach Do Not Apply**

- (a) *General requirement.* A Board-regulated institution must assign a 1,250 percent risk weight to all securitization exposures to which the Board-regulated institution does not apply the SSFA or the gross-up approach under section 217.43, except as set forth in this section.
- (b) *Eligible ABCP liquidity facilities.* A Board-regulated institution may determine the risk-weighted asset amount of an eligible

ABCP liquidity facility by multiplying the exposure amount by the highest risk weight applicable to any of the individual underlying exposures covered by the facility.

(c) *A securitization exposure in a second loss position or better to an ABCP program.*

(1) *Risk weighting.* A Board-regulated institution may determine the risk-weighted asset amount of a securitization exposure that is in a second loss position or better to an ABCP program that meets the requirements of paragraph (c)(2) of this section by multiplying the exposure amount by the higher of the following risk weights:

- (i) 100 percent; and
- (ii) The highest risk weight applicable to any of the individual underlying exposures of the ABCP program.

(2) *Requirements.*

- (i) The exposure is not an eligible ABCP liquidity facility;
- (ii) The exposure must be economically in a second loss position or better, and the first loss position must provide significant credit protection to the second loss position;
- (iii) The exposure qualifies as investment grade; and
- (iv) The Board-regulated institution holding the exposure must not retain or provide protection to the first loss position.

3-2145**SECTION 217.45—Recognition of Credit Risk Mitigants for Securitization Exposures**

(a) *General.*

(1) An originating Board-regulated institution that has obtained a credit risk mitigant to hedge its exposure to a synthetic or traditional securitization that satisfies the operational criteria provided in section 217.41 may recognize the credit risk mitigant under sections 217.36 or 217.37, but only as provided in this section.

(2) An investing Board-regulated institution that has obtained a credit risk mitigant to hedge a securitization exposure may recognize the credit risk mitigant under sections 217.36 or 217.37, but only as provided in this section.

(b) *Mismatches.* A Board-regulated institution must make any applicable adjustment to the protection amount of an eligible guarantee or credit derivative as required in section 217.36(d), (e), and (f) for any hedged securitization exposure. In the context of a synthetic securitization, when an eligible guarantee or eligible credit derivative covers multiple hedged exposures that have different residual maturities, the Board-regulated institution must use the longest residual maturity of any of the hedged exposures as the residual maturity of all hedged exposures.

SECTIONS 217.46–217.50—[Reserved]

3-2151

RISK-WEIGHTED ASSETS FOR EQUITY EXPOSURES

SECTION 217.51—Introduction and Exposure Measurement

(a) *General.*

(1) To calculate its risk-weighted asset amounts for equity exposures that are not equity exposures to an investment fund, a Board-regulated institution must use the Simple Risk-Weight Approach (SRWA) provided in section 217.52. A Board-regulated institution must use the look-through approaches provided in section 217.53 to calculate its risk-weighted asset amounts for equity exposures to investment funds.

(2) A Board-regulated institution must treat an investment in a separate account (as defined in section 217.2) as if it were an equity exposure to an investment fund as provided in section 217.53.

(3) *Stable value protection.*

(i) Stable value protection means a contract where the provider of the contract is obligated to pay:

(A) The policy owner of a separate account an amount equal to the shortfall between the fair value and cost basis of the separate account when the policy owner of the separate account surrenders the policy; or

(B) The beneficiary of the contract an amount equal to the shortfall between the fair value and book value of a specified portfolio of assets.

(ii) A Board-regulated institution that purchases stable value protection on its investment in a separate account must treat the portion of the carrying value of its investment in the separate account attributable to the stable value protection as an exposure to the provider of the protection and the remaining portion of the carrying value of its separate account as an equity exposure to an investment fund.

(iii) A Board-regulated institution that provides stable value protection must treat the exposure as an equity derivative with an adjusted carrying value determined as the sum of paragraphs (b)(1) and (3) of this section.

(b) *Adjusted carrying value.* For purposes of sections 217.51 through 217.53, the adjusted carrying value of an equity exposure is:

(1) For the on-balance sheet component of an equity exposure (other than an equity exposure that is classified as available-for-sale where the Board-regulated institution has made an AOCI opt-out election under section 217.22(b)(2)), the Board-regulated institution's carrying value of the exposure;

(2) For the on-balance sheet component of an equity exposure that is classified as available-for-sale where the Board-regulated institution has made an AOCI opt-out election under section 217.22(b)(2), the Board-regulated institution's carrying value of the exposure less any net unrealized gains on the exposure that are reflected in such carrying value but excluded from the Board-regulated institution's regulatory capital components;

(3) For the off-balance sheet component of an equity exposure that is not an equity commitment, the effective notional principal amount of the exposure, the size of which is equivalent to a hypothetical on-balance sheet position in the underlying equity instrument that would evidence the same change in fair value (measured in dollars) given a small change in the price of the underlying equity instrument, minus the adjusted carrying value of the on-balance sheet component of the exposure as calculated in paragraph (b)(1) of this section; and

(4) For a commitment to acquire an equity

exposure (an equity commitment), the effective notional principal amount of the exposure is multiplied by the following conversion factors (CFs):

- (i) Conditional equity commitments with an original maturity of one year or less receive a CF of 20 percent.
- (ii) Conditional equity commitments with an original maturity of over one year receive a CF of 50 percent.
- (iii) Unconditional equity commitments receive a CF of 100 percent.

3-2152

SECTION 217.52—Simple Risk-Weight Approach (SRWA)

(a) *General.* Under the SRWA, a Board-regulated institution's total risk-weighted assets for equity exposures equals the sum of the risk-weighted asset amounts for each of the Board-regulated institution's individual equity exposures (other than equity exposures to an investment fund) as determined under this section and the risk-weighted asset amounts for each of the Board-regulated institution's individual equity exposures to an investment fund as determined under section 217.53.

(b) *SRWA computation for individual equity exposures.* A Board-regulated institution must determine the risk-weighted asset amount for an individual equity exposure (other than an equity exposure to an investment fund) by multiplying the adjusted carrying value of the equity exposure or the effective portion and ineffective portion of a hedge pair (as defined in paragraph (c) of this section) by the lowest applicable risk weight in this paragraph (b).

(1) *Zero percent risk weight equity exposures.* An equity exposure to a sovereign, the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, the European Stability Mechanism, the European Financial Stability Facility, an MDB, and any other entity whose credit exposures receive a zero percent risk weight under section 217.32 may be assigned a zero percent risk weight.

(2) *20 percent risk weight equity exposures.* An equity exposure to a PSE, Federal Home Loan Bank or the Federal Agricul-

tural Mortgage Corporation (Farmer Mac) must be assigned a 20 percent risk weight.

(3) *100 percent risk weight equity exposures.* The equity exposures set forth in this paragraph (b)(3) must be assigned a 100 percent risk weight.

(i) *Community development equity exposures.*

(A) For state member banks and bank holding companies, an equity exposure that qualifies as a community development investment under 12 U.S.C. 24 (Eleventh), excluding equity exposures to an unconsolidated small business investment company and equity exposures held through a consolidated small business investment company described in section 302 of the Small Business Investment Act of 1958 (15 U.S.C. 682).

(B) For savings and loan holding companies, an equity exposure that is designed primarily to promote community welfare, including the welfare of low- and moderate-income communities or families, such as by providing services or employment, and excluding equity exposures to an unconsolidated small business investment company and equity exposures held through a small business investment company described in section 302 of the Small Business Investment Act of 1958 (15 U.S.C. 682).

(ii) *Effective portion of hedge pairs.* The effective portion of a hedge pair.

(iii) *Non-significant equity exposures.* Equity exposures, excluding significant investments in the capital of an unconsolidated financial institution in the form of common stock and exposures to an investment firm that would meet the definition of a traditional securitization were it not for the application of paragraph (8) of that definition in section 217.2 and has greater than immaterial leverage, to the extent that the aggregate adjusted carrying value of the exposures does not exceed 10 percent of the Board-regulated institution's total capital.

(A) To compute the aggregate adjusted carrying value of a Board-regulated in-

stitution's equity exposures for purposes of this section, the Board-regulated institution may exclude equity exposures described in paragraphs (b)(1), (b)(2), (b)(3)(i), and (b)(3)(ii) of this section, the equity exposure in a hedge pair with the smaller adjusted carrying value, and a proportion of each equity exposure to an investment fund equal to the proportion of the assets of the investment fund that are not equity exposures or that meet the criterion of paragraph (b)(3)(i) of this section. If a Board-regulated institution does not know the actual holdings of the investment fund, the Board-regulated institution may calculate the proportion of the assets of the fund that are not equity exposures based on the terms of the prospectus, partnership agreement, or similar contract that defines the fund's permissible investments. If the sum of the investment limits for all exposure classes within the fund exceeds 100 percent, the Board-regulated institution must assume for purposes of this section that the investment fund invests to the maximum extent possible in equity exposures.

(B) When determining which of a Board-regulated institution's equity exposures qualify for a 100 percent risk weight under this paragraph (b), a Board-regulated institution first must include equity exposures to unconsolidated small business investment companies or held through consolidated small business investment companies described in section 302 of the Small Business Investment Act, then must include publicly traded equity exposures (including those held indirectly through investment funds), and then must include non-publicly traded equity exposures (including those held indirectly through investment funds).

(4) *250 percent risk weight equity exposures.* Significant investments in the capital of unconsolidated financial institutions in the form of common stock that are not de-

ducted from capital pursuant to section 217.22(d)(2) are assigned a 250 percent risk weight.

(5) *300 percent risk weight equity exposures.* A publicly traded equity exposure (other than an equity exposure described in paragraph (b)(7) of this section and including the ineffective portion of a hedge pair) must be assigned a 300 percent risk weight.

(6) *400 percent risk weight equity exposures.* An equity exposure (other than an equity exposure described in paragraph (b)(7)) of this section that is not publicly traded must be assigned a 400 percent risk weight.

(7) *600 percent risk weight equity exposures.* An equity exposure to an investment firm must be assigned a 600 percent risk weight, provided that the investment firm:

- (i) Would meet the definition of a traditional securitization were it not for the application of paragraph (8) of that definition; and
- (ii) Has greater than immaterial leverage.

(c) *Hedge transactions.*

(1) *Hedge pair.* A hedge pair is two equity exposures that form an effective hedge so long as each equity exposure is publicly traded or has a return that is primarily based on a publicly traded equity exposure.

(2) *Effective hedge.* Two equity exposures form an effective hedge if the exposures either have the same remaining maturity or each has a remaining maturity of at least three months; the hedge relationship is formally documented in a prospective manner (that is, before the Board-regulated institution acquires at least one of the equity exposures); the documentation specifies the measure of effectiveness (E) the Board-regulated institution will use for the hedge relationship throughout the life of the transaction; and the hedge relationship has an E greater than or equal to 0.8. A Board-regulated institution must measure E at least quarterly and must use one of three alternative measures of E as set forth in this paragraph (c).

- (i) Under the dollar-offset method of measuring effectiveness, the Board-regulated institution must determine the

ratio of value change (RVC). The RVC is the ratio of the cumulative sum of the changes in value of one equity exposure to the cumulative sum of the changes in the value of the other equity exposure. If RVC is positive, the hedge is not effective and E equals 0. If RVC is negative and greater than or equal to -1 (that is, between zero and -1), then E equals the absolute value of RVC. If RVC is negative and less than -1, then E equals 2 plus RVC.

(ii) Under the variability-reduction method of measuring effectiveness:

$$E = 1 - \frac{\sum_{t=1}^T (X_t - X_{t-1})^2}{\sum_{t=1}^T (A_t - A_{t-1})^2}$$

where

(A) $X_t = A_t - B_t$;

(B) A_t = the value at time t of one exposure in a hedge pair; and

(C) B_t = the value at time t of the other exposure in a hedge pair.

(iii) Under the regression method of measuring effectiveness, E equals the coefficient of determination of a regression in which the change in value of one exposure in a hedge pair is the dependent variable and the change in value of the other exposure in a hedge pair is the independent variable. However, if the estimated regression coefficient is positive, then E equals zero.

(3) The effective portion of a hedge pair is E multiplied by the greater of the adjusted carrying values of the equity exposures forming a hedge pair.

(4) The ineffective portion of a hedge pair is (1-E) multiplied by the greater of the adjusted carrying values of the equity exposures forming a hedge pair.

3-2153

SECTION 217.53—Equity Exposures to Investment Funds

(a) *Available approaches.*

(1) Unless the exposure meets the requirements for a community development equity exposure under section 217.52(b)(3)(i), a Board-regulated institution must determine

the risk-weighted asset amount of an equity exposure to an investment fund under the full look-through approach described in paragraph (b) of this section, the simple modified look-through approach described in paragraph (c) of this section, or the alternative modified look-through approach described in paragraph (d) of this section, provided, however, that the minimum risk weight that may be assigned to an equity exposure under this section is 20 percent.

(2) The risk-weighted asset amount of an equity exposure to an investment fund that meets the requirements for a community development equity exposure in section 217.52(b)(3)(i) is its adjusted carrying value.

(3) If an equity exposure to an investment fund is part of a hedge pair and the Board-regulated institution does not use the full look-through approach, the Board-regulated institution must use the ineffective portion of the hedge pair as determined under section 217.52(c) as the adjusted carrying value for the equity exposure to the investment fund. The risk-weighted asset amount of the effective portion of the hedge pair is equal to its adjusted carrying value.

(b) *Full look-through approach.* A Board-regulated institution that is able to calculate a risk-weighted asset amount for its proportional ownership share of each exposure held by the investment fund (as calculated under this subpart as if the proportional ownership share of the adjusted carrying value of each exposure were held directly by the Board-regulated institution) may set the risk-weighted asset amount of the Board-regulated institution's exposure to the fund equal to the product of:

(1) The aggregate risk-weighted asset amounts of the exposures held by the fund as if they were held directly by the Board-regulated institution; and

(2) The Board-regulated institution's proportional ownership share of the fund.

(c) *Simple modified look-through approach.* Under the simple modified look-through approach, the risk-weighted asset amount for a Board-regulated institution's equity exposure to an investment fund equals the adjusted carrying value of the equity exposure multiplied

by the highest risk weight that applies to any exposure the fund is permitted to hold under the prospectus, partnership agreement, or similar agreement that defines the fund's permissible investments (excluding derivative contracts that are used for hedging rather than speculative purposes and that do not constitute a material portion of the fund's exposures).

(d) *Alternative modified look-through approach.* Under the alternative modified look-through approach, a Board-regulated institution may assign the adjusted carrying value of an equity exposure to an investment fund on a pro rata basis to different risk weight categories under this subpart based on the investment limits in the fund's prospectus, partnership agreement, or similar contract that defines the fund's permissible investments. The risk-weighted asset amount for the Board-regulated institution's equity exposure to the investment fund equals the sum of each portion of the adjusted carrying value assigned to an exposure type multiplied by the applicable risk weight under this subpart. If the sum of the investment limits for all exposure types within the fund exceeds 100 percent, the Board-regulated institution must assume that the fund invests to the maximum extent permitted under its investment limits in the exposure type with the highest applicable risk weight under this subpart and continues to make investments in order of the exposure type with the next highest applicable risk weight under this subpart until the maximum total investment level is reached. If more than one exposure type applies to an exposure, the Board-regulated institution must use the highest applicable risk weight. A Board-regulated institution may exclude derivative contracts held by the fund that are used for hedging rather than for speculative purposes and do not constitute a material portion of the fund's exposures.

SECTIONS 217.54–217.60—[Reserved]

3-2161

DISCLOSURES

SECTION 217.61—Purpose and Scope

Sections 217.61 through 217.63 of this subpart establish public disclosure requirements related to the capital requirements described in subpart B of this part for a Board-regulated institution with total consolidated assets of \$50 billion or more as reported on the Board-regulated institution's most recent year-end Call Report, for a state member bank, or FR Y-9C, for a bank holding company or savings and loan holding company, as applicable that is not an advanced approaches Board-regulated institution making public disclosures pursuant to section 217.172. An advanced approaches Board-regulated institution that has not received approval from the Board to exit parallel run pursuant to section 217.121(d) is subject to the disclosure requirements described in sections 217.62 and 217.63. A Board-regulated institution with total consolidated assets of \$50 billion or more as reported on the Board-regulated institution's most recent year-end Call Report, for a state member bank, or FR Y-9C, for a bank holding company or savings and loan holding company, as applicable, that is not an advanced approaches Board-regulated institution making public disclosures subject to section 217.172 must comply with section 217.62 unless it is a consolidated subsidiary of a bank holding company, savings and loan holding company, or depository institution that is subject to the disclosure requirements of section 217.62 or a subsidiary of a non-U.S. banking organization that is subject to comparable public disclosure requirements in its home jurisdiction. For purposes of this section, total consolidated assets are determined based on the average of the Board-regulated institution's total consolidated assets in the four most recent quarters as reported on the Call Report, for a state member bank, or FR Y-9C, for a bank holding company or savings and loan holding company, as applicable; or the average of the Board-regulated institution's total consolidated assets in the most recent consecutive quarters as reported quarterly on the Board-regulated institution's Call Report, for a state member bank, or FR Y-9C, for a bank holding company or savings and loan holding company, as applicable if the Board-regulated institution has not filed such a report for each of the most recent four quarters.

3-2162**SECTION 217.62—Disclosure Requirements**

(a) A Board-regulated institution described in section 217.61 must provide timely public disclosures each calendar quarter of the information in the applicable tables in section 217.63. If a significant change occurs, such that the most recent reported amounts are no longer reflective of the Board-regulated institution's capital adequacy and risk profile, then a brief discussion of this change and its likely impact must be disclosed as soon as practicable thereafter. Qualitative disclosures that typically do not change each quarter (for example, a general summary of the Board-regulated institution's risk management objectives and policies, reporting system, and definitions) may be disclosed annually after the end of the fourth calendar quarter, provided that any significant changes are disclosed in the interim. The Board-regulated institution's management may provide all of the disclosures required by sections 217.61 through 217.63 in one place on the Board-regulated institution's public website or may provide the disclosures in more than one public financial report or other regulatory reports, provided that the Board-regulated institution publicly provides a summary table specifically indicating the location(s) of all such disclosures.

(b) A Board-regulated institution described in section 217.61 must have a formal disclosure policy approved by the board of directors that addresses its approach for determining the disclosures it makes. The policy must address the associated internal controls and disclosure controls and procedures. The board of directors and senior management are responsible for establishing and maintaining an effective internal control structure over financial reporting, including the disclosures required by this subpart, and must ensure that appropriate review of the disclosures takes place. One or more senior officers of the Board-regulated institution must attest that the disclosures meet the requirements of this subpart.

(c) If a Board-regulated institution described in section 217.61 concludes that specific com-

mercial or financial information that it would otherwise be required to disclose under this section would be exempt from disclosure by the Board under the Freedom of Information Act (5 U.S.C. 552), then the Board-regulated institution is not required to disclose that specific information pursuant to this section, but must disclose more general information about the subject matter of the requirement, together with the fact that, and the reason why, the specific items of information have not been disclosed.

3-2163**SECTION 217.63—Disclosures by Board-Regulated Institutions Described in Section 217.61**

(a) Except as provided in section 217.62, a Board-regulated institution described in section 217.61 must make the disclosures described in Tables 1 through 10 of this section. The Board-regulated institution must make these disclosures publicly available for each of the last three years (that is, twelve quarters) or such shorter period beginning on January 1, 2015.

(b) A Board-regulated institution must publicly disclose each quarter the following:

(1) Common equity tier 1 capital, additional tier 1 capital, tier 2 capital, tier 1 and total capital ratios, including the regulatory capital elements and all the regulatory adjustments and deductions needed to calculate the numerator of such ratios;

(2) Total risk-weighted assets, including the different regulatory adjustments and deductions needed to calculate total risk-weighted assets;

(3) Regulatory capital ratios during any transition periods, including a description of all the regulatory capital elements and all regulatory adjustments and deductions needed to calculate the numerator and denominator of each capital ratio during any transition period; and

(4) A reconciliation of regulatory capital elements as they relate to its balance sheet in any audited consolidated financial statements.

Table 1 to section 217.63—Scope of application

Qualitative disclosures	(a)	The name of the top corporate entity in the group to which subpart D of this part applies.
	(b)	A brief description of the differences in the basis for consolidating entities ¹ for accounting and regulatory purposes, with a description of those entities: (1) That are fully consolidated; (2) That are deconsolidated and deducted from total capital; (3) For which the total capital requirement is deducted; and (4) That are neither consolidated nor deducted (for example, where the investment in the entity is assigned a risk weight in accordance with this subpart).
	(c)	Any restrictions, or other major impediments, on transfer of funds or total capital within the group.
Quantitative disclosures	(d)	The aggregate amount of surplus capital of insurance subsidiaries included in the total capital of the consolidated group.
	(e)	The aggregate amount by which actual total capital is less than the minimum total capital requirement in all subsidiaries, with total capital requirements and the name(s) of the subsidiaries with such deficiencies.

¹ Entities include securities, insurance and other financial subsidiaries, commercial subsidiaries (where permitted), and significant minority equity investments in insurance, financial and commercial entities.

Table 2 to section 217.63—Capital structure

Qualitative disclosures	(a)	Summary information on the terms and conditions of the main features of all regulatory capital instruments.
Quantitative disclosures	(b)	The amount of common equity tier 1 capital, with separate disclosure of: (1) Common stock and related surplus; (2) Retained earnings; (3) Common equity minority interest; (4) AOCI; and (5) Regulatory adjustments and deductions made to common equity tier 1 capital.
	(c)	The amount of tier 1 capital, with separate disclosure of: (1) Additional tier 1 capital elements, including additional tier 1 capital instruments and tier 1 minority interest not included in common equity tier 1 capital; and (2) Regulatory adjustments and deductions made to tier 1 capital.
	(d)	The amount of total capital, with separate disclosure of: (1) Tier 2 capital elements, including tier 2 capital instruments and total capital minority interest not included in tier 1 capital; and (2) Regulatory adjustments and deductions made to total capital.

Table 3 to section 217.63—Capital adequacy

Qualitative disclosures	(a)	A summary discussion of the Board-regulated institution's approach to assessing the adequacy of its capital to support current and future activities.
Quantitative disclosures	(b)	Risk-weighted assets for: (1) Exposures to sovereign entities; (2) Exposures to certain supranational entities and MDBs; (3) Exposures to depository institutions, foreign banks, and credit unions; (4) Exposures to PSEs; (5) Corporate exposures; (6) Residential mortgage exposures; (7) Statutory multifamily mortgages and pre-sold construction loans; (8) HVCRE loans; (9) Past due loans; (10) Other assets; (11) Cleared transactions; (12) Default fund contributions; (13) Unsettled transactions; (14) Securitization exposures; and (15) Equity exposures.
	(c)	Standardized market risk-weighted assets as calculated under subpart F of this part.
	(d)	Common equity tier 1, tier 1 and total risk-based capital ratios: (1) For the top consolidated group; and (2) For each depository institution subsidiary.
	(e)	Total standardized risk-weighted assets.

Table 4 to section 217.63—Capital conservation buffer

Quantitative disclosures	(a)	At least quarterly, the Board-regulated institution must calculate and publicly disclose the capital conservation buffer as described under section 217.11.
	(b)	At least quarterly, the Board-regulated institution must calculate and publicly disclose the eligible retained income of the Board-regulated institution, as described under section 217.11.
	(c)	At least quarterly, the Board-regulated institution must calculate and publicly disclose any limitations it has on distributions and discretionary bonus payments resulting from the capital conservation buffer framework described under section 217.11, including the maximum payout amount for the quarter.

(c) *General qualitative disclosure requirement.* For each separate risk area described in Tables 5 through 10, the Board-regulated institution must describe its risk management objectives and policies, including: strategies and processes; the structure and organization of the relevant risk management function; the scope and nature of risk reporting and/or measurement systems; policies for hedging and/or mitigating risk and strategies and processes for monitoring the continuing effectiveness of hedges/mitigants.

(d) A Category III Board-regulated institution

that is required to publicly disclose its supplementary leverage ratio pursuant to section 217.172(d) is subject to the supplementary leverage ratio disclosure requirement at section 217.173(a)(2).

(e) A Category III Board-regulated institution that is required to calculate a countercyclical capital buffer pursuant to section 217.11 is subject to the disclosure requirement at Table 4 to section 217.173, “Capital Conservation and Countercyclical Capital Buffers,” and not to the disclosure requirement at Table 4 to this section, “Capital Conservation Buffer.”

Table 5 to section 217.63¹ —Credit risk: general disclosures

Qualitative disclosures	(a)	The general qualitative disclosure requirement with respect to credit risk (excluding counterparty credit risk disclosed in accordance with Table 6), including the: (1) Policy for determining past due or delinquency status; (2) Policy for placing loans on nonaccrual; (3) Policy for returning loans to accrual status; (4) Definition of and policy for identifying impaired loans (for financial accounting purposes); (5) Description of the methodology that the Board-regulated institution uses to estimate its allowance for loan and lease losses or adjusted allowance for credit losses, as applicable, including statistical methods used where applicable; (6) Policy for charging-off uncollectible amounts; and (7) Discussion of the Board-regulated institution's credit risk management policy.
Quantitative disclosures	(b)	Total credit risk exposures and average credit risk exposures, after accounting offsets in accordance with GAAP, without taking into account the effects of credit risk mitigation techniques (for example, collateral and netting not permitted under GAAP), over the period categorized by major types of credit exposure. For example, Board-regulated institutions could use categories similar to that used for financial statement purposes. Such categories might include, for instance (1) Loans, off-balance sheet commitments, and other non-derivative off-balance sheet exposures; (2) Debt securities; and (3) OTC derivatives. ²
	(c)	Geographic distribution of exposures, categorized in significant areas by major types of credit exposure. ³
	(d)	Industry or counterparty type distribution of exposures, categorized by major types of credit exposure.
	(e)	By major industry or counterparty type: (1) Amount of impaired loans for which there was a related allowance under GAAP; (2) Amount of impaired loans for which there was no related allowance under GAAP; (3) Amount of loans past due 90 days and on nonaccrual; (4) Amount of loans past due 90 days and still accruing; ⁴ (5) The balance in the allowance for loan and lease losses or adjusted allowance for credit losses, as applicable, at the end of each period, disaggregated on the basis of the Board-regulated institution's impairment method. To disaggregate the information required on the basis of impairment methodology, an entity shall separately disclose the amounts based on the requirements in GAAP; and (6) Charge-offs during the period.
	(f)	Amount of impaired loans and, if available, the amount of past due loans categorized by significant geographic areas including, if practical, the amounts of allowances related to each geographical area ⁵ , further categorized as required by GAAP.
	(g)	Reconciliation of changes in ALLL or AACL, as applicable. ⁶
	(h)	Remaining contractual maturity delineation (for example, one year or less) of the whole portfolio, categorized by credit exposure.

¹ Table 5 does not cover equity exposures, which should be reported in Table 9.

² See, for example, ASC Topic 815-10 and 210, as they may be amended from time to time.

³ Geographical areas may consist of individual countries, groups of countries, or regions within countries. A Board-regulated institution might choose to define the geographical areas based on the way the Board-regulated institution's portfolio is geographically managed. The criteria used to allocate the loans to geographical areas must be specified.

⁴ A Board-regulated institution is encouraged also to provide an analysis of the aging of past-due loans.

⁵ The portion of the general allowance that is not allocated to a geographical area should be disclosed separately.

⁶ The reconciliation should include the following: a description of the allowance; the opening balance of the allowance; charge-offs taken against the allowance during the period; amounts provided (or reversed) for estimated probable loan losses during the period; any other adjustments (for example, exchange rate differences, business combinations, acquisitions and disposals of subsidiaries), including transfers between allowances; and the closing balance of the allowance. Charge-offs and recoveries that have been recorded directly to the income statement should be disclosed separately.

Table 6 to section 217.63—General disclosure for counterparty credit risk-related exposures

Qualitative disclosures	(a)	The general qualitative disclosure requirement with respect to OTC derivatives, eligible margin loans, and repo-style transactions, including a discussion of: (1) The methodology used to assign credit limits for counterparty credit exposures; (2) Policies for securing collateral, valuing and managing collateral, and establishing credit reserves; (3) The primary types of collateral taken; and (4) The impact of the amount of collateral the Board-regulated institution would have to provide given a deterioration in the Board-regulated institution's own creditworthiness.
Quantitative disclosures	(b)	Gross positive fair value of contracts, collateral held (including type, for example, cash, government securities), and net unsecured credit exposure. ¹ A Board-regulated institution also must disclose the notional value of credit derivative hedges purchased for counterparty credit risk protection and the distribution of current credit exposure by exposure type. ²
	(c)	Notional amount of purchased and sold credit derivatives, segregated between use for the Board-regulated institution's own credit portfolio and in its intermediation activities, including the distribution of the credit derivative products used, categorized further by protection bought and sold within each product group.

¹ Net unsecured credit exposure is the credit exposure after considering both the benefits from legally enforceable netting agreements and collateral arrangements without taking into account haircuts for price volatility, liquidity, etc.

² This may include interest rate derivative contracts, foreign exchange derivative contracts, equity derivative contracts, credit derivatives, commodity or other derivative contracts, repo-style transactions, and eligible margin loans.

Table 7 to section 217.63—Credit risk mitigation^{1,2}

Qualitative disclosures	(a)	The general qualitative disclosure requirement with respect to credit risk mitigation, including: (1) Policies and processes for collateral valuation and management; (2) A description of the main types of collateral taken by the Board-regulated institution; (3) The main types of guarantors/credit derivative counterparties and their creditworthiness; and (4) Information about (market or credit) risk concentrations with respect to credit risk mitigation.
Quantitative disclosures	(b)	For each separately disclosed credit risk portfolio, the total exposure that is covered by eligible financial collateral, and after the application of haircuts.
	(c)	For each separately disclosed portfolio, the total exposure that is covered by guarantees/credit derivatives and the risk-weighted asset amount associated with that exposure.

¹ At a minimum, a Board-regulated institution must provide the disclosures in Table 7 in relation to credit risk mitigation that has been recognized for the purposes of reducing capital requirements under this subpart. Where relevant, Board-regulated institutions are encouraged to give further information about mitigants that have not been recognized for that purpose.

² Credit derivatives that are treated, for the purposes of this subpart, as synthetic securitization exposures should be excluded from the credit risk mitigation disclosures and included within those relating to securitization (Table 8).

Table 8 to section 217.63—Securitization

Qualitative disclosures	(a)	The general qualitative disclosure requirement with respect to a securitization (including synthetic securitizations), including a discussion of: (1) The Board-regulated institution's objectives for securitizing assets, including the extent to which these activities transfer credit risk of the underlying exposures away from the Board-regulated institution to other entities and including the type of risks assumed and retained with resecuritization activity; ¹ (2) The nature of the risks (e.g., liquidity risk) inherent in the securitized assets; (3) The roles played by the Board-regulated institution in the securitization process ² and an indication of the extent of the Board-regulated institution's involvement in each of them; (4) The processes in place to monitor changes in the credit and market risk of securitization exposures including how those processes differ for resecuritization exposures; (5) The Board-regulated institution's policy for mitigating the credit risk retained through securitization and resecuritization exposures; and (6) The risk-based capital approaches that the Board-regulated institution follows for its securitization exposures including the type of securitization exposure to which each approach applies.
	(b)	A list of: (1) The type of securitization SPEs that the Board-regulated institution, as sponsor, uses to securitize third-party exposures. The Board-regulated institution must indicate whether it has exposure to these SPEs, either on- or off- balance sheet; and (2) Affiliated entities: (i) That the Board-regulated institution manages or advises; and (ii) That invest either in the securitization exposures that the Board-regulated institution has securitized or in securitization SPEs that the Board-regulated institution sponsors. ³
	(c)	Summary of the Board-regulated institution's accounting policies for securitization activities, including: (1) Whether the transactions are treated as sales or financings; (2) Recognition of gain-on-sale; (3) Methods and key assumptions applied in valuing retained or purchased interests; (4) Changes in methods and key assumptions from the previous period for valuing retained interests and impact of the changes; (5) Treatment of synthetic securitizations; (6) How exposures intended to be securitized are valued and whether they are recorded under subpart D of this part; and (7) Policies for recognizing liabilities on the balance sheet for arrangements that could require the Board-regulated institution to provide financial support for securitized assets.
	(d)	An explanation of significant changes to any quantitative information since the last reporting period.
Quantitative disclosures	(e)	The total outstanding exposures securitized by the Board-regulated institution in securitizations that meet the operational criteria provided in section 217.41 (categorized into traditional and synthetic securitizations), by exposure type, separately for securitizations of third-party exposures for which the bank acts only as sponsor. ⁴
	(f)	For exposures securitized by the Board-regulated institution in securitizations that meet the operational criteria in section 217.41: (1) Amount of securitized assets that are impaired/past due categorized by exposure type; ⁵ and (2) Losses recognized by the Board-regulated institution during the current period categorized by exposure type. ⁶
	(g)	The total amount of outstanding exposures intended to be securitized categorized by exposure type.
	(h)	Aggregate amount of: (1) On-balance sheet securitization exposures retained or purchased categorized by exposure type; and (2) Off-balance sheet securitization exposures categorized by exposure type.

Table 8 to section 217.63—Securitization—continued

Quantitative disclosures	(i)	1) Aggregate amount of securitization exposures retained or purchased and the associated capital requirements for these exposures, categorized between securitization and resecuritization exposures, further categorized into a meaningful number of risk weight bands and by risk-based capital approach (e.g., SSFA); and (2) Aggregate amount disclosed separately by type of underlying exposure in the pool of any: (i) After-tax gain-on-sale on a securitization that has been deducted from common equity tier 1 capital; and (ii) Credit-enhancing interest-only strip that is assigned a 1,250 percent risk weight.
	(j)	Summary of current year’s securitization activity, including the amount of exposures securitized (by exposure type), and recognized gain or loss on sale by exposure type.
	(k)	Aggregate amount of resecuritization exposures retained or purchased categorized according to: (1) Exposures to which credit risk mitigation is applied and those not applied; and (2) Exposures to guarantors categorized according to guarantor creditworthiness categories or guarantor name.

¹ The Board-regulated institution should describe the structure of resecuritizations in which it participates; this description should be provided for the main categories of resecuritization products in which the Board-regulated institution is active.

² For example, these roles may include originator, investor, servicer, provider of credit enhancement, sponsor, liquidity provider, or swap provider.

³ Such affiliated entities may include, for example, money market funds, to be listed individually, and personal and private trusts, to be noted collectively.

⁴ “Exposures securitized” include underlying exposures originated by the bank, whether generated by them or purchased, and recognized in the balance sheet, from third parties, and third-party exposures included in sponsored transactions. Securitization transactions (including underlying exposures originally on the bank’s balance sheet and underlying exposures acquired by the bank from third-party entities) in which the originating bank does not retain any securitization exposure should be shown separately but need only be reported for the year of inception. Banks are required to disclose exposures regardless of whether there is a capital charge under this part.

⁵ Include credit-related other than temporary impairment (OTTI).

⁶ For example, charge-offs/allowances (if the assets remain on the bank’s balance sheet) or credit-related OTTI of interest-only strips and other retained residual interests, as well as recognition of liabilities for probable future financial support required of the bank with respect to securitized assets.

Table 9 to section 217.63—Equities not subject to subpart F of this part

Qualitative disclosures	(a)	The general qualitative disclosure requirement with respect to equity risk for equities not subject to subpart F of this part, including: (1) Differentiation between holdings on which capital gains are expected and those taken under other objectives including for relationship and strategic reasons; and (2) Discussion of important policies covering the valuation of and accounting for equity holdings not subject to subpart F of this part. This includes the accounting techniques and valuation methodologies used, including key assumptions and practices affecting valuation as well as significant changes in these practices.
Quantitative disclosures	(b)	Value disclosed on the balance sheet of investments, as well as the fair value of those investments; for securities that are publicly traded, a comparison to publicly-quoted share values where the share price is materially different from fair value.
	(c)	The types and nature of investments, including the amount that is: (1) Publicly traded; and (2) Non publicly traded.
	(d)	The cumulative realized gains (losses) arising from sales and liquidations in the reporting period.
	(e)	(1) Total unrealized gains (losses). ¹ (2) Total latent revaluation gains (losses). ² (3) Any amounts of the above included in tier 1 or tier 2 capital.
	(f)	Capital requirements categorized by appropriate equity groupings, consistent with the Board-regulated institution’s methodology, as well as the aggregate amounts and the type of equity investments subject to any supervisory transition regarding regulatory capital requirements.

¹ Unrealized gains (losses) recognized on the balance sheet but not through earnings.

² Unrealized gains (losses) not recognized either on the balance sheet or through earnings.

Table 10 to section 217.63—Interest rate risk for non-trading activities

Qualitative disclosures	(a)	The general qualitative disclosure requirement, including the nature of interest rate risk for non-trading activities and key assumptions, including assumptions regarding loan prepayments and behavior of non-maturity deposits, and frequency of measurement of interest rate risk for non-trading activities.
Quantitative disclosures	(b)	The increase (decline) in earnings or economic value (or relevant measure used by management) for upward and downward rate shocks according to management’s method for measuring interest rate risk for non-trading activities, categorized by currency (as appropriate).

SECTIONS 217.64–217.99—[Reserved]

3-2200

SUBPART E—RISK-WEIGHTED ASSETS—INTERNAL RATINGS-BASED AND ADVANCED MEASUREMENT APPROACHES

SECTION 217.100—Purpose, Applicability, and Principle of Conservatism

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

- (1) Minimum qualifying criteria for Board-regulated institutions using institution-specific internal risk measurement and management processes for calculating risk-based capital requirements; and
- (2) Methodologies for such Board-regulated institutions to calculate their total risk-weighted assets.

(b) *Applicability.*

- (1) This subpart applies to:
 - (i) A top-tier bank holding company or savings and loan holding company domiciled in the United States that:
 - (A) Is not a consolidated subsidiary of another bank holding company or savings and loan holding company that uses this subpart to calculate its risk-based capital requirements; and
 - (B) That:
 - (1) Is identified as a global systemically important BHC pursuant to section 217.402;
 - (2) Is identified as a Category II banking organization pursuant to 12 CFR 252.5 or 12 CFR 238.10; or
 - (3) Has a subsidiary depository institution that is required, or has elected, to use 12 CFR part 3, subpart E (OCC), this subpart (Board), or 12 CFR part 324, subpart E

(FDIC), to calculate its risk-based capital requirements;

(ii) A state member bank that:

- (A) Is a subsidiary of a global systemically important BHC;
- (B) Is a Category II Board-regulated institution;
- (C) Is a subsidiary of a depository institution that uses 12 CFR part 3, subpart E (OCC), this subpart (Board), or 12 CFR part 324, subpart E (FDIC), to calculate its risk-based capital requirements; or
- (D) Is a subsidiary of a bank holding company or savings and loan holding company that uses this subpart to calculate its risk-based capital requirements; or

(iii) Any Board-regulated institution that elects to use this subpart to calculate its risk-based capital requirements.

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

(c) *Principle of conservatism.* Notwithstanding the requirements of this subpart, a Board-regulated institution may choose not to apply a provision of this subpart to one or more exposures provided that:

- (1) The Board-regulated institution can demonstrate on an ongoing basis to the satisfaction of the Board that not applying the provision would, in all circumstances, unambiguously generate a risk-based capital requirement for each such exposure greater

than that which would otherwise be required under this subpart;

(2) The Board-regulated institution appropriately manages the risk of each such exposure;

(3) The Board-regulated institution notifies the Board in writing prior to applying this principle to each such exposure; and

(4) The exposures to which the Board-regulated institution applies this principle are not, in the aggregate, material to the Board-regulated institution.

3-2201

SECTION 217.101—Definitions

(a) Terms that are set forth in section 217.2 and used in this subpart have the definitions assigned thereto in section 217.2.

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

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

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

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

Benchmarking means the comparison of a Board-regulated institution's internal estimates

with relevant internal and external data or with estimates based on other estimation techniques.

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

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

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

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

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

(1) *Retail.*

(i) A retail exposure of a Board-regulated institution is in default if:

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

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

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

(ii) Notwithstanding paragraph (1)(i) of this definition, for a retail exposure held by a non-U.S. subsidiary of the Board-regulated institution that is subject to an internal ratings-based approach to capital adequacy consistent with the Basel Committee on Banking Supervision's "Inter-

national Convergence of Capital Measurement and Capital Standards: A Revised Framework” in a non-U.S. jurisdiction, the Board-regulated institution may elect to use the definition of default that is used in that jurisdiction, provided that the Board-regulated institution has obtained prior approval from the Board to use the definition of default in that jurisdiction.

(iii) A retail exposure in default remains in default until the Board-regulated institution has reasonable assurance of repayment and performance for all contractual principal and interest payments on the exposure.

(2) *Wholesale.*

(i) A Board-regulated institution’s wholesale obligor is in default if:

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

(B) The obligor is past due more than 90 days on any material credit obligation(s) to the Board-regulated institution.²⁸

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

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

Economic downturn conditions means, with respect to an exposure held by the Board regulated institution, those conditions in which the aggregate default rates for that exposure’s wholesale or retail exposure subcategory (or

subdivision of such subcategory selected by the Board-regulated institution) in the exposure’s national jurisdiction (or subdivision of such jurisdiction selected by the Board-regulated institution) are significantly higher than average.

Effective maturity (M) of a wholesale exposure means:

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

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

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

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

(3) For repo-style transactions, eligible margin loans, and OTC derivative contracts for which the Board-regulated institution applies the internal models approach in section 217.132(d), the value determined in section 217.132(d)(4).

Eligible double default guarantor, with respect to a guarantee or credit derivative obtained by a Board-regulated institution, means:

(1) *U.S.-based entities.* A depository institution, a bank holding company, a savings and loan holding company, or a securities broker or dealer registered with the SEC under the Securities Exchange Act, if at the time the guarantee is issued or anytime thereafter, has issued and outstanding an

²⁸ Overdrafts are past due once the obligor has breached an advised limit or been advised of a limit smaller than the current outstanding balance.

unsecured debt security without credit enhancement that is investment grade.

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

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

- (1) Are generated by internal business practices to absorb highly predictable and reasonably stable operational losses, including reserves calculated consistent with GAAP; and
- (2) Are available to cover expected operational losses with a high degree of certainty over a one-year horizon.

Eligible purchased wholesale exposure means a purchased wholesale exposure that:

- (1) The Board-regulated institution or securitization SPE purchased from an unaffiliated seller and did not directly or indirectly originate;
- (2) Was generated on an arm's-length basis between the seller and the obligor (inter-company accounts receivable and receivables subject to contra-accounts between firms that buy and sell to each other do not satisfy this criterion);
- (3) Provides the Board-regulated institution or securitization SPE with a claim on all proceeds from the exposure or a pro rata interest in the proceeds from the exposure;
- (4) Has an M of less than one year; and
- (5) When consolidated by obligor, does not represent a concentrated exposure relative to the portfolio of purchased wholesale exposures.

Expected exposure (EE) means the expected value of the probability distribution of non-negative credit risk exposures to a counterparty at any specified future date before the maturity date of the longest term

transaction in the netting set. Any negative fair values in the probability distribution of fair values to a counterparty at a specified future date are set to zero to convert the probability distribution of fair values to the probability distribution of credit risk exposures.

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

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

Exposure at default (EAD) means:

- (1) For the on-balance sheet component of a wholesale exposure or segment of retail exposures (other than an OTC derivative contract, a repo-style transaction or eligible margin loan for which the Board-regulated institution determines EAD under section 217.132, a cleared transaction, or default fund contribution), EAD means the Board-regulated institution's carrying value (including net accrued but unpaid interest and fees) for the exposure or segment less any allocated transfer risk reserve for the exposure or segment.
- (2) For the off-balance sheet component of a wholesale exposure or segment of retail exposures (other than an OTC derivative contract, a repo-style transaction or eligible margin loan for which the Board-regulated institution determines EAD under section 217.132, cleared transaction, or default fund contribution) in the form of a loan commitment, line of credit, trade-related letter of credit, or transaction-related contingency, EAD means the Board-regulated institution's best estimate of net additions to the outstanding amount owed the Board-regulated institution, including estimated future additional draws of principal and accrued but unpaid interest and fees, that are

likely to occur over a one-year horizon assuming the wholesale exposure or the retail exposures in the segment were to go into default. This estimate of net additions must reflect what would be expected during economic downturn conditions. For the purposes of this definition:

- (i) Trade-related letters of credit are short-term, self-liquidating instruments that are used to finance the movement of goods and are collateralized by the underlying goods.
- (ii) Transaction-related contingencies relate to a particular transaction and include, among other things, performance bonds and performance-based letters of credit.
- (3) For the off-balance sheet component of a wholesale exposure or segment of retail exposures (other than an OTC derivative contract, a repo-style transaction, or eligible margin loan for which the Board-regulated institution determines EAD under section 217.132, cleared transaction, or default fund contribution) in the form of anything other than a loan commitment, line of credit, trade-related letter of credit, or transaction-related contingency, EAD means the notional amount of the exposure or segment.
- (4) EAD for OTC derivative contracts is calculated as described in section 217.132. A Board-regulated institution also may determine EAD for repo-style transactions and eligible margin loans as described in section 217.132.

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

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

IMM exposure means a repo-style transaction, eligible margin loan, or OTC derivative for which a Board-regulated institution calculates its EAD using the internal models methodology of section 217.132(d).

Internal operational loss event data means, with respect to a Board-regulated institution, gross operational loss amounts, dates, recoveries, and relevant causal information for operational loss events occurring at the Board-regulated institution.

Loss given default (LGD) means:

- (1) For a wholesale exposure, the greatest of:
 - (i) Zero;
 - (ii) The Board-regulated institution's empirically based best estimate of the long-run default-weighted average economic loss, per dollar of EAD, the Board-regulated institution would expect to incur if the obligor (or a typical obligor in the loss severity grade assigned by the Board-regulated institution to the exposure) were to default within a one-year horizon over a mix of economic conditions, including economic downturn conditions; or
 - (iii) The Board-regulated institution's empirically based best estimate of the economic loss, per dollar of EAD, the Board-regulated institution would expect to incur if the obligor (or a typical obligor in the loss severity grade assigned by the Board-regulated institution to the exposure) were to default within a one-year horizon during economic downturn conditions.
- (2) For a segment of retail exposures, the greatest of:
 - (i) Zero;
 - (ii) The Board-regulated institution's empirically based best estimate of the long-run default-weighted average economic loss, per dollar of EAD, the Board-regulated institution would expect to incur if the exposures in the segment were to default within a one-year horizon over a mix of economic conditions, including economic downturn conditions; or
 - (iii) The Board-regulated institution's empirically based best estimate of the economic loss, per dollar of EAD, the Board-regulated institution would expect to incur if the exposures in the segment were to default within a one-year horizon during economic downturn conditions.

(3) The economic loss on an exposure in the event of default is all material credit-related losses on the exposure (including accrued but unpaid interest or fees, losses on the sale of collateral, direct workout costs, and an appropriate allocation of indirect workout costs). Where positive or negative cash flows on a wholesale exposure to a defaulted obligor or a defaulted retail exposure (including proceeds from the sale of collateral, workout costs, additional extensions of credit to facilitate repayment of the exposure, and draw-downs of unused credit lines) occur after the date of default, the economic loss must reflect the net present value of cash flows as of the default date using a discount rate appropriate to the risk of the defaulted exposure.

Obligor means the legal entity or natural person contractually obligated on a wholesale exposure, except that a Board-regulated institution may treat the following exposures as having separate obligors:

- (1) Exposures to the same legal entity or natural person denominated in different currencies;
- (2) (i) An income-producing real estate exposure for which all or substantially all of the repayment of the exposure is reliant on the cash flows of the real estate serving as collateral for the exposure; the Board-regulated institution, in economic substance, does not have recourse to the borrower beyond the real estate collateral; and no cross-default or cross-acceleration clauses are in place other than clauses obtained solely out of an abundance of caution; and
 - (ii) Other credit exposures to the same legal entity or natural person; and
- (3) (i) A wholesale exposure authorized under section 364 of the U.S. Bankruptcy Code (11 U.S.C. 364) to a legal entity or natural person who is a debtor-in-possession for purposes of Chapter 11 of the Bankruptcy Code; and
 - (ii) Other credit exposures to the same legal entity or natural person.

Operational loss means a loss (excluding insurance or tax effects) resulting from an operational loss event. Operational loss includes

all expenses associated with an operational loss event except for opportunity costs, forgone revenue, and costs related to risk management and control enhancements implemented to prevent future operational losses.

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

- (1) Internal fraud, which means the operational loss event type category that comprises operational losses resulting from an act involving at least one internal party of a type intended to defraud, misappropriate property, or circumvent regulations, the law, or company policy excluding diversity- and discrimination-type events.
- (2) External fraud, which means the operational loss event type category that comprises operational losses resulting from an act by a third party of a type intended to defraud, misappropriate property, or circumvent the law. Retail credit card losses arising from non-contractual, third-party-initiated fraud (for example, identity theft) are external fraud operational losses. All other third-party-initiated credit losses are to be treated as credit risk losses.
- (3) Employment practices and workplace safety, which means the operational loss event type category that comprises operational losses resulting from an act inconsistent with employment, health, or safety laws or agreements, payment of personal injury claims, or payment arising from diversity- and discrimination-type events.
- (4) Clients, products, and business practices, which means the operational loss event type category that comprises operational losses resulting from the nature or design of a product or from an unintentional or negligent failure to meet a professional obligation to specific clients (including fiduciary and suitability requirements).
- (5) Damage to physical assets, which means the operational loss event type category that comprises operational losses resulting from the loss of or damage to physical assets from natural disaster or other events.
- (6) Business disruption and system failures,

which means the operational loss event type category that comprises operational losses resulting from disruption of business or system failures.

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

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

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

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

- (1) An exposure to an individual for non-business purposes; or
- (2) An exposure to an individual or company for business purposes if the Board-regulated institution's consolidated business credit exposure to the individual or company is \$1 million or less.

Probability of default (PD) means:

- (1) For a wholesale exposure to a non-defaulted obligor, the Board-regulated institution's empirically based best estimate of the long-run average one-year default rate for the rating grade assigned by the Board-regulated institution to the obligor, capturing the average default experience for obligors in the rating grade over a mix of

economic conditions (including economic downturn conditions) sufficient to provide a reasonable estimate of the average one-year default rate over the economic cycle for the rating grade.

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

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

Qualifying cross-product master netting agreement means a qualifying master netting agreement that provides for termination and close-out netting across multiple types of financial transactions or qualifying master netting agreements in the event of a counterparty's default, provided that the underlying financial transactions are OTC derivative contracts, eligible margin loans, or repo-style transactions. In order to treat an agreement as a qualifying cross-product master netting agreement for purposes of this subpart, a Board-regulated institution must comply with the requirements of section 217.3(c) of this part with respect to that agreement.

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

- (1) Is revolving (that is, the amount outstanding fluctuates, determined largely by a borrower's decision to borrow and repay up to a pre-established maximum amount, except for an outstanding amount that the borrower is required to pay in full every month);
- (2) Is unsecured and unconditionally cancelable by the Board-regulated institution to the fullest extent permitted by Federal law; and

- (3) (i) Has a maximum contractual exposure amount (drawn plus undrawn) of up to \$100,000; or
- (ii) With respect to a product with an outstanding amount that the borrower is required to pay in full every month, the total outstanding amount does not in practice exceed \$100,000.
- (4) A segment of exposures that contains one or more exposures that fails to meet paragraph (3)(ii) of this definition must be treated as a segment of other retail exposures for the 24 month period following the month in which the total outstanding amount of one or more exposures individually exceeds \$100,000.

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

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

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

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

Total wholesale and retail risk-weighted assets means the sum of:

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

to defaulted obligors and segments of defaulted retail exposures;

- (3) Risk-weighted assets for assets not defined by an exposure category;
- (4) Risk-weighted assets for non-material portfolios of exposures;
- (5) Risk-weighted assets for IMM exposures (as determined in section 217.132(d));
- (6) Risk-weighted assets for cleared transactions and risk-weighted assets for default fund contributions (as determined in section 217.133); and
- (7) Risk-weighted assets for unsettled transactions (as determined in section 217.136).

Unexpected operational loss (UOL) means the difference between the Board-regulated institution's operational risk exposure and the Board-regulated institution's expected operational loss.

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

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

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

SECTIONS 217.102–217.120—
[Reserved]

3-2221

QUALIFICATION

SECTION 217.121—Qualification Process

(a) *Timing.*

- (1) A Board-regulated institution that is described in section 217.100(b)(1)(i) and (ii) must adopt a written implementation plan no later than six months after the date the Board-regulated institution meets a criterion in that section. The implementation plan

must incorporate an explicit start date no later than 36 months after the date the Board-regulated institution meets at least one criterion under section 217.100(b)(1)(i) and (ii). The Board may extend the start date.

(2) A Board-regulated institution that elects to be subject to this subpart under section 217.101(b)(1)(iii) must adopt a written implementation plan.

(b) *Implementation plan.*

(1) The Board-regulated institution's implementation plan must address in detail how the Board-regulated institution complies, or plans to comply, with the qualification requirements in section 217.122. The Board-regulated institution also must maintain a comprehensive and sound planning and governance process to oversee the implementation efforts described in the plan. At a minimum, the plan must:

(i) Comprehensively address the qualification requirements in section 217.122 for the Board-regulated institution and each consolidated subsidiary (U.S. and foreign-based) of the Board-regulated institution with respect to all portfolios and exposures of the Board-regulated institution and each of its consolidated subsidiaries;

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

(iii) Include the Board-regulated institution's self-assessment of:

(A) The Board-regulated institution's current status in meeting the qualification requirements in section 217.122; and

(B) The consistency of the Board-regulated institution's current practices with the Board's supervisory guidance on the qualification requirements;

(iv) Based on the Board-regulated institution's self-assessment, identify and describe the areas in which the Board-

regulated institution proposes to undertake additional work to comply with the qualification requirements in section 217.122 or to improve the consistency of the Board-regulated institution's current practices with the Board's supervisory guidance on the qualification requirements (gap analysis);

(v) Describe what specific actions the Board-regulated institution will take to address the areas identified in the gap analysis required by paragraph (b)(1)(iv) of this section;

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

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

(viii) Receive approval of the Board-regulated institution's board of directors.

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

(c) *Parallel run.* Before determining its risk-weighted assets under this subpart and following adoption of the implementation plan, the Board-regulated institution must conduct a satisfactory parallel run. A satisfactory parallel run is a period of no less than four consecutive calendar quarters during which the Board-regulated institution complies with the qualification requirements in section 217.122 to the satisfaction of the Board. During the parallel run, the Board-regulated institution must report to the Board on a calendar quarterly basis its risk-based capital ratios determined in accordance with section 217.10(b)(1) through (3) and section 217.10(d)(1) through (3). During this period, the Board-regulated institution's minimum risk-based capital ratios are determined as set forth in subpart D of this part.

(d) *Approval to calculate risk-based capital requirements under this subpart.* The Board

will notify the Board-regulated institution of the date that the Board-regulated institution must begin to use this subpart for purposes of section 217.10 if the Board determines that:

- (1) The Board-regulated institution fully complies with all the qualification requirements in section 217.122;
- (2) The Board-regulated institution has conducted a satisfactory parallel run under paragraph (c) of this section; and
- (3) The Board-regulated institution has an adequate process to ensure ongoing compliance with the qualification requirements in section 217.122.

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SECTION 217.122—Qualification Requirements

(a) *Process and systems requirements.*

- (1) A Board-regulated institution must have a rigorous process for assessing its overall capital adequacy in relation to its risk profile and a comprehensive strategy for maintaining an appropriate level of capital.
- (2) The systems and processes used by a Board-regulated institution for risk-based capital purposes under this subpart must be consistent with the Board-regulated institution's internal risk management processes and management information reporting systems.
- (3) Each Board-regulated institution must have an appropriate infrastructure with risk measurement and management processes that meet the qualification requirements of this section and are appropriate given the Board-regulated institution's size and level of complexity. Regardless of whether the systems and models that generate the risk parameters necessary for calculating a Board-regulated institution's risk-based capital requirements are located at any affiliate of the Board-regulated institution, the Board-regulated institution itself must ensure that the risk parameters and reference data used to determine its risk-based capital requirements are representative of long run experience with respect to its own credit risk and operational risk exposures.

(b) *Risk rating and segmentation systems for wholesale and retail exposures.*

- (1) (i) A Board-regulated institution must have an internal risk rating and segmentation system that accurately, reliably, and meaningfully differentiates among degrees of credit risk for the Board-regulated institution's wholesale and retail exposures. When assigning an internal risk rating, a Board-regulated institution may consider a third-party assessment of credit risk, provided that the Board-regulated institution's internal risk rating assignment does not rely solely on the external assessment.
 - (ii) If a Board-regulated institution uses multiple rating or segmentation systems, the Board-regulated institution's rationale for assigning an obligor or exposure to a particular system must be documented and applied in a manner that best reflects the obligor or exposure's level of risk. A Board-regulated institution must not inappropriately allocate obligors or exposures across systems to minimize regulatory capital requirements.
 - (iii) In assigning ratings to wholesale obligors and exposures, including loss severity ratings grades to wholesale exposures, and assigning retail exposures to retail segments, a Board-regulated institution must use all relevant and material information and ensure that the information is current.
 - (iv) When assigning an obligor to a PD rating or retail exposure to a PD segment, a Board-regulated institution must assess the obligor or retail borrower's ability and willingness to contractually perform, taking a conservative view of projected information.
- (2) For wholesale exposures:
 - (i) A Board-regulated institution must have an internal risk rating system that accurately and reliably assigns each obligor to a single rating grade (reflecting the obligor's likelihood of default). A Board-regulated institution may elect, however, not to assign to a rating grade an obligor to whom the Board-regulated institution extends credit based solely on the financial strength of a guarantor, provided that all of the Board-regulated institution's exposures to the obligor are fully covered

by eligible guarantees, the Board-regulated institution applies the PD substitution approach in section 217.134(c)(1) to all exposures to that obligor, and the Board-regulated institution immediately assigns the obligor to a rating grade if a guarantee can no longer be recognized under this part. The Board-regulated institution's wholesale obligor rating system must have at least seven discrete rating grades for non-defaulted obligors and at least one rating grade for defaulted obligors.

(ii) Unless the Board-regulated institution has chosen to directly assign LGD estimates to each wholesale exposure, the Board-regulated institution must have an internal risk rating system that accurately and reliably assigns each wholesale exposure to a loss severity rating grade (reflecting the Board-regulated institution's estimate of the LGD of the exposure). A Board-regulated institution employing loss severity rating grades must have a sufficiently granular loss severity grading system to avoid grouping together exposures with widely ranging LGDs.

(iii) A Board-regulated institution must have an effective process to obtain and update in a timely manner relevant and material information on obligor and exposure characteristics that affect PD, LGD and EAD.

(3) For retail exposures:

(i) A Board-regulated institution must have an internal system that groups retail exposures into the appropriate retail exposure subcategory and groups the retail exposures in each retail exposure subcategory into separate segments with homogeneous risk characteristics that provide a meaningful differentiation of risk. The Board-regulated institution's system must identify and group in separate segments by subcategories exposures identified in section 217.131(c)(2)(ii) and (iii).

(ii) A Board-regulated institution must have an internal system that captures all relevant exposure risk characteristics, including borrower credit score, product and collateral types, as well as exposure

delinquencies, and must consider cross-collateral provisions, where present.

(iii) The Board-regulated institution must review and, if appropriate, update assignments of individual retail exposures to segments and the loss characteristics and delinquency status of each identified risk segment. These reviews must occur whenever the Board-regulated institution receives new material information, but generally no less frequently than quarterly, and, in all cases, at least annually.

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

(5) The Board-regulated institution's internal risk rating system for wholesale exposures must provide for the review and update (as appropriate) of each obligor rating and (if applicable) each loss severity rating whenever the Board-regulated institution obtains relevant and material information on the obligor or exposure that affects PD, LGD and EAD, but no less frequently than annually.

(c) *Quantification of risk parameters for wholesale and retail exposures.*

(1) The Board-regulated institution must have a comprehensive risk parameter quantification process that produces accurate, timely, and reliable estimates of the risk parameters on a consistent basis for the Board-regulated institution's wholesale and retail exposures.

(2) A Board-regulated institution's estimates of PD, LGD, and EAD must incorporate all relevant, material, and available data that is reflective of the Board-regulated institution's actual wholesale and retail exposures and of sufficient quality to support the determination of risk-based capital requirements for the exposures. In particular, the population of exposures in the data used for estimation purposes, the lending standards

in use when the data were generated, and other relevant characteristics, should closely match or be comparable to the Board-regulated institution's exposures and standards. In addition, a Board-regulated institution must:

- (i) Demonstrate that its estimates are representative of long run experience, including periods of economic downturn conditions, whether internal or external data are used;
 - (ii) Take into account any changes in lending practice or the process for pursuing recoveries over the observation period;
 - (iii) Promptly reflect technical advances, new data, and other information as they become available;
 - (iv) Demonstrate that the data used to estimate risk parameters support the accuracy and robustness of those estimates; and
 - (v) Demonstrate that its estimation technique performs well in out-of-sample tests whenever possible.
- (3) The Board-regulated institution's risk parameter quantification process must produce appropriately conservative risk parameter estimates where the Board-regulated institution has limited relevant data, and any adjustments that are part of the quantification process must not result in a pattern of bias toward lower risk parameter estimates.
- (4) The Board-regulated institution's risk parameter estimation process should not rely on the possibility of U.S. government financial assistance, except for the financial assistance that the U.S. government has a legally binding commitment to provide.
- (5) The Board-regulated institution must be able to demonstrate which variables have been found to be statistically significant with regard to EAD. The Board-regulated institution's EAD estimates must reflect its specific policies and strategies with regard to account management, including account monitoring and payment processing, and its ability and willingness to prevent further drawdowns in circumstances short of payment default. The Board-regulated institution must have adequate systems and procedures in place to monitor current

outstanding amounts against committed lines, and changes in outstanding amounts per obligor and obligor rating grade and per retail segment. The Board-regulated institution must be able to monitor outstanding amounts on a daily basis.

- (6) At a minimum, PD estimates for wholesale obligors and retail segments must be based on at least five years of default data. LGD estimates for wholesale exposures must be based on at least seven years of loss severity data, and LGD estimates for retail segments must be based on at least five years of loss severity data. EAD estimates for wholesale exposures must be based on at least seven years of exposure amount data, and EAD estimates for retail segments must be based on at least five years of exposure amount data. If the Board-regulated institution has relevant and material reference data that span a longer period of time than the minimum time periods specified above, the Board-regulated institution must incorporate such data in its estimates, provided that it does not place undue weight on periods of favorable or benign economic conditions relative to periods of economic downturn conditions.
- (7) Default, loss severity, and exposure amount data must include periods of economic downturn conditions, or the Board-regulated institution must adjust its estimates of risk parameters to compensate for the lack of data from periods of economic downturn conditions.
- (8) The Board-regulated institution's PD, LGD, and EAD estimates must be based on the definition of default in section 217.101.
- (9) If a Board-regulated institution uses internal data obtained prior to becoming subject to this subpart E or external data to arrive at PD, LGD, or EAD estimates, the Board-regulated institution must demonstrate to the Board that the Board-regulated institution has made appropriate adjustments if necessary to be consistent with the definition of default in section 217.101. Internal data obtained after the Board-regulated institution becomes subject to this subpart E must be consistent with the definition of default in section 217.101.
- (10) The Board-regulated institution must

review and update (as appropriate) its risk parameters and its risk parameter quantification process at least annually.

(11) The Board-regulated institution must, at least annually, conduct a comprehensive review and analysis of reference data to determine relevance of the reference data to the Board-regulated institution's exposures, quality of reference data to support PD, LGD, and EAD estimates, and consistency of reference data to the definition of default in section 217.101.

(d) *Counterparty credit risk model.* A Board-regulated institution must obtain the prior written approval of the Board under section 217.132 to use the internal models methodology for counterparty credit risk and the advanced CVA approach for the CVA capital requirement.

(e) *Double default treatment.* A Board-regulated institution must obtain the prior written approval of the Board under section 217.135 to use the double default treatment.

(f) *Equity exposures model.* A Board-regulated institution must obtain the prior written approval of the Board under section 217.153 to use the internal models approach for equity exposures.

(g) *Operational risk.*

(1) *Operational risk management processes.* A Board-regulated institution must:

(i) Have an operational risk management function that:

(A) Is independent of business line management; and

(B) Is responsible for designing, implementing, and overseeing the Board-regulated institution's operational risk data and assessment systems, operational risk quantification systems, and related processes;

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

(iii) Report operational risk exposures,

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

(2) *Operational risk data and assessment systems.* A Board-regulated institution must have operational risk data and assessment systems that capture operational risks to which the Board-regulated institution is exposed. The Board-regulated institution's operational risk data and assessment systems must:

(i) Be structured in a manner consistent with the Board-regulated institution's current business activities, risk profile, technological processes, and risk management processes; and

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

(A) *Internal operational loss event data.* The Board-regulated institution must have a systematic process for capturing and using internal operational loss event data in its operational risk data and assessment systems.

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

(2) The Board-regulated institution must be able to map its internal operational loss event data into the seven operational loss event type categories.

(3) The Board-regulated institution may refrain from collecting internal operational loss event data for individual operational losses below established dollar threshold amounts if the Board-regulated institution can demonstrate to the satisfaction of the Board that the thresholds are reasonable, do not exclude important internal operational loss event data, and

permit the Board-regulated institution to capture substantially all the dollar value of the Board-regulated institution's operational losses.

(B) *External operational loss event data.* The Board-regulated institution must have a systematic process for determining its methodologies for incorporating external operational loss event data into its operational risk data and assessment systems.

(C) *Scenario analysis.* The Board-regulated institution must have a systematic process for determining its methodologies for incorporating scenario analysis into its operational risk data and assessment systems.

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

(3) *Operational risk quantification systems.*

(i) The Board-regulated institution's operational risk quantification systems:

(A) Must generate estimates of the Board-regulated institution's operational risk exposure using its operational risk data and assessment systems;

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

(C) Must include a credible, transparent, systematic, and verifiable approach for weighting each of the four elements, described in paragraph (g)(2)(ii) of this section, that a Board-regulated institution is required to incorporate

into its operational risk data and assessment systems;

(D) May use internal estimates of dependence among operational losses across and within units of measure if the Board-regulated institution can demonstrate to the satisfaction of the Board that its process for estimating dependence is sound, robust to a variety of scenarios, and implemented with integrity, and allows for uncertainty surrounding the estimates. If the Board-regulated institution has not made such a demonstration, it must sum operational risk exposure estimates across units of measure to calculate its total operational risk exposure; and

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

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

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

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

(C) A state member bank must not use

an allocation of operational risk capital requirements that includes entities other than depository institutions or the benefits of diversification across entities.

(h) *Data management and maintenance.*

(1) A Board-regulated institution must have data management and maintenance systems that adequately support all aspects of its advanced systems and the timely and accurate reporting of risk-based capital requirements.

(2) A Board-regulated institution must retain data using an electronic format that allows timely retrieval of data for analysis, validation, reporting, and disclosure purposes.

(3) A Board-regulated institution must retain sufficient data elements related to key risk drivers to permit adequate monitoring, validation, and refinement of its advanced systems.

(i) *Control, oversight, and validation mechanisms.*

(1) The Board-regulated institution's senior management must ensure that all components of the Board-regulated institution's advanced systems function effectively and comply with the qualification requirements in this section.

(2) The Board-regulated institution's board of directors (or a designated committee of the board) must at least annually review the effectiveness of, and approve, the Board-regulated institution's advanced systems.

(3) A Board-regulated institution must have an effective system of controls and oversight that:

- (i) Ensures ongoing compliance with the qualification requirements in this section;
- (ii) Maintains the integrity, reliability, and accuracy of the Board-regulated institution's advanced systems; and
- (iii) Includes adequate governance and project management processes.

(4) The Board-regulated institution must validate, on an ongoing basis, its advanced systems. The Board-regulated institution's validation process must be independent of the advanced systems' development, implementation, and operation, or the validation

process must be subjected to an independent review of its adequacy and effectiveness. Validation must include:

- (i) An evaluation of the conceptual soundness of (including developmental evidence supporting) the advanced systems;
- (ii) An ongoing monitoring process that includes verification of processes and benchmarking; and
- (iii) An outcomes analysis process that includes backtesting.

(5) The Board-regulated institution must have an internal audit function or equivalent function that is independent of business-line management that at least annually:

- (i) Reviews the Board-regulated institution's advanced systems and associated operations, including the operations of its credit function and estimations of PD, LGD, and EAD;
- (ii) Assesses the effectiveness of the controls supporting the Board-regulated institution's advanced systems; and
- (iii) Documents and reports its findings to the Board-regulated institution's board of directors (or a committee thereof).

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

(j) *Documentation.* The Board-regulated institution must adequately document all material aspects of its advanced systems.

3-2223

SECTION 217.123—Ongoing Qualification

(a) *Changes to advanced systems.* A Board-regulated institution must meet all the qualification requirements in section 217.122 on an ongoing basis. A Board-regulated institution must notify the Board when the Board-regulated institution makes any change to an advanced system that would result in a material change in the Board-regulated institution's

advanced approaches total risk-weighted asset amount for an exposure type or when the Board-regulated institution makes any significant change to its modeling assumptions.

(b) *Failure to comply with qualification requirements.*

(1) If the Board determines that a Board-regulated institution that uses this subpart and that has conducted a satisfactory parallel run fails to comply with the qualification requirements in section 217.122, the Board will notify the Board-regulated institution in writing of the Board-regulated institution's failure to comply.

(2) The Board-regulated institution must establish and submit a plan satisfactory to the Board to return to compliance with the qualification requirements.

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

3-2224

SECTION 217.124—Merger and Acquisition Transitional Arrangements

(a) *Mergers and acquisitions of companies without advanced systems.* If a Board-regulated institution merges with or acquires a company that does not calculate its risk-based capital requirements using advanced systems, the Board-regulated institution may use subpart D of this part to determine the risk-weighted asset amounts for the merged or acquired company's exposures for up to 24 months after the calendar quarter during which the merger or acquisition consummates. The Board may extend this transition period for up to an additional 12 months. Within 90 days of consummating the merger or acquisition, the Board-regulated institution must submit to the Board an implementation plan for using its advanced systems for the acquired company. During the period in which subpart D of this part applies to the merged or ac-

quired company, any ALLL or AACL, as applicable, net of allocated transfer risk reserves established pursuant to 12 U.S.C. 3904, associated with the merged or acquired company's exposures may be included in the acquiring Board-regulated institution's tier 2 capital up to 1.25 percent of the acquired company's risk-weighted assets. All general allowances of the merged or acquired company must be excluded from the Board-regulated institution's eligible credit reserves. In addition, the risk-weighted assets of the merged or acquired company are not included in the Board-regulated institution's credit-risk-weighted assets but are included in total risk-weighted assets. If a Board-regulated institution relies on this paragraph (a), the Board-regulated institution must disclose publicly the amounts of risk-weighted assets and qualifying capital calculated under this subpart for the acquiring Board-regulated institution and under subpart D of this part for the acquired company.

(b) *Mergers and acquisitions of companies with advanced systems.*

(1) If a Board-regulated institution merges with or acquires a company that calculates its risk-based capital requirements using advanced systems, the Board-regulated institution may use the acquired company's advanced systems to determine total risk-weighted assets for the merged or acquired company's exposures for up to 24 months after the calendar quarter during which the acquisition or merger consummates. The Board may extend this transition period for up to an additional 12 months. Within 90 days of consummating the merger or acquisition, the Board-regulated institution must submit to the Board an implementation plan for using its advanced systems for the merged or acquired company.

(2) If the acquiring Board-regulated institution is not subject to the advanced approaches in this subpart at the time of acquisition or merger, during the period when subpart D of this part applies to the acquiring Board-regulated institution, the ALLL or AACL, as applicable, associated with the exposures of the merged or acquired company may not be directly included in tier 2 capital. Rather, any excess eligible credit

reserves associated with the merged or acquired company's exposures may be included in the Board-regulated institution's tier 2 capital up to 0.6 percent of the credit-risk-weighted assets associated with those exposures.

the definition of a wholesale, retail, equity, or securitization exposure, any non-material portfolio of exposures described in paragraph (e)(4) of this section, and for bank holding companies and savings and loan holding companies, any on-balance sheet asset that is held in a non-guaranteed separate account.

SECTIONS 217.125–217.130—
[Reserved]

3-2231

**RISK-WEIGHTED ASSETS FOR
GENERAL CREDIT RISK**

**SECTION 217.131—Mechanics for
Calculating Total Wholesale and Retail
Risk-Weighted Assets**

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

- (1) Phase 1—categorization of exposures;
- (2) Phase 2—assignment of wholesale obligors and exposures to rating grades and segmentation of retail exposures;
- (3) Phase 3—assignment of risk parameters to wholesale exposures and segments of retail exposures; and
- (4) Phase 4—calculation of risk-weighted asset amounts.

(b) *Phase 1—Categorization.* The Board-regulated institution must determine which of its exposures are wholesale exposures, retail exposures, securitization exposures, or equity exposures. The Board-regulated institution must categorize each retail exposure as a residential mortgage exposure, a QRE, or another retail exposure. The Board-regulated institution must identify which wholesale exposures are HVCRE exposures, sovereign exposures, OTC derivative contracts, repo-style transactions, eligible margin loans, eligible purchased wholesale exposures, cleared transactions, default fund contributions, and unsettled transactions to which section 217.136 applies, and eligible guarantees or eligible credit derivatives that are used as credit risk mitigants. The Board-regulated institution must identify any on-balance sheet asset that does not meet

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

(1) *Assignment of wholesale obligors and exposures to rating grades.*

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

(ii) The Board-regulated institution must identify which of its wholesale obligors are in default.

(2) *Segmentation of retail exposures.*

(i) The Board-regulated institution must group the retail exposures in each retail subcategory into segments that have homogeneous risk characteristics.

(ii) The Board-regulated institution must identify which of its retail exposures are in default. The Board-regulated institution must segment defaulted retail exposures separately from non-defaulted retail exposures.

(iii) If the Board-regulated institution determines the EAD for eligible margin loans using the approach in section 217.132(b), the Board-regulated institution must identify which of its retail exposures are eligible margin loans for which the Board-regulated institution uses this EAD approach and must segment such eligible margin loans separately from other retail exposures.

(3) *Eligible purchased wholesale exposures.*

A Board-regulated institution may group its eligible purchased wholesale exposures into segments that have homogeneous risk characteristics. A Board-regulated institution must use the wholesale exposure formula in Table 1 of this section to determine the

risk-based capital requirement for each segment of eligible purchased wholesale exposures.

(d) *Phase 3—Assignment of risk parameters to wholesale exposures and segments of retail exposures.*

(1) *Quantification process.* Subject to the limitations in this paragraph (d), the Board-regulated institution must:

- (i) Associate a PD with each wholesale obligor rating grade;
- (ii) Associate an LGD with each wholesale loss severity rating grade or assign an LGD to each wholesale exposure;
- (iii) Assign an EAD and M to each wholesale exposure; and
- (iv) Assign a PD, LGD, and EAD to each segment of retail exposures.

(2) *Floor on PD assignment.* The PD for each wholesale obligor or retail segment may not be less than 0.03 percent, except for exposures to or directly and unconditionally guaranteed by a sovereign entity, the Bank for International Settlements, the International Monetary Fund, the European Commission, the European Central Bank, the European Stability Mechanism, the European Financial Stability Facility, or a multilateral development bank, to which the Board-regulated institution assigns a rating grade associated with a PD of less than 0.03 percent.

(3) *Floor on LGD estimation.* The LGD for each segment of residential mortgage exposures may not be less than 10 percent, except for segments of residential mortgage exposures for which all or substantially all of the principal of each exposure is either:

- (i) Directly and unconditionally guaranteed by the full faith and credit of a sovereign entity; or
- (ii) Guaranteed by a contingent obligation of the U.S. government or its agencies, the enforceability of which is dependent upon some affirmative action on the part of the beneficiary of the guarantee or a third party (for example, meeting servicing requirements).

(4) *Eligible purchased wholesale exposures.* A Board-regulated institution must assign a PD, LGD, EAD, and M to each segment of

eligible purchased wholesale exposures. If the Board-regulated institution can estimate ECL (but not PD or LGD) for a segment of eligible purchased wholesale exposures, the Board-regulated institution must assume that the LGD of the segment equals 100 percent and that the PD of the segment equals ECL divided by EAD. The estimated ECL must be calculated for the exposures without regard to any assumption of recourse or guarantees from the seller or other parties.

(5) *Credit risk mitigation: credit derivatives, guarantees, and collateral.*

(i) A Board-regulated institution may take into account the risk reducing effects of eligible guarantees and eligible credit derivatives in support of a wholesale exposure by applying the PD substitution or LGD adjustment treatment to the exposure as provided in section 217.134 or, if applicable, applying double default treatment to the exposure as provided in section 217.135. A Board-regulated institution may decide separately for each wholesale exposure that qualifies for the double default treatment under section 217.135 whether to apply the double default treatment or to use the PD substitution or LGD adjustment treatment without recognizing double default effects.

(ii) A Board-regulated institution may take into account the risk reducing effects of guarantees and credit derivatives in support of retail exposures in a segment when quantifying the PD and LGD of the segment. In doing so, a Board-regulated institution must consider all relevant available information.

(iii) Except as provided in paragraph (d)(6) of this section, a Board-regulated institution may take into account the risk reducing effects of collateral in support of a wholesale exposure when quantifying the LGD of the exposure, and may take into account the risk reducing effects of collateral in support of retail exposures when quantifying the PD and LGD of the segment. In order to do so, a Board-regulated institution must have established internal requirements for collateral

management, legal certainty, and risk management processes.

(6) *EAD for OTC derivative contracts, repo-style transactions, and eligible margin loans.* A Board-regulated institution must calculate its EAD for an OTC derivative contract as provided in section 217.132 (c) and (d). A Board-regulated institution may take into account the risk-reducing effects of financial collateral in support of a repo-style transaction or eligible margin loan and of any collateral in support of a repo-style transaction that is included in the Board-regulated institution's VaR-based measure under subpart F of this part through an adjustment to EAD as provided in section 217.132(b) and (d). A Board-regulated institution that takes collateral into account through such an adjustment to EAD under section 217.132 may not reflect such collateral in LGD.

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

- (i) Has a legal and practical ability not to renew or roll over the exposure in the event of credit deterioration of the obligor;
- (ii) Makes an independent credit decision at the inception of the exposure and at every renewal or roll over; and
- (iii) Has no substantial commercial incentive to continue its credit relationship with the obligor in the event of credit deterioration of the obligor.

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

(e) *Phase 4—Calculation of risk-weighted assets.*

(1) *Non-defaulted exposures.*

(i) A Board-regulated institution must calculate the dollar risk-based capital requirement for each of its wholesale exposures to a non-defaulted obligor (except for eligible guarantees and eligible credit derivatives that hedge another wholesale exposure, IMM exposures, cleared transactions, default fund contributions, unsettled transactions, and exposures to which the Board-regulated institution applies the double default treatment in section 217.135) and segments of non-defaulted retail exposures by inserting the assigned risk parameters for the wholesale obligor and exposure or retail segment into the appropriate risk-based capital formula specified in Table 1 and multiplying the output of the formula (K) by the EAD of the exposure or segment. Alternatively, a Board-regulated institution may apply a 300 percent risk weight to the EAD of an eligible margin loan if the Board-regulated institution is not able to meet the Board's requirements for estimation of PD and LGD for the margin loan.

Table 1 to section 217.131—IRB risk-based capital formulas for wholesale exposures to non-defaulted obligors and segments of non-defaulted retail exposures¹

Retail	<p>Capital requirement (K) non-defaulted exposures</p> $K = \left[LGD \times N \left(\frac{N^{-1}(PD) + \sqrt{R} \times N^{-1}(0.999)}{\sqrt{1-R}} \right) - (LGD \times PD) \right]$
	<p>Correlation factor (R)</p> <p>For residential mortgage exposures: $R = 0.15$ For qualifying revolving exposures: $R = 0.04$ For other retail exposures: $R = 0.03 + 0.13 \times e^{-35 \times PD}$</p>
	<p>Capital requirement (K) non-defaulted exposures</p> $K = \left[LGD \times N \left(\frac{N^{-1}(PD) + \sqrt{R} \times N^{-1}(0.999)}{\sqrt{1-R}} \right) - (LGD \times PD) \right] \times \left(\frac{1 + (M - 2.5) \times b}{1 - 1.5 \times b} \right)$
Wholesale	<p>Correlation factor (R)</p> <p>For HVCRE exposures:</p> $R = 0.12 + 0.18 \times e^{-50 \times PD}$ <p>For wholesale exposures to unregulated financial institutions:</p> $R = 1.25 \times (0.12 + 0.12 \times e^{-50 \times PD})$ <p>For wholesale exposures to regulated financial institutions with total assets greater than or equal to \$100 billion:</p> $R = 1.25 \times (0.12 + 0.12 \times e^{-50 \times PD})$ <p>For wholesale exposures other than HVCRE exposures, unregulated financial institutions, and regulated financial institutions with total assets greater than or equal to \$100 billion:</p> $R = 0.12 + 0.12 \times e^{-50 \times PD}$
	<p>Maturity adjustment (b)</p> $b = (0.11852 - 0.05478 \times \ln(PD))^2$

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

(ii) The sum of all the dollar risk-based capital requirements for each wholesale exposure to a non-defaulted obligor and segment of non-defaulted retail exposures calculated in paragraph (e)(1)(i) of this section and in section 217.135(e) equals the total dollar risk-based capital requirement for those exposures and segments.

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

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

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

(i) *Not covered by an eligible U.S. government guarantee:* The dollar risk-based capital requirement for each wholesale exposure not covered by an eligible guarantee from the U.S. government to a defaulted obligor and each segment of defaulted retail exposures not covered by an eligible guarantee from the U.S. govern-

ment equals 0.08 multiplied by the EAD of the exposure or segment.

(ii) *Covered by an eligible U.S. government guarantee:* The dollar risk-based capital requirement for each wholesale exposure to a defaulted obligor covered by an eligible guarantee from the U.S. government and each segment of defaulted retail exposures covered by an eligible guarantee from the U.S. government equals the sum of:

(A) The sum of the EAD of the portion of each wholesale exposure to a defaulted obligor covered by an eligible guarantee from the U.S. government plus the EAD of the portion of each segment of defaulted retail exposures that is covered by an eligible guarantee from the U.S. government and the resulting sum is multiplied by 0.016, and

(B) The sum of the EAD of the portion of each wholesale exposure to a defaulted obligor not covered by an eligible guarantee from the U.S. government plus the EAD of the portion of each segment of defaulted retail exposures that is not covered by an eligible guarantee from the U.S. government and the resulting sum is multiplied by 0.08.

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

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

(3) *Assets not included in a defined exposure category.*

(i) A bank holding company or savings and loan holding company may assign a risk-weighted asset amount of zero to cash owned and held in all offices of subsidiary depository institutions or in transit; and for gold bullion held in a subsidiary depository institution's own vaults, or held in another depository institution's vaults on an allocated basis, to the extent the gold bullion assets are offset by gold bullion liabilities.

(ii) A state member bank may assign a risk-weighted asset amount to cash owned and held in all offices of the state member bank or in transit and for gold bullion held in the state member bank's own vaults, or held in another depository institution's vaults on an allocated basis, to the extent the gold bullion assets are offset by gold bullion liabilities.

(iii) A Board-regulated institution must assign a risk-weighted asset amount equal to 50 percent of the carrying value to a pre-sold construction loan unless the purchase contract is cancelled, in which case a Board-regulated institution must assign a risk-weighted asset amount equal to a 100 percent of the carrying value of the pre-sold construction loan.

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

(v) The risk-weighted asset amount for DTAs arising from temporary differences that the Board-regulated institution could realize through net operating loss carrybacks equals the carrying value, netted in accordance with section 217.22.

(vi) The risk-weighted asset amount for MSAs, DTAs arising from temporary timing differences that the Board-regulated institution could not realize through net operating loss carrybacks, and significant investments in the capital of unconsolidated financial institutions in the form of common stock that are not deducted pursuant to section 217.22(a)(7) equals the amount not subject to deduction multiplied by 250 percent.

(vii) The risk-weighted asset amount for any other on-balance-sheet asset that does not meet the definition of a wholesale,

retail, securitization, IMM, or equity exposure, cleared transaction, or default fund contribution and is not subject to deduction under section 217.22(a), (c), or (d) equals the carrying value of the asset. (viii) The risk-weighted asset amount for a Paycheck Protection Program covered loan as defined in section 7(a)(36) of the Small Business Act (15 U.S.C. 636(a)(36)) equals zero.

(4) *Non-material portfolios of exposures.* The risk-weighted asset amount of a portfolio of exposures for which the Board-regulated institution has demonstrated to the Board's satisfaction that the portfolio (when combined with all other portfolios of exposures that the Board-regulated institution seeks to treat under this paragraph (e)) is not material to the Board-regulated institution is the sum of the carrying values of on-balance sheet exposures plus the notional amounts of off-balance sheet exposures in the portfolio. For purposes of this paragraph (e)(4), the notional amount of an OTC derivative contract that is not a credit derivative is the EAD of the derivative as calculated in section 217.132.

(5) *Assets held in non-guaranteed separate accounts.* The risk-weighted asset amount for an on-balance sheet asset that is held in a non-guaranteed separate account is zero percent of the carrying value of the asset.

included in a Board-regulated institution's VaR-based measure under subpart F of this part:

- (i) The collateral haircut approach set forth in paragraph (b)(2) of this section;
- (ii) The internal models methodology set forth in paragraph (d) of this section; and
- (iii) For single product netting sets of repo-style transactions and eligible margin loans, the simple VaR methodology set forth in paragraph (b)(3) of this section.

(2) A Board-regulated institution may use any combination of the three methodologies for collateral recognition; however, it must use the same methodology for transactions in the same category.

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

(4) A Board-regulated institution must also use the methodology in paragraph (e) of this section to calculate the risk-weighted asset amounts for CVA for OTC derivatives.

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SECTION 217.132—Counterparty Credit Risk of Repo-Style Transactions, Eligible Margin Loans, and OTC Derivative Contracts

(a) *Methodologies for collateral recognition.*

(1) Instead of an LGD estimation methodology, a Board-regulated institution may use the following methodologies to recognize the benefits of financial collateral in mitigating the counterparty credit risk of repo-style transactions, eligible margin loans, collateralized OTC derivative contracts and single product netting sets of such transactions, and to recognize the benefits of any collateral in mitigating the counterparty credit risk of repo-style transactions that are

(b) *EAD for eligible margin loans and repo-style transactions.*

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

- (i) The collateral haircut approach described in paragraph (b)(2) of this section;
- (ii) For netting sets only, the simple VaR methodology described in paragraph (b)(3) of this section; or
- (iii) The internal models methodology described in paragraph (d) of this section.

(2) *Collateral haircut approach.*

(i) *EAD equation.* A Board-regulated institution may determine EAD for an eligible margin loan, repo-style transaction, or netting set by setting EAD equal to $\max \{0, [(\sum E - \sum C) + \sum (E_s \times H_s) + \sum (E_{fx} \times H_{fx})]\}$, where:

(A) $\sum E$ equals the value of the exposure (the sum of the current fair values of all instruments, gold, and cash the Board-regulated institution has lent, sold subject to repurchase, or posted as collateral to the counterparty under the transaction (or netting set));

(B) $\sum C$ equals the value of the collateral (the sum of the current fair values of all instruments, gold, and cash the Board-regulated institution has borrowed, purchased subject to resale, or taken as collateral from the counterparty under the transaction (or netting set));

(C) E_s equals the absolute value of the net position in a given instrument or in gold (where the net position in a given instrument or in gold equals the sum of the current fair values of the instrument or gold the Board-regulated institution has lent, sold subject to repurchase, or posted as collateral to the counterparty minus the sum of the cur-

rent fair values of that same instrument or gold the Board-regulated institution has borrowed, purchased subject to resale, or taken as collateral from the counterparty);

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

(E) E_{fx} equals the absolute value of the net position of instruments and cash in a currency that is different from the settlement currency (where the net position in a given currency equals the sum of the current fair values of any instruments or cash in the currency the Board-regulated institution has lent, sold subject to repurchase, or posted as collateral to the counterparty minus the sum of the current fair values of any instruments or cash in the currency the Board-regulated institution has borrowed, purchased subject to resale, or taken as collateral from the counterparty); and

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

(ii) *Standard supervisory haircuts.*

(A) Under the standard supervisory haircuts approach:

(1) A Board-regulated institution must use the haircuts for market price volatility (H_s) in Table 1 to section 217.132, as adjusted in certain circumstances as provided in paragraphs (b)(2)(ii)(A)(3) and (4) of this section;

Table 1 to section 217.132—Standard supervisory market price volatility haircuts¹

Residual maturity	Haircut (in percent) assigned based on:						Investment grade securitization exposures (in percent)
	Sovereign issuers risk weight under section 217.132 ² (in percent)			Non-sovereign issuers risk weight under section 217.132 (in percent)			
	Zero	20 or 50	100	20	50	100	
Less than or equal to 1 year	0.5	1.0	15.0	1.0	2.0	4.0	4.0
Greater than 1 year and less than or equal to 5 years	2.0	3.0	15.0	4.0	6.0	8.0	12.0
Greater than 5 years	4.0	6.0	15.0	8.0	12.0	16.0	24.0
Main index equities (including convertible bonds) and gold	15.0						
Other publicly traded equities (including convertible bonds)	25.0						
Mutual funds	Highest haircut applicable to any security in which the fund can invest.						
Cash collateral held	Zero						
Other exposure types	25.0						

¹ The market price volatility haircuts in Table 1 to section 217.132 are based on a 10 business-day holding period.

² Includes a foreign PSE that receives a zero percent risk weight.

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

(3) For repo-style transactions and client-facing derivative transactions, a Board-regulated institution may multiply the supervisory haircuts provided in paragraphs (b)(2)(ii)(A)(1) and (2) of this section by the square root of $\frac{1}{2}$ (which equals 0.707107). If the Board-regulated institution determines that a longer holding period is appropriate for client-facing derivative transactions, then it must use a larger scaling factor to adjust for the longer holding period pursuant to paragraph (b)(2)(ii)(A)(6) of this section.

(4) A Board-regulated institution must adjust the supervisory haircuts upward on the basis of a holding period longer than ten business days (for eligible margin loans) or five business days (for repo-style transactions), using the formula provided in paragraph (b)(2)(ii)(A)(6) of this section where the conditions in this

paragraph (b)(2)(ii)(A)(4) apply. If the number of trades in a netting set exceeds 5,000 at any time during a quarter, a Board-regulated institution must adjust the supervisory haircuts upward on the basis of a minimum holding period of twenty business days for the following quarter (except when a Board-regulated institution is calculating EAD for a cleared transaction under section 217.133). If a netting set contains one or more trades involving illiquid collateral, a Board-regulated institution must adjust the supervisory haircuts upward on the basis of a minimum holding period of twenty business days. If over the two previous quarters more than two margin disputes on a netting set have occurred that lasted longer than the holding period, then the Board-regulated institution must adjust the supervisory haircuts upward for that netting set on the basis of a minimum holding period that is at least two times the minimum holding period for that netting set.

(5) (i) A Board-regulated institution must adjust the supervisory haircuts upward on the basis of a holding period longer than ten business days for collateral associ-

ated with derivative contracts (five business days for client-facing derivative contracts) using the formula provided in paragraph (b)(2)(ii)(A)(6) of this section where the conditions in this paragraph (b)(2)(ii)(A)(5)(i) apply. For collateral associated with a derivative contract that is within a netting set that is composed of more than 5,000 derivative contracts that are not cleared transactions, a Board-regulated institution must use a minimum holding period of twenty business days. If a netting set contains one or more trades involving illiquid collateral or a derivative contract that cannot be easily replaced, a Board-regulated institution must use a minimum holding period of twenty business days.

(ii) Notwithstanding paragraph (b)(2)(ii)(A)(1) or (3) or (b)(2)(ii)(A)(5)(i) of this section, for collateral associated with a derivative contract in a netting set under which more than two margin disputes that lasted longer than the holding period occurred during the two previous quarters, the minimum holding period is twice the amount provided under paragraph (b)(2)(ii)(A)(1) or (3) or (b)(2)(ii)(A)(5)(i) of this section.

(6) A Board-regulated institution must adjust the standard supervisory haircuts upward, pursuant to the adjustments provided in paragraphs (b)(2)(ii)(A)(3) through (5) of this section, using the following formula:

$$H_A = H_S \sqrt{\frac{T_M}{T_S}}, \text{ where,}$$

Where:

T_M equals a holding period of longer than 10 business days for eligible margin loans and derivative contracts other than client-facing derivative transactions or longer than 5 business days for repo-style transac-

tions and client-facing derivative transactions;

H_S equals the standard supervisory haircut; and

T_S equals 10 business days for eligible margin loans and derivative contracts other than client-facing derivative transactions or 5 business days for repo-style transactions and client-facing derivative transactions.

(7) If the instrument a Board-regulated institution has lent, sold subject to repurchase, or posted as collateral does not meet the definition of financial collateral, the Board-regulated institution must use a 25.0 percent haircut for market price volatility (H_S).

(iii) *Own internal estimates for haircuts.* With the prior written approval of the Board, a Board-regulated institution may calculate haircuts (H_S and H_{fx}) using its own internal estimates of the volatilities of market prices and foreign exchange rates.

(A) To receive Board approval to use its own internal estimates, a Board-regulated institution must satisfy the following minimum quantitative standards:

(1) A Board-regulated institution must use a 99th percentile one-tailed confidence interval.

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

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

where

- (i) T_M equals 5 for repo-style transactions and 10 for eligible margin loans;
 - (ii) T_N equals the holding period used by the Board-regulated institution to derive H_N ; and
 - (iii) H_N equals the haircut based on the holding period T_N .
- (3) If the number of trades in a netting set exceeds 5,000 at any time during a quarter, a Board-regulated institution must calculate the haircut using a minimum holding period of twenty business days for the following quarter (except when a Board-regulated institution is calculating EAD for a cleared transaction under section 217.133). If a netting set contains one or more trades involving illiquid collateral or an OTC derivative that cannot be easily replaced, a Board-regulated institution must calculate the haircut using a minimum holding period of twenty business days. If over the two previous quarters more than two margin disputes on a netting set have occurred that lasted more than the holding period, then the Board-regulated institution must calculate the haircut for transactions in that netting set on the basis of a holding period that is at least two times the minimum holding period for that netting set.
- (4) A Board-regulated institution is required to calculate its own internal estimates with inputs calibrated to historical data from a continuous 12-month period that reflects a period of significant financial stress appropriate to the security or category of securities.
- (5) A Board-regulated institution must have policies and procedures that describe how it determines the period of significant financial stress used to calculate the Board-regulated institution's own internal estimates for haircuts under this section and must be able to provide empirical support for the period used. The

Board-regulated institution must obtain the prior approval of the Board for, and notify the Board if the Board-regulated institution makes any material changes to, these policies and procedures.

(6) Nothing in this section prevents the Board from requiring a Board-regulated institution to use a different period of significant financial stress in the calculation of own internal estimates for haircuts.

(7) A Board-regulated institution must update its data sets and calculate haircuts no less frequently than quarterly and must also reassess data sets and haircuts whenever market prices change materially.

(B) With respect to debt securities that are investment grade, a Board-regulated institution may calculate haircuts for categories of securities. For a category of securities, the Board-regulated institution must calculate the haircut on the basis of internal volatility estimates for securities in that category that are representative of the securities in that category that the Board-regulated institution has lent, sold subject to repurchase, posted as collateral, borrowed, purchased subject to resale, or taken as collateral. In determining relevant categories, the Board-regulated institution must at a minimum take into account:

- (1) The type of issuer of the security;
- (2) The credit quality of the security;
- (3) The maturity of the security; and
- (4) The interest rate sensitivity of the security.

(C) With respect to debt securities that are not investment grade and equity securities, a Board-regulated institution must calculate a separate haircut for each individual security.

(D) Where an exposure or collateral (whether in the form of cash or securities) is denominated in a currency that differs from the settlement currency, the Board-regulated institution must

calculate a separate currency mismatch haircut for its net position in each mismatched currency based on estimated volatilities of foreign exchange rates between the mismatched currency and the settlement currency.

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

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

(i) $\sum E$ equals the value of the exposure (the sum of the current fair values of all instruments, gold, and cash the Board-regulated institution has lent, sold subject to repurchase, or posted as collateral to the counterparty under the netting set);

(ii) $\sum C$ equals the value of the collateral (the sum of the current fair values of all instruments, gold, and cash the Board-regulated institution has borrowed, purchased subject to resale, or taken as collateral from the counterparty under the netting set); and

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

lent, sold subject to repurchase, posted as collateral, borrowed, purchased subject to resale, or taken as collateral. The Board-regulated institution must validate its VaR model by establishing and maintaining a rigorous and regular backtesting regime.

(iv) If the number of trades in a netting set exceeds 5,000 at any time during a quarter, a Board-regulated institution must use a twenty-business-day holding period for the following quarter (except when a Board-regulated institution is calculating EAD for a cleared transaction under section 217.133). If a netting set contains one or more trades involving illiquid collateral, a Board-regulated institution must use a twenty-business-day holding period. If over the two previous quarters more than two margin disputes on a netting set have occurred that lasted more than the holding period, then the Board-regulated institution must set its PFE for that netting set equal to an estimate over a holding period that is at least two times the minimum holding period for that netting set.

(c) *EAD for derivative contracts.*

(1) *Options for determining EAD.* A Board-regulated institution must determine the EAD for a derivative contract using the standardized approach for counterparty credit risk (SA-CCR) under paragraph (c)(5) of this section or using the internal models methodology described in paragraph (d) of this section. If a Board-regulated institution elects to use SA-CCR for one or more derivative contracts, the exposure amount determined under SA-CCR is the EAD for the derivative contract or derivatives contracts. A Board-regulation institution must use the same methodology to calculate the exposure amount for all its derivative contracts and may change its election only with prior approval of the Board. A Board-regulated institution may reduce the EAD calculated according to paragraph (c)(5) of this section by the credit valuation adjustment that the Board-regulated institution has recognized in its balance sheet valuation of any derivative contracts in the netting set. For purposes of

this paragraph (c)(1), the credit valuation adjustment does not include any adjustments to common equity tier 1 capital attributable to changes in the fair value of the Board-regulated institution's liabilities that are due to changes in its own credit risk since the inception of the transaction with the counterparty.

(2) *Definitions.* For purposes of this paragraph (c) of this section, the following definitions apply:

(i) *End date* means the last date of the period referenced by an interest rate or credit derivative contract or, if the derivative contract references another instrument, by the underlying instrument, except as otherwise provided in paragraph (c) of this section.

(ii) *Start date* means the first date of the period referenced by an interest rate or credit derivative contract or, if the derivative contract references the value of another instrument, by underlying instrument, except as otherwise provided in paragraph (c) of this section.

(iii) *Hedging set* means:

(A) With respect to interest rate derivative contracts, all such contracts within a netting set that reference the same reference currency;

(B) With respect to exchange rate derivative contracts, all such contracts within a netting set that reference the same currency pair;

(C) With respect to credit derivative contract, all such contracts within a netting set;

(D) With respect to equity derivative contracts, all such contracts within a netting set;

(E) With respect to a commodity derivative contract, all such contracts within a netting set that reference one of the following commodity categories: Energy, metal, agricultural, or other commodities;

(F) With respect to basis derivative contracts, all such contracts within a netting set that reference the same pair of risk factors and are denominated in the same currency; or

(G) With respect to volatility deriva-

tive contracts, all such contracts within a netting set that reference one of interest rate, exchange rate, credit, equity, or commodity risk factors, separated according to the requirements under paragraphs (c)(2)(iii)(A) through (E) of this section.

(H) If the risk of a derivative contract materially depends on more than one of interest rate, exchange rate, credit, equity, or commodity risk factors, the Board may require a Board-regulated institution to include the derivative contract in each appropriate hedging set under paragraphs (c)(1)(iii)(A) through (E) of this section.

(3) *Credit derivatives.* Notwithstanding paragraphs (c)(1) and (c)(2) of this section:

(i) A Board-regulated institution that purchases a credit derivative that is recognized under section 217.134 or section 217.135 as a credit risk mitigant for an exposure that is not a covered position under subpart F of this part is not required to calculate a separate counterparty credit risk capital requirement under this section so long as the Board-regulated institution does so consistently for all such credit derivatives and either includes or excludes all such credit derivatives that are subject to a master netting agreement from any measure used to determine counterparty credit risk exposure to all relevant counterparties for risk-based capital purposes.

(ii) A Board-regulated institution that is the protection provider in a credit derivative must treat the credit derivative as a wholesale exposure to the reference obligor and is not required to calculate a counterparty credit risk capital requirement for the credit derivative under this section, so long as it does so consistently for all such credit derivatives and either includes all or excludes all such credit derivatives that are subject to a master netting agreement from any measure used to determine counterparty credit risk exposure to all relevant counterparties for risk-based capital purposes (unless the Board-regulated institution is treating the

credit derivative as a covered position under subpart F of this part, in which case the Board-regulated institution must calculate a supplemental counterparty credit risk capital requirement under this section).

(4) *Equity derivatives.* A Board-regulated institution must treat an equity derivative contract as an equity exposure and compute a risk-weighted asset amount for the equity derivative contract under sections 217.151-217.155 (unless the Board-regulated institution is treating the contract as a covered position under subpart F of this part). In addition, if the Board-regulated institution is treating the contract as a covered position under subpart F of this part, and under certain other circumstances described in section 217.155, the Board-regulated institution must also calculate a risk-based capital requirement for the counterparty credit risk of an equity derivative contract under this section.

(5) *Exposure amount.*

(i) The exposure amount of a netting set, as calculated under paragraph (c) of this section, is equal to 1.4 multiplied by the sum of the replacement cost of the netting set, as calculated under paragraph (c)(6) of this section, and the potential future exposure of the netting set, as calculated under paragraph (c)(7) of this section.

(ii) Notwithstanding the requirements of paragraph (c)(5)(i) of this section, the exposure amount of a netting set subject to a variation margin agreement, excluding a netting set that is subject to a variation margin agreement under which the counterparty to the variation margin agreement is not required to post variation margin, is equal to the lesser of the exposure amount of the netting set calculated under paragraph (c)(5)(i) of this section and the exposure amount of the netting set calculated under paragraph (c)(5)(i) of this section as if the netting set were not subject to a variation margin agreement.

(iii) Notwithstanding the requirements of paragraph (c)(5)(i) of this section, the exposure amount of a netting set that con-

sists of only sold options in which the premiums have been fully paid by the counterparty to the options and where the options are not subject to a variation margin agreement is zero.

(iv) Notwithstanding the requirements of paragraph (c)(5)(i) of this section, the exposure amount of a netting set in which the counterparty is a commercial end-user is equal to the sum of replacement cost, as calculated under paragraph (c)(6) of this section, and the potential future exposure of the netting set, as calculated under paragraph (c)(7) of this section.

(v) For purposes of the exposure amount calculated under paragraph (c)(5)(i) of this section and all calculations that are part of that exposure amount, a Board-regulated institution may elect to treat a derivative contract that is a cleared transaction that is not subject to a variation margin agreement as one that is subject to a variation margin agreement, if the derivative contract is subject to a requirement that the counterparties make daily cash payments to each other to account for changes in the fair value of the derivative contract and to reduce the net position of the contract to zero. If a Board-regulated institution makes an election under this paragraph (c)(5)(v) for one derivative contract, it must treat all other derivative contracts within the same netting set that are eligible for an election under this paragraph (c)(5)(v) as derivative contracts that are subject to a variation margin agreement.

(vi) For purposes of the exposure amount calculated under paragraph (c)(5)(i) of this section and all calculations that are part of that exposure amount, a Board-regulated institution may elect to treat a credit derivative contract, equity derivative contract, or commodity derivative contract that references an index as if it were multiple derivative contracts each referencing one component of the index.

(6) *Replacement cost of a netting set.*

(i) *Netting set subject to a variation margin agreement under which the counterparty must post variation margin.* The replacement cost of a netting set

subject to a variation margin agreement, excluding a netting set that is subject to a variation margin agreement under which the counterparty is not required to post variation margin, is the greater of:

(A) The sum of the fair values (after excluding any valuation adjustments) of the derivative contracts within the netting set less the sum of the net independent collateral amount and the variation margin amount applicable to such derivative contracts;

(B) The sum of the variation margin threshold and the minimum transfer amount applicable to the derivative contracts within the netting set less the net independent collateral amount applicable to such derivative contracts; or

(C) Zero.

(ii) *Netting sets not subject to a variation margin agreement under which the counterparty must post variation margin.* The replacement cost of a netting set that is not subject to a variation margin agreement under which the counterparty must post variation margin to the Board-regulated institution is the greater of:

(A) The sum of the fair values (after excluding any valuation adjustments) of the derivative contracts within the netting set less the sum of the net independent collateral amount and variation margin amount applicable to such derivative contracts; or

(B) Zero.

(iii) *Multiple netting sets subject to a single variation margin agreement.* Notwithstanding paragraphs (c)(6)(i) and (ii) of this section, the replacement cost for multiple netting sets subject to a single variation margin agreement must be calculated according to paragraph (c)(10)(i) of this section.

(iv) *Netting set subject to multiple variation margin agreements or a hybrid netting set.* Notwithstanding paragraphs (c)(6)(i) and (ii) of this section, the replacement cost for a netting set subject to multiple variation margin agreements or a hybrid netting set must be calculated according to paragraph (c)(11)(i) of this section.

(7) *Potential future exposure of a netting set.* The potential future exposure of a netting set is the product of the PFE multiplier and the aggregated amount.

(i) *PFE multiplier.* The PFE multiplier is calculated according to the following formula:

$$PFE\ multiplier = \min\left\{1; 0.05 + 0.95 * e^{\left(\frac{V-C}{1.9 * A}\right)}\right\}$$

Where:

V is the sum of the fair values (after excluding any valuation adjustments) of the derivative contracts within the netting set;

C is the sum of the net independent collateral amount and the variation margin amount applicable to the derivative contracts within the netting set; and

A is the aggregated amount of the netting set.

(ii) *Aggregated amount.* The aggregated amount is the sum of all hedging set amounts, as calculated under paragraph (c)(8) of this section, within a netting set.

(iii) *Multiple netting sets subject to a single variation margin agreement.* Notwithstanding paragraphs (c)(7)(i) and (ii) of this section and when calculating the potential future exposure for purposes of total leverage exposure under section 217.10(c)(2)(ii)(B), the potential future exposure for multiple netting sets subject to a single variation margin agreement must be calculated according to paragraph (c)(10)(ii) of this section.

(iv) *Netting set subject to multiple variation margin agreements or a hybrid netting set.* Notwithstanding paragraphs (c)(7)(i) and (ii) of this section and when calculating the potential future exposure for purposes of total leverage exposure under section 217.10(c)(2)(ii)(B), the potential future exposure for a netting set subject to multiple variation margin agreements or a hybrid netting set must be calculated according to paragraph (c)(11)(ii) of this section.

(8) *Hedging set amount.*

(i) *Interest rate derivative contracts.* To calculate the hedging set amount of an

interest rate derivative contract hedging set, a Board-regulated institution may use either of the formulas provided in paragraphs (c)(8)(i)(A) and (B) of this section:

$$\text{Hedging set amount} = [(AddOn_{TB1}^{IR})^2 + (AddOn_{TB2}^{IR})^2 + (AddOn_{TB3}^{IR})^2 + 1.4 * AddOn_{TB1}^{IR} * AddOn_{TB2}^{IR} + 1.4 * AddOn_{TB2}^{IR} * AddOn_{TB3}^{IR} + 0.6 * AddOn_{TB1}^{IR} * AddOn_{TB3}^{IR}]^{\frac{1}{2}}; \text{ or}$$

(B) Formula 2 is as follows:

$$\text{Hedging set amount} = |AddOn_{TB1}^{IR}| + |AddOn_{TB2}^{IR}| + |AddOn_{TB3}^{IR}|.$$

Where in paragraphs (c)(8)(i)(A) and (B) of this section:

$AddOn_{TB1}^{IR}$ is the sum of the adjusted derivative contract amounts, as calculated under paragraph (c)(9) of this section, within the hedging set with an end date of less than one year from the present date;

$AddOn_{TB2}^{IR}$ is the sum of the adjusted derivative contract amounts, as calculated under paragraph (c)(9) of this section, within the hedging set with an end date of one to five years from the present date; and

$AddOn_{TB3}^{IR}$ is the sum of the adjusted derivative contract amounts, as cal-

(A) Formula 1 is as follows:

culated under paragraph (c)(9) of this section, within the hedging set with an end date of more than five years from the present date.

(ii) *Exchange rate derivative contracts.*

For an exchange rate derivative contract hedging set, the hedging set amount equals the absolute value of the sum of the adjusted derivative contract amounts, as calculated under paragraph (c)(9) of this section, within the hedging set.

(iii) *Credit derivative contracts and equity derivative contracts.* The hedging set amount of a credit derivative contract hedging set or equity derivative contract hedging set within a netting set is calculated according to the following formula:

$$\text{Hedging set amount} = \left[\left(\sum_{k=1}^K \rho_k * AddOn(Ref_k) \right)^2 + \sum_{k=1}^K (1 - (\rho_k)^2) * (AddOn(Ref_k))^2 \right]^{\frac{1}{2}}$$

Where:

k is each reference entity within the hedging set.

K is the number of reference entities within the hedging set.

$AddOn(Ref_k)$ equals the sum of the adjusted derivative contract amounts, as determined under paragraph (c)(9) of this section, for all derivative contracts within the hedging set that reference reference entity k .

$$\text{Hedging set amount} = \left[\left(\rho * \sum_{k=1}^K AddOn(Type_k) \right)^2 + (1 - (\rho)^2) * \sum_{k=1}^K (AddOn(Type_k))^2 \right]^{\frac{1}{2}}$$

Where:

k is each commodity type within the hedging set.

K is the number of commodity types within the hedging set.

ρ_k equals the applicable supervisory correlation factor, as provided in Table 3 to this section.

(iv) *Commodity derivative contracts.* The hedging set amount of a commodity derivative contract hedging set within a netting set is calculated according to the following formula:

$AddOn(Type_k)$ equals the sum of the adjusted derivative contract amounts, as determined under paragraph (c)(9) of this section, for all derivative contracts

within the hedging set that reference reference commodity type.

ρ equals the applicable supervisory correlation factor, as provided in Table 3 to this section.

(v) *Basis derivative contracts and volatility derivative contracts.* Notwithstanding paragraphs (c)(8)(i) through (iv) of this section, a Board-regulated institution must calculate a separate hedging set amount for each basis derivative contract hedging set and each volatility derivative contract hedging set. A Board-regulated institution must calculate such hedging set amounts using one of the formulas under paragraphs (c)(8)(i) through (iv) that corresponds to the primary risk factor of the hedging set being calculated.

(9) *Adjusted derivative contract amount.*

(i) *Summary.* To calculate the adjusted derivative contract amount of a derivative contract, a Board-regulated institution must determine the adjusted notional amount of derivative contract, pursuant to paragraph (c)(9)(ii) of this section, and multiply the adjusted notional amount by each of the supervisory delta adjustment, pursuant to paragraph (c)(9)(iii) of this section, the maturity factor, pursuant to paragraph (c)(9)(iv) of this section, and the applicable supervisory factor, as provided in Table 3 to this section.

(ii) *Adjusted notional amount.*

(A) (I) For an interest rate derivative contract or a credit derivative contract, the adjusted notional amount equals the product of the notional amount of the derivative contract, as measured in U.S. dollars using the exchange rate on the date of the calculation, and the supervisory duration, as calculated by the following formula:

$$\text{Supervisory duration} = \max \left\{ \frac{e^{-0.05 \cdot (\frac{S}{250})} - e^{-0.05 \cdot (\frac{E}{250})}}{0.05}, 0.04 \right\}$$

Where:

S is the number of business days from the present day until the start date of the derivative contract, or zero if the start date has already passed; and

E is the number of business days from the present day until the end date of the derivative contract.

(2) For purposes of paragraph (c)(9)(ii)(A)(I) of this section:

(i) For an interest rate derivative contract or credit derivative contract that is a variable notional swap, the notional amount is equal to the time-weighted average of the contractual notional amounts of such a swap over the remaining life of the swap; and

(ii) For an interest rate derivative contract or a credit derivative contract that is a leveraged swap, in which the notional amount of all legs of the derivative contract are divided by a factor and all rates of the derivative contract are multiplied by the same factor, the notional amount is equal to the notional amount of an equivalent unleveraged swap.

(B) (I) For an exchange rate derivative contract, the adjusted notional amount is the notional amount of the non-U.S. denominated currency leg of the derivative contract, as measured in U.S. dollars using the exchange rate on the date of the calculation. If both legs of the exchange rate derivative contract are denominated in currencies other than U.S. dollars, the adjusted notional amount of the derivative contract is the largest leg of the derivative contract, as measured in U.S. dollars using the exchange rate on the date of the calculation.

(2) Notwithstanding paragraph (c)(9)(ii)(B)(I) of this section, for an exchange rate derivative contract with multiple exchanges of principal, the Board-regulated institution must set the adjusted notional amount of the derivative contract equal to the notional amount of the derivative contract multiplied by the number of exchanges of principal under the derivative contract.

(C) (I) For an equity derivative con-

tract or a commodity derivative contract, the adjusted notional amount is the product of the fair value of one unit of the reference instrument underlying the derivative contract and the number of such units referenced by the derivative contract.

(2) Notwithstanding paragraph (c)(9)(ii)(C)(I) of this section, when calculating the adjusted notional amount for an equity derivative contract or a commodity derivative contract that is a volatility derivative contract, the Board-regulated institution must replace the unit price with the underlying volatility referenced by the volatility derivative contract and replace the number of units with

the notional amount of the volatility derivative contract.

(iii) *Supervisory delta adjustments.*

(A) For a derivative contract that is not an option contract or collateralized debt obligation tranche, the supervisory delta adjustment is 1 if the fair value of the derivative contract increases when the value of the primary risk factor increases and - 1 if the fair value of the derivative contract decreases when the value of the primary risk factor increases.

(B) (I) For a derivative contract that is an option contract, the supervisory delta adjustment is determined by the following formulas, as applicable:

Table 2 to section 217.132—Supervisory delta adjustment for options contracts

	Bought	Sold
Call Options	$\Phi \left(\frac{\ln \left(\frac{P}{K} + \frac{\lambda}{\lambda} \right) + 0.5 \cdot \sigma^2 \cdot T / 250}{\sigma \cdot \sqrt{T / 250}} \right)$	$-\Phi \left(\frac{\ln \left(\frac{P}{K} + \frac{\lambda}{\lambda} \right) + 0.5 \cdot \sigma^2 \cdot T / 250}{\sigma \cdot \sqrt{T / 250}} \right)$
Put Options	$-\Phi \left(-\frac{\ln \left(\frac{P}{K} + \frac{\lambda}{\lambda} \right) + 0.5 \cdot \sigma^2 \cdot T / 250}{\sigma \cdot \sqrt{T / 250}} \right)$	$\Phi \left(-\frac{\ln \left(\frac{P}{K} + \frac{\lambda}{\lambda} \right) + 0.5 \cdot \sigma^2 \cdot T / 250}{\sigma \cdot \sqrt{T / 250}} \right)$

(2) As used in the formulas in Table 2 to this section: (i) Φ is the standard normal cumulative distribution function; (ii) P equals the current fair value of the instrument or risk factor, as applicable, underlying the option; (iii) K equals the strike price of the option; (iv) T equals the number of business days until the latest contractual exercise date of the option; (v) λ equals zero for all derivative contracts except interest rate options for the currencies where interest rates have negative values. The same value of λ must be used for all interest rate options that are denominated in the same currency. To determine the value of λ for a given currency, a Board-regulated institution must find the lowest

value L of P and K of all interest rate options in a given currency that the Board-regulated institution has with all counterparties. Then, λ is set according to this formula: $\lambda = \max\{-L + 0.1\%, 0\}$; and (vi) σ equals the supervisory option volatility, as provided in Table 3 to this section.

(C) (I) For a derivative contract that is a collateralized debt obligation tranche, the supervisory delta adjustment is determined by the following formula:

$$\text{Supervisory delta adjustment} = \frac{15}{(1 + 14 \cdot A) \cdot (1 + 14 \cdot D)}$$

(2) As used in the formula in paragraph (c)(9)(iii)(C)(I) of this section:

(i) A is the attachment point,

which equals the ratio of the notional amounts of all underlying exposures that are subordinated to the Board-regulated institution's exposure to the total notional amount of all underlying exposures, expressed as a decimal value between zero and one;³⁰

(ii) D is the detachment point, which equals one minus the ratio of the notional amounts of all underlying exposures that are senior to the Board-regulated institution's exposure to the total notional amount of all underlying exposures, expressed as a decimal value between zero and one; and

(iii) The resulting amount is designated with a positive sign if the collateralized debt obligation tranche was purchased by the Board-regulated institution and is designated with a negative sign if the collateralized debt obligation tranche was sold by the Board-regulated institution.

(iv) *Maturity factor.*

(A) (I) The maturity factor of a derivative contract that is subject to a variation margin agreement, excluding derivative contracts that are subject to a variation margin agreement under which the counterparty is not required to post variation margin, is determined by the following formula:

$$\text{Maturity factor} = \frac{3}{2} \sqrt{\frac{\text{MPOR}}{250}}$$

Where MPOR refers to the period from the most recent exchange of collateral covering a netting set of derivative contracts with a defaulting counterparty until the derivative contracts are closed out and the resulting market risk is re-hedged.

³⁰ In the case of a first-to-default credit derivative, there are no underlying exposures that are subordinated to the Board-regulated institution's exposure. In the case of a second-or-subsequent-to-default credit derivative, the smallest (n - 1) notional amounts of the underlying exposures are subordinated to the Board-regulated institution's exposure.

(2) Notwithstanding paragraph (c)(9)(iv)(A)(I) of this section:

(i) For a derivative contract that is not a client-facing derivative transaction, MPOR cannot be less than ten business days plus the periodicity of re-margining expressed in business days minus one business day;

(ii) For a derivative contract that is a client-facing derivative transaction, cannot be less than five business days plus the periodicity of re-margining expressed in business days minus one business day; and

(iii) For a derivative contract that is within a netting set that is composed of more than 5,000 derivative contracts that are not cleared transactions, or a netting set that contains one or more trades involving illiquid collateral or a derivative contract that cannot be easily replaced, MPOR cannot be less than twenty business days.

(3) Notwithstanding paragraphs (c)(9)(iv)(A)(I) and (2) of this section, for a netting set subject to more than two outstanding disputes over margin that lasted longer than the MPOR over the previous two quarters, the applicable floor is twice the amount provided in paragraphs (c)(9)(iv)(A)(I) and (2) of this section.

(B) The maturity factor of a derivative contract that is not subject to a variation margin agreement, or derivative contracts under which the counterparty is not required to post variation margin, is determined by the following formula:

$$\text{Maturity factor} = \sqrt{\frac{\min\{M; 250\}}{250}}$$

Where M equals the greater of 10 business days and the remaining maturity of the contract, as measured in business days. (C) For purposes of paragraph (c)(9)(iv) of this section, if a Board-regulated institution has elected

pursuant to paragraph (c)(5)(v) of this section to treat a derivative contract that is a cleared transaction that is not subject to a variation margin agreement as one that is subject to a variation margin agreement, the Board-regulated institution must treat the derivative contract as subject to a variation margin agreement with maturity factor as determined according to (c)(9)(iv)(A) of this section, and daily settlement does not change the end date of the period referenced by the derivative contract.

(v) *Derivative contract as multiple effective derivative contracts.* A Board-regulated institution must separate a derivative contract into separate derivative contracts, according to the following rules:

(A) For an option where the counterparty pays a predetermined amount if the value of the underlying asset is above or below the strike price and nothing otherwise (binary option), the option must be treated as two separate options. For purposes of paragraph (c)(9)(iii)(B) of this section, a binary option with strike K must be represented as the combination of one bought European option and one sold European option of the same type as the original option (put or call) with the strikes set equal to $0.95 * K$ and $1.05 * K$ so that the payoff of the binary option is reproduced exactly

outside the region between the two strikes. The absolute value of the sum of the adjusted derivative contract amounts of the bought and sold options is capped at the payoff amount of the binary option.

(B) For a derivative contract that can be represented as a combination of standard option payoffs (such as collar, butterfly spread, calendar spread, straddle, and strangle), a Board-regulated institution must treat each standard option component as a separate derivative contract.

(C) For a derivative contract that includes multiple-payment options, (such as interest rate caps and floors), a Board-regulated institution may represent each payment option as a combination of effective single-payment options (such as interest rate caplets and floorlets).

(D) A Board-regulated institution may not decompose linear derivative contracts (such as swaps) into components.

(10) *Multiple netting sets subject to a single variation margin agreement.*

(i) *Calculating replacement cost.* Notwithstanding paragraph (c)(6) of this section, a Board-regulated institution shall assign a single replacement cost to multiple netting sets that are subject to a single variation margin agreement under which the counterparty must post variation margin, calculated according to the following formula:

$$\text{Replacement cost} = \max\{\sum_{NS} \max\{V_{NS}; 0\} - \max\{C_{MA}; 0\}; 0\} + \max\{\sum_{NS} \min\{V_{NS}; 0\} - \min\{C_{MA}; 0\}; 0\}$$

Where:

NS is each netting set subject to the variation margin agreement MA;

V_{NS} is the sum of the fair values (after excluding any valuation adjustments) of the derivative contracts within the netting set NS; and

C_{MA} is the sum of the net independent collateral amount and the variation margin amount applicable to the derivative contracts within the netting

sets subject to the single variation margin agreement.

(ii) *Calculating potential future exposure.* Notwithstanding paragraph (c)(5) of this section, a Board-regulated institution shall assign a single potential future exposure to multiple netting sets that are subject to a single variation margin agreement under which the counterparty must post variation margin equal to the sum of the potential future exposure of each such netting set, each calculated ac-

ording to paragraph (c)(7) of this section as if such netting sets were not subject to a variation margin agreement.

(11) *Netting set subject to multiple variation margin agreements or a hybrid netting set.*

(i) *Calculating replacement cost.* To calculate replacement cost for either a netting set subject to multiple variation margin agreements under which the counterparty to each variation margin agreement must post variation margin, or a netting set composed of at least one derivative contract subject to variation margin agreement under which the counterparty must post variation margin and at least one derivative contract that is not subject to such a variation margin agreement, the calculation for replacement cost is provided under paragraph (c)(6)(i) of this section, except that the variation margin threshold equals the sum of the variation margin thresholds of all variation margin agreements within the netting set and the minimum transfer amount equals the sum of the minimum transfer amounts of all the variation margin agreements within the netting set.

(ii) *Calculating potential future exposure.*

(A) To calculate potential future exposure for a netting set subject to multiple variation margin agreements under which the counterparty to each variation margin agreement must post variation margin, or a netting set composed of at least one derivative contract subject to variation margin agreement under which the counterparty to the derivative contract must post variation margin and at least one derivative

contract that is not subject to such a variation margin agreement, a Board-regulated institution must divide the netting set into sub-netting sets (as described in paragraph (c)(11)(ii)(B) of this section) and calculate the aggregated amount for each sub-netting set. The aggregated amount for the netting set is calculated as the sum of the aggregated amounts for the sub-netting sets. The multiplier is calculated for the entire netting set.

(B) For purposes of paragraph (c)(11)(ii)(A) of this section, the netting set must be divided into sub-netting sets as follows:

(1) All derivative contracts within the netting set that are not subject to a variation margin agreement or that are subject to a variation margin agreement under which the counterparty is not required to post variation margin form a single sub-netting set. The aggregated amount for this sub-netting set is calculated as if the netting set is not subject to a variation margin agreement.

(2) All derivative contracts within the netting set that are subject to variation margin agreements in which the counterparty must post variation margin and that share the same value of the MPOR form a single sub-netting set. The aggregated amount for this sub-netting set is calculated as if the netting set is subject to a variation margin agreement, using the MPOR value shared by the derivative contracts within the netting set.

Table 3 to section 217.132—Supervisory option volatility, supervisory correlation parameters, and supervisory factors for derivative contracts

Asset class	Category	Type	Supervisory option volatility (percent)	Supervisory correlation factor (percent)	Supervisory factor (percent)
Interest rate	N/A	N/A	50	N/A	0.50
Exchange rate	N/A	N/A	15	N/A	4.0
Credit, single name	Investment grade	N/A	100	50	0.46
	Speculative grade	N/A	100	50	1.3
	Sub-speculative grade	N/A	100	50	6.0
Credit, index	Investment grade	N/A	80	80	0.38
	Speculative grade	N/A	80	80	1.06
Equity, single name	N/A	N/A	120	50	32
Equity, index	N/A	N/A	75	80	20
Commodity	Energy	Electricity	150	40	40
		Other	70	40	18
	Metals	N/A	70	40	18
	Agricultural	N/A	70	40	18
	Other	N/A	70	40	18

¹ The applicable supervisory factor for basis derivative contract hedging sets is equal to one-half of the supervisory factor provided in this Table 3, and the applicable supervisory factor for volatility derivative contract hedging sets is equal to 5 times the supervisory factor provided in this Table 3.

(d) *Internal models methodology.*

(1) (i) With prior written approval from the Board, a Board-regulated institution may use the internal models methodology in this paragraph (d) to determine EAD for counterparty credit risk for derivative contracts (collateralized or uncollateralized) and single-product netting sets thereof, for eligible margin loans and single-product netting sets thereof, and for repo-style transactions and single-product netting sets thereof.

(ii) A Board-regulated institution that uses the internal models methodology for a particular transaction type (derivative contracts, eligible margin loans, or repo-style transactions) must use the internal models methodology for all transactions of that transaction type. A Board-regulated institution may choose to use the internal models methodology for one or two of these three types of exposures and not the other types.

(iii) A Board-regulated institution may also use the internal models methodology for derivative contracts, eligible margin loans, and repo-style transactions subject

to a qualifying cross-product netting agreement if:

(A) The Board-regulated institution effectively integrates the risk mitigating effects of cross-product netting into its risk management and other information technology systems; and

(B) The Board-regulated institution obtains the prior written approval of the Board.

(iv) A Board-regulated institution that uses the internal models methodology for a transaction type must receive approval from the Board to cease using the methodology for that transaction type or to make a material change to its internal model.

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

(i) $EAD_{\text{unstressed}}$ is calculated using an EE estimate based on the most recent

data meeting the requirements of paragraph (d)(3)(vii) of this section;

(ii) EAD_{stressed} is calculated using an EE estimate based on a historical period that includes a period of stress to the credit default spreads of the Board-regulated institution's counterparties according to paragraph (d)(3)(viii) of this section;

(iii) The Board-regulated institution must use its internal model's probability distribution for changes in the fair value of a netting set that are attributable to changes in market variables to determine EE; and

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

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

$$(B) \text{ Effective EPE}_{t_k} = \sum_{k=1}^n \text{ Effective EE}_k \times \Delta t_k$$

(that is, effective EPE is the time-weighted average of effective EE where the weights are the proportion that an individual effective EE represents in a one-year time interval) where:

$$(1) \text{ Effective EE}_{t_k} = \max(\text{Effective EE}_{t_{k-1}}, \text{EE}_{t_k})$$

(that is, for a specific date t_k , effective EE is the greater of EE at that date or the effective EE at the previous date); and

(2) t_k represents the k^{th} future time period in the model and there are n

time periods represented in the model over the first year, and

(C) $\alpha = 1.4$ except as provided in paragraph (d)(6) of this section, or when the Board has determined that the Board-regulated institution must set α higher based on the Board-regulated institution's specific characteristics of counterparty credit risk or model performance.

(v) A Board-regulated institution may include financial collateral currently posted by the counterparty as collateral (but may not include other forms of collateral) when calculating EE.

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

(3) *Prior approval relating to EAD calculation.* To obtain Board approval to calculate the distributions of exposures upon which the EAD calculation is based, the Board-regulated institution must demonstrate to the satisfaction of the Board that it has been using for at least one year an internal model that broadly meets the following minimum standards, with which the Board-regulated institution must maintain compliance:

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

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

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

(iv) The Board-regulated institution must measure, monitor, and control current counterparty exposure and the exposure to the counterparty over the whole life of all contracts in the netting set;

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

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

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

(viii) When estimating model parameters based on a stress period, the Board-regulated institution must use at least three years of historical data that include a period of stress to the credit default spreads of the Board-regulated institution's counterparties. The Board-regulated institution must review the data set and update the data as necessary, particularly for any material changes in its counterparties. The Board-regulated institution must demonstrate, at least quarterly, and maintain documentation of such demonstration, that the stress period coincides with increased CDS or other credit spreads of the Board-regulated institution's counterparties. The Board-regulated institution must have procedures to evaluate the effectiveness of its stress calibration that include a process for using benchmark portfolios that are vulnerable to the same risk factors as the Board-

regulated institution's portfolio. The Board may require the Board-regulated institution to modify its stress calibration to better reflect actual historic losses of the portfolio;

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

(x) A Board-regulated institution must have policies for the measurement, management and control of collateral and margin amounts; and

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

(4) *Calculating the maturity of exposures.*

(i) If the remaining maturity of the exposure or the longest-dated contract in the netting set is greater than one year, the Board-regulated institution must set M for the exposure or netting set equal to the lower of five years or M(EPE), where:

$$(A) M(EPE) = 1 + \frac{\sum_{t_k > 1 \text{ year}}^{maturity} E E_k \times \Delta t_k \times df_k}{\sum_{k=1}^{effective} E E_k \times \Delta t_k \times df_k};$$

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

(C) $\Delta t_k = t_k - t_{k-1}$.

(ii) If the remaining maturity of the exposure or the longest-dated contract in the netting set is one year or less, the Board-regulated institution must set M for the exposure or netting set equal to one year, except as provided in section 217.131(d)(7).

(iii) Alternatively, a Board-regulated institution that uses an internal model to

calculate a one-sided credit valuation adjustment may use the effective credit duration estimated by the model as M(EPE) in place of the formula in paragraph (d)(4)(i) of this section.

(5) *Effects of collateral agreements on EAD.* A Board-regulated institution may capture the effect on EAD of a collateral agreement that requires receipt of collateral when exposure to the counterparty increases, but may not capture the effect on EAD of a collateral agreement that requires receipt of collateral when counterparty credit quality deteriorates. Two methods are available to capture the effect of a collateral agreement, as set forth in paragraphs (d)(5)(i) and (ii) of this section:

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

(ii) As an alternative to paragraph (d)(5)(i) of this section, a Board-regulated institution that can model EPE without collateral agreements but cannot achieve the higher level of modeling sophistication to model EPE with collateral agreements can set effective EPE for a collateralized netting set equal to the lesser of:

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

(1) The current exposure of the netting set reflecting all collateral held or posted by the Board-regulated institution excluding any collateral called or in dispute; or

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

(B) Effective EPE without a collateral agreement plus any collateral the Board-regulated institution posts to the counterparty that exceeds the required margin amount.

(iii) For purposes of this part, including paragraphs (d)(5)(i) and (ii) of this section, the margin period of risk for a netting set subject to a collateral agreement is:

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

(B) Twenty business days if the number of trades in a netting set exceeds 5,000 at any time during the previous quarter (except if the Board-regulated institution is calculating EAD for a cleared transaction under section 217.133) or contains one or more trades involving illiquid collateral or any derivative contract that cannot be easily replaced. If over the two previous quarters more than two margin disputes on a netting set have occurred that lasted more than the margin period of risk, then the Board-regulated institution must use a margin period of risk for that netting set that is at least two times the minimum margin period of risk for that netting set. If the periodicity of the receipt of collateral is N-days, the minimum margin period of

risk is the minimum margin period of risk under this paragraph (d) plus N minus 1. This period should be extended to cover any impediments to prompt re-hedging of any market risk. (C) Five business days for an OTC derivative contract or netting set of OTC derivative contracts where the Board-regulated institution is either acting as a financial intermediary and enters into an offsetting transaction with a CCP or where the Board-regulated institution provides a guarantee to the CCP on the performance of the client. A Board-regulated institution must use a longer holding period if the Board-regulated institution determines that a longer period is appropriate. Additionally, the Board may require the Board-regulated institution to set a longer holding period if the Board determines that a longer period is appropriate due to the nature, structure, or characteristics of the transaction or is commensurate with the risks associated with the transaction.

(6) *Own estimate of alpha.* With prior written approval of the Board, a Board-regulated institution may calculate alpha as the ratio of economic capital from a full simulation of counterparty exposure across counterparties that incorporates a joint simulation of market and credit risk factors (numerator) and economic capital based on EPE (denominator), subject to a floor of 1.2. For purposes of this calculation, economic capital is the unexpected losses for all counterparty credit risks measured at a 99.9 percent confidence level over a one-year horizon. To receive approval, the Board-regulated institution must meet the following minimum standards to the satisfaction of the Board:

- (i) The Board-regulated institution's own estimate of alpha must capture in the numerator the effects of:
 - (A) The material sources of stochastic dependency of distributions of fair values of transactions or portfolios of transactions across counterparties;
 - (B) Volatilities and correlations of market risk factors used in the joint

simulation, which must be related to the credit risk factor used in the simulation to reflect potential increases in volatility or correlation in an economic downturn, where appropriate; and

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

(ii) The Board-regulated institution must assess the potential model uncertainty in its estimates of alpha.

(iii) The Board-regulated institution must calculate the numerator and denominator of alpha in a consistent fashion with respect to modeling methodology, parameter specifications, and portfolio composition.

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

(7) *Risk-based capital requirements for transactions with specific wrong-way risk.*

A Board-regulated institution must determine if a repo-style transaction, eligible margin loan, bond option, or equity derivative contract or purchased credit derivative to which the Board-regulated institution applies the internal models methodology under this paragraph (d) has specific wrong-way risk. If a transaction has specific wrong-way risk, the Board-regulated institution must treat the transaction as its own netting set and exclude it from the model described in section 217.132(d)(2) and instead calculate the risk-based capital requirement for the transaction as follows:

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

(A) K, calculated using the appropriate risk-based capital formula specified in Table 1 of section 217.131 using the PD of the counterparty and LGD equal to 100 percent, by

(B) The maximum amount the Board-regulated institution could lose on the equity derivative.

- (ii) For a purchased credit derivative by multiplying:
- (A) K, calculated using the appropriate risk-based capital formula specified in Table 1 of section 217.131 using the PD of the counterparty and LGD equal to 100 percent, by
 - (B) The fair value of the reference asset of the credit derivative.
- (iii) For a bond option, by multiplying:
- (A) K, calculated using the appropriate risk-based capital formula specified in Table 1 of section 217.131 using the PD of the counterparty and LGD equal to 100 percent, by
 - (B) The smaller of the notional amount of the underlying reference asset and the maximum potential loss under the bond option contract.
- (iv) For a repo-style transaction or eligible margin loan by multiplying:
- (A) K, calculated using the appropriate risk-based capital formula specified in Table 1 of section 217.131 using the PD of the counterparty and LGD equal to 100 percent, by
 - (B) The EAD of the transaction determined according to the EAD equation in section 217.132(b)(2), substituting the estimated value of the collateral assuming a default of the counterparty for the value of the collateral in ΣC of the equation.
- (8) *Risk-weighted asset amount for IMM exposures with specific wrong-way risk.* The aggregate risk-weighted asset amount for IMM exposures with specific wrong-way risk is the sum of a Board-regulated institution's risk-based capital requirement for purchased credit derivatives that are not bond options with specific wrong-way risk as calculated under paragraph (d)(7)(ii) of this section, a Board-regulated institution's risk-based capital requirement for equity derivatives with specific wrong-way risk as calculated under paragraph (d)(7)(i) of this section, a Board-regulated institution's risk-based capital requirement for bond options with specific wrong-way risk as calculated under paragraph (d)(7)(iii) of this section, and a Board-regulated institution's risk-based capital requirement for repo-style transactions and eligible margin loans with specific wrong-way risk as calculated under paragraph (d)(7)(iv) of this section, multiplied by 12.5.
- (9) *Risk-weighted assets for IMM exposures.*
- (i) The Board-regulated institution must insert the assigned risk parameters for each counterparty and netting set into the appropriate formula specified in Table 1 of section 217.131 and multiply the output of the formula by the $EAD_{unstressed}$ of the netting set to obtain the unstressed capital requirement for each netting set. A Board-regulated institution that uses an advanced CVA approach that captures migrations in credit spreads under paragraph (e)(3) of this section must set the maturity adjustment (b) in the formula equal to zero. The sum of the unstressed capital requirement calculated for each netting set equals $K_{unstressed}$.
 - (ii) The Board-regulated institution must insert the assigned risk parameters for each wholesale obligor and netting set into the appropriate formula specified in Table 1 of section 217.131 and multiply the output of the formula by the $EAD_{stressed}$ of the netting set to obtain the stressed capital requirement for each netting set. A Board-regulated institution that uses an advanced CVA approach that captures migrations in credit spreads under paragraph (e)(6) of this section must set the maturity adjustment (b) in the formula equal to zero. The sum of the stressed capital requirement calculated for each netting set equals $K_{stressed}$.
 - (iii) The Board-regulated institution's dollar risk-based capital requirement under the internal models methodology equals the larger of $K_{unstressed}$ and $K_{stressed}$. A Board-regulated institution's risk-weighted assets amount for IMM exposures is equal to the capital requirement multiplied by 12.5, plus risk-weighted assets for IMM exposures with specific wrong-way risk in paragraph (d)(8) of this section and those in paragraph (d)(10) of this section.
- (10) *Other measures of counterparty exposure.*

(i) With prior written approval of the Board, a Board-regulated institution may set EAD equal to a measure of counterparty credit risk exposure, such as peak EAD, that is more conservative than an alpha of 1.4 times the larger of $EPE_{\text{unstressed}}$ and EPE_{stressed} for every counterparty whose EAD will be measured under the alternative measure of counterparty exposure. The Board-regulated institution must demonstrate the conservatism of the measure of counterparty credit risk exposure used for EAD. With respect to paragraph (d)(10)(i) of this section:

(A) For material portfolios of new OTC derivative products, the Board-regulated institution may assume that the standardized approach for counterparty credit risk pursuant to paragraph (c) of this section meets the conservatism requirement of this section for a period not to exceed 180 days.

(B) For immaterial portfolios of OTC derivative contracts, the Board-regulated institution generally may assume that the standardized approach for counterparty credit risk pursuant to paragraph (c) of this section meets the conservatism requirement of this section.

(ii) To calculate risk-weighted assets for purposes of the approach in paragraph (d)(10)(i) of this section, the Board-regulated institution must insert the assigned risk parameters for each counterparty and netting set into the appropriate formula specified in Table 1 of section 217.131, multiply the output of the formula by the EAD for the exposure as specified above, and multiply by 12.5.

(e) *Credit valuation adjustment (CVA) risk-weighted assets.*

(1) *In general.* With respect to its OTC derivative contracts, a Board-regulated institution must calculate a CVA risk-weighted asset amount for its portfolio of OTC derivative transactions that are subject to the CVA capital requirement using the simple CVA approach described in para-

graph (e)(5) of this section or, with prior written approval of the Board, the advanced CVA approach described in paragraph (e)(6) of this section. A Board-regulated institution that receives prior Board approval to calculate its CVA risk-weighted asset amounts for a class of counterparties using the advanced CVA approach must continue to use that approach for that class of counterparties until it notifies the Board in writing that the Board-regulated institution expects to begin calculating its CVA risk-weighted asset amount using the simple CVA approach. Such notice must include an explanation of the Board-regulated institution's rationale and the date upon which the Board-regulated institution will begin to calculate its CVA risk-weighted asset amount using the simple CVA approach.

(2) *Market risk Board-regulated institutions.* Notwithstanding the prior approval requirement in paragraph (e)(1) of this section, a market risk Board-regulated institution may calculate its CVA risk-weighted asset amount using the advanced CVA approach if the Board-regulated institution has Board approval to:

(i) Determine EAD for OTC derivative contracts using the internal models methodology described in paragraph (d) of this section; and

(ii) Determine its specific risk add-on for debt positions issued by the counterparty using a specific risk model described in section 217.207(b).

(3) *Recognition of hedges.*

(i) A Board-regulated institution may recognize a single name CDS, single name contingent CDS, any other equivalent hedging instrument that references the counterparty directly, and index credit default swaps (CDS_{ind}) as a CVA hedge under paragraph (e)(5)(ii) of this section or paragraph (e)(6) of this section, provided that the position is managed as a CVA hedge in accordance with the Board-regulated institution's hedging policies.

(ii) A Board-regulated institution shall not recognize as a CVA hedge any tranching or n^{th} -to-default credit derivative.

(4) *Total CVA risk-weighted assets.* Total CVA risk-weighted assets is the CVA capital requirement, K_{CVA} , calculated for a Board-regulated institution's entire portfolio of OTC derivative counterparties that are subject to the CVA capital requirement, multiplied by 12.5.

(5) *Simple CVA approach.*

(i) Under the simple CVA approach, the CVA capital requirement, K_{CVA} , is calculated according to the following formula:

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

Where:

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

(A) w_i = the weight applicable to counterparty i under Table 4 to this section;

(B) M_i = the EAD-weighted average of the effective maturity of each netting set with counterparty i (where each netting set's effective maturity can be no less than one year.)

(C) EAD_i^{total} = the sum of the EAD for all netting sets of OTC derivative contracts with counterparty i calculated using the standardized approach to counterparty credit risk described in paragraph (c) of this section or the internal models methodology described in paragraph (d) of this section. When the Board-regulated institution calculates EAD under paragraph (c) of this section, such EAD may be adjusted for purposes of calculating EAD_i^{total} by multiplying EAD by $(1 - \exp(-0.05 \times M_i)) / (0.05 \times M_i)$, where "exp" is the exponential function. When the Board-regulated institution calculates EAD under paragraph (d) of this section, EAD_i^{total} equals $EAD_{unstressed}$.

(D) M_i^{hedge} = the notional weighted average maturity of the hedge instrument.

(E) B_i = the sum of the notional amounts of any purchased single name CDS referencing counterparty i that is used to hedge CVA risk to counterparty i multiplied by $(1 - \exp(-0.05 \times M_i^{hedge})) / (0.05 \times M_i^{hedge})$.

(F) M_{ind} = the maturity of the CDS_{ind} or the notional weighted average maturity of any CDS_{ind} purchased to hedge CVA risk of counterparty i .

(G) B_{ind} = the notional amount of one or more CDS_{ind} purchased to hedge CVA risk for counterparty i multiplied by $(1 - \exp(-0.05 \times M_{ind})) / (0.05 \times M_{ind})$.

(H) w_{ind} = the weight applicable to the CDS_{ind} based on the average weight of the underlying reference names that comprise the index under Table 4 to this section.

(ii) The Board-regulated institution may treat the notional amount of the index attributable to a counterparty as a single name hedge of counterparty i (B_i), when calculating K_{CVA} , and subtract the notional amount of B_i from the notional amount of the CDS_{ind}. A Board-regulated institution must treat the CDS_{ind} hedge with the notional amount reduced by B_i as a CVA hedge.

Table 4 to section 217.132—Assignment of counterparty weight

Internal PD (in percent)	Weight w_i (in percent)
0.00-0.07	0.70
>0.070-0.15	0.80
>0.15-0.40	1.00
>0.40-2.00	2.00
>2.00-6.00	3.00
>6.00	10.00

(6) *Advanced CVA approach.*

(i) A Board-regulated institution may use the VaR model that it uses to determine specific risk under section 217.207(b) or another VaR model that meets the quantitative requirements of section 217.205(b) and section 217.207(b)(1) to calculate its CVA capital requirement for a counterparty by modeling the impact of changes in the counterparties' credit spreads, together with any recognized CVA hedges, on the CVA for the counterparties, subject to the following requirements:

(A) The VaR model must incorporate only changes in the counterparties' credit spreads, not changes in other risk factors. The VaR model does not need to capture jump-to-default risk;

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

Where

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

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

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

(D) LGD_{MKT} = the loss given default

(B) A Board-regulated institution that qualifies to use the advanced CVA approach must include in that approach any immaterial OTC derivative portfolios for which it uses the standardized approach to counterparty credit risk in paragraph (c) of this section according to paragraph (e)(6)(viii) of this section; and

(C) A Board-regulated institution must have the systems capability to calculate the CVA capital requirement for a counterparty on a daily basis (but is not required to calculate the CVA capital requirement on a daily basis).

(ii) Under the advanced CVA approach, the CVA capital requirement, K_{CVA} , is calculated according to the following formulas:

$$K_{CVA} = 3 \times (VaR_{Unstressed}^{CVA} + VaR_{Stressed}^{CVA})$$

where VaR_j^{CVA} is the 99% VaR reflecting changes of CVA_j and fair value of eligible hedges (aggregated across all counterparties and eligible hedges) resulting from simulated changes of credit spreads over a 10-day time horizon. CVA_j for a given counterparty must be calculated according to

of the counterparty based on the spread of a publicly traded debt instrument of the counterparty, or, where a publicly traded debt instrument spread is not available, a proxy spread based on the credit quality, industry, and region of the counterparty. Where no market information and no reliable proxy based on the credit quality, industry, and region of the counterparty are available to determine LGD_{MKT} , a Board-regulated institution may use a conservative estimate when determining LGD_{MKT} , subject to approval by the Board.

(E) EE_i = the sum of the expected exposures for all netting sets with the counterparty at revaluation time t_i , calculated according to paragraphs (e)(6)(iv)(A) and (e)(6)(v)(A) of this section.

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

(G) Exp is the exponential function.

(H) The subscript j refers either to a stressed or an unstressed calibration as described in paragraphs (e)(6)(iv) and (v) of this section.

(iii) Notwithstanding paragraphs (e)(6)(i) and (e)(6)(ii) of this section, a Board-regulated institution must use the formulas in paragraphs (e)(6)(iii)(A) or (e)(6)(iii)(B) of this section to calculate credit spread sensitivities if its VaR model is not based on full repricing.

(A) If the VaR model is based on credit spread sensitivities for specific tenors, the Board-regulated institution must calculate each credit spread sensitivity according to the following formula:

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

For the final time bucket $i = T$, the corresponding formula is

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

(B) If the VaR model uses credit spread sensitivities to parallel shifts in credit spreads, the Board-regulated in-

stitution must calculate each credit spread sensitivity according to the following formula:

$$\text{Regulatory CS01} = 0.0001 \times \sum_{i=1}^T \left(t_i \times \exp\left(-\frac{s_i \times t_i}{LGD_{MKT}}\right) - t_{i-1} \times \exp\left(-\frac{s_{i-1} \times t_{i-1}}{LGD_{MKT}}\right) \right) \times \left(\frac{EE_{i-1} \times D_{i-1} + EE_i \times D_i}{2}\right)$$

(iv) To calculate the $CVA_{\text{Unstressed}}$ measure for purposes of paragraph (e)(6)(ii) of this section, the Board-regulated institution must:

(A) Use the EE_i calculated using the calibration of paragraph (d)(3)(vii) of this section, except as provided in section 217.132 (e)(6)(vi), and

(B) Use the historical observation period required under section 217.205(b)(2).

(v) To calculate the CVA_{Stressed} measure for purposes of paragraph (e)(6)(ii) of this section, the Board-regulated institution must:

(A) Use the EE_i calculated using the stress calibration in paragraph (d)(3)(viii) of this section except as provided in paragraph (e)(6)(vi) of this section.

(B) Calibrate VaR model inputs to his-

torical data from the most severe twelve-month stress period contained within the three-year stress period used to calculate EE_i . The Board may require a Board-regulated institution to use a different period of significant financial stress in the calculation of the CVA_{Stressed} measure.

(vi) If a Board-regulated institution captures the effect of a collateral agreement on EAD using the method described in paragraph (d)(5)(ii) of this section, for purposes of paragraph (e)(6)(ii) of this section, the Board-regulated institution must calculate EE_i using the method in paragraph (d)(5)(ii) of this section and keep that EE constant with the maturity equal to the maximum of:

(A) Half of the longest maturity of a transaction in the netting set, and

(B) The notional weighted average

maturity of all transactions in the netting set.

(vii) For purposes of paragraph (e)(6) of this section, the Board-regulated institution's VaR model must capture the basis between the spreads of any CDS_{ind} that is used as the hedging instrument and the hedged counterparty exposure over various time periods, including benign and stressed environments. If the VaR model does not capture that basis, the Board-regulated institution must reflect only 50 percent of the notional amount of the CDS_{ind} hedge in the VaR model.

(viii) If a Board-regulated institution uses the standardized approach for counterparty credit risk pursuant to paragraph (c) of this section to calculate the EAD for any immaterial portfolios of OTC derivative contracts, the Board-regulated institution must use that EAD as a constant EE in the formula for the calculation of CVA with the maturity equal to the maximum of:

- (A) Half of the longest maturity of a transaction in the netting set; and
- (B) The notional weighted average maturity of all transactions in the netting set.

(1) *Risk-weighted assets for cleared transactions.*

(i) To determine the risk-weighted asset amount for a cleared transaction, a Board-regulated institution that is a clearing member client must multiply the trade exposure amount for the cleared transaction, calculated in accordance with paragraph (b)(2) of this section, by the risk weight appropriate for the cleared transaction, determined in accordance with paragraph (b)(3) of this section.

(ii) A clearing member client Board-regulated institution's total risk-weighted assets for cleared transactions is the sum of the risk-weighted asset amounts for all of its cleared transactions.

(2) *Trade exposure amount.*

(i) For a cleared transaction that is a derivative contract or a netting set of derivative contracts, trade exposure amount equals the EAD for the derivative contract or netting set of derivative contracts calculated using the methodology used to calculate EAD for derivative contracts set forth in section 217.132(c) or (d), plus the fair value of the collateral posted by the clearing member client Board-regulated institution and held by the CCP or a clearing member in a manner that is not bankruptcy remote. When the Board-regulated institution calculates EAD for the cleared transaction using the methodology in section 217.132(d), EAD equals $EAD_{\text{unstressed}}$.

(ii) For a cleared transaction that is a repo-style transaction or netting set of repo-style transactions, trade exposure amount equals the EAD for the repo-style transaction calculated using the methodology set forth in section 217.132(b)(2) or (3) or (d), plus the fair value of the collateral posted by the clearing member client Board-regulated institution and held by the CCP or a clearing member in a manner that is not bankruptcy remote. When the Board-regulated institution calculates EAD for the cleared transaction under section 217.132(d), EAD equals $EAD_{\text{unstressed}}$.

(3) *Cleared transaction risk weights.*

(i) For a cleared transaction with a

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SECTION 217.133—Cleared Transactions

(a) *General requirements.*

(1) *Clearing member clients.* A Board-regulated institution that is a clearing member client must use the methodologies described in paragraph (b) of this section to calculate risk-weighted assets for a cleared transaction.

(2) *Clearing members.* A Board-regulated institution that is a clearing member must use the methodologies described in paragraph (c) of this section to calculate its risk-weighted assets for a cleared transaction and paragraph (d) of this section to calculate its risk-weighted assets for its default fund contribution to a CCP.

(b) *Clearing member client Board-regulated institutions.*

QCCP, a clearing member client Board-regulated institution must apply a risk weight of:

(A) 2 percent if the collateral posted by the Board-regulated institution to the QCCP or clearing member is subject to an arrangement that prevents any loss to the clearing member client Board-regulated institution due to the joint default or a concurrent insolvency, liquidation, or receivership proceeding of the clearing member and any other clearing member clients of the clearing member; and the clearing member client Board-regulated institution has conducted sufficient legal review to conclude with a well-founded basis (and maintains sufficient written documentation of that legal review) that in the event of a legal challenge (including one resulting from an event of default or from liquidation, insolvency, or receivership proceedings) the relevant court and administrative authorities would find the arrangements to be legal, valid, binding, and enforceable under the law of the relevant jurisdictions.

(B) 4 percent, if the requirements of paragraph (b)(3)(i)(A) of this section are not met.

(ii) For a cleared transaction with a CCP that is not a QCCP, a clearing member client Board-regulated institution must apply the risk weight applicable to the CCP under subpart D of this part.

(4) *Collateral.*

(i) Notwithstanding any other requirement of this section, collateral posted by a clearing member client Board-regulated institution that is held by a custodian (in its capacity as a custodian) in a manner that is bankruptcy remote from the CCP, clearing member, and other clearing member clients of the clearing member, is not subject to a capital requirement under this section.

(ii) A clearing member client Board-regulated institution must calculate a risk-weighted asset amount for any collateral provided to a CCP, clearing member or a custodian in connection with a cleared

transaction in accordance with requirements under subparts E or F of this part, as applicable.

(c) *Clearing member Board-regulated institution.*

(1) *Risk-weighted assets for cleared transactions.*

(i) To determine the risk-weighted asset amount for a cleared transaction, a clearing member Board-regulated institution must multiply the trade exposure amount for the cleared transaction, calculated in accordance with paragraph (c)(2) of this section by the risk weight appropriate for the cleared transaction, determined in accordance with paragraph (c)(3) of this section.

(ii) A clearing member Board-regulated institution's total risk-weighted assets for cleared transactions is the sum of the risk-weighted asset amounts for all of its cleared transactions.

(2) *Trade exposure amount.* A clearing member Board-regulated institution must calculate its trade exposure amount for a cleared transaction as follows:

(i) For a cleared transaction that is a derivative contract or a netting set of derivative contracts, trade exposure amount equals the EAD calculated using the methodology used to calculate EAD for derivative contracts set forth in section 217.132(c) or (d), plus the fair value of the collateral posted by the clearing member Board-regulated institution and held by the CCP in a manner that is not bankruptcy remote. When the clearing member Board-regulated institution calculates EAD for the cleared transaction using the methodology in section 217.132(d), EAD equals $EAD_{\text{unstressed}}$.

(ii) For a cleared transaction that is a repo-style transaction or netting set of repo-style transactions, trade exposure amount equals the EAD calculated under section 217.132(b)(2) or (3) or (d), plus the fair value of the collateral posted by the clearing member Board-regulated institution and held by the CCP in a manner that is not bankruptcy remote. When the clearing member Board-regulated in-

stitution calculates EAD for the cleared transaction under section 217.132(d), EAD equals $EAD_{\text{unstressed}}$.

(3) *Cleared transaction risk weights.*

(i) A clearing member Board-regulated institution must apply a risk weight of 2 percent to the trade exposure amount for a cleared transaction with a QCCP.

(ii) For a cleared transaction with a CCP that is not a QCCP, a clearing member Board-regulated institution must apply the risk weight applicable to the CCP according to subpart D of this part.

(iii) Notwithstanding paragraphs (c)(3)(i) and (ii) of this section, a clearing member Board-regulated institution may apply a risk weight of zero percent to the trade exposure amount for a cleared transaction with a QCCP where the clearing member Board-regulated institution is acting as a financial intermediary on behalf of a clearing member client, the transaction offsets another transaction that satisfies the requirements set forth in section 217.3(a), and the clearing member Board-regulated institution is not obligated to reimburse the clearing member client in the event of the QCCP default.

(4) *Collateral.*

(i) Notwithstanding any other requirement of this section, collateral posted by a clearing member Board-regulated institution that is held by a custodian (in its capacity as a custodian) in a manner that is bankruptcy remote from the CCP, clearing member, and other clearing member clients of the clearing member, is not subject to a capital requirement under this section.

(ii) A clearing member Board-regulated institution must calculate a risk-weighted asset amount for any collateral provided to a CCP, clearing member or a custodian in connection with a cleared transaction in accordance with requirements under subparts E or F of this part, as applicable.

(d) *Default fund contributions.*

(1) *General requirement.* A clearing member Board-regulated institution must determine the risk-weighted asset amount for a

default fund contribution to a CCP at least quarterly, or more frequently if, in the opinion of the Board-regulated institution or the Board, there is a material change in the financial condition of the CCP.

(2) *Risk-weighted asset amount for default fund contributions to nonqualifying CCPs.*

A clearing member Board-regulated institution's risk-weighted asset amount for default fund contributions to CCPs that are not QCCPs equals the sum of such default fund contributions multiplied by 1,250 percent, or an amount determined by the Board, based on factors such as size, structure, and membership characteristics of the CCP and riskiness of its transactions, in cases where such default fund contributions may be unlimited.

(3) *Risk-weighted asset amount for default fund contributions to QCCPs.*

A clearing member Board-regulated institution's risk-weighted asset amount for default fund contributions to QCCPs equals the sum of its capital requirement, K_{CM} for each QCCP, as calculated under the methodology set forth in paragraph (d)(4) of this section, multiplied by 12.5.

(4) *Capital requirement for default fund contributions to a QCCP.* A clearing member Board-regulated institution's capital requirement for its default fund contribution to a QCCP (K_{CM}) is equal to:

$$K_{\text{CM}} = \max\left\{K_{\text{CCP}} * \left(\frac{DF^{\text{pref}}}{DF_{\text{CCP}} + DF_{\text{CCPCM}}^{\text{pref}}}\right); 0.16 \text{ percent} * DF^{\text{pref}}\right\}$$

Where:

K_{CCP} is the hypothetical capital requirement of the QCCP, as determined under paragraph (d)(5) of this section;

DF^{pref} is the prefunded default fund contribution of the clearing member Board regulated institution to the QCCP;

DF_{CCP} is the QCCP's own prefunded amounts that are contributed to the default waterfall and are junior or *pari passu* with prefunded default fund contributions of clearing members of the QCCP; and

$DF_{\text{CCPCM}}^{\text{pref}}$ is the total prefunded default fund contributions from clearing members of the QCCP to the QCCP.

(5) *Hypothetical capital requirement of a*

QCCP. Where a QCCP has provided its K_{CCP} , a Board-regulated institution must rely on such disclosed figure instead of calculating K_{CCP} under this paragraph (d)(5), unless the Board-regulated institution determines that a more conservative figure is appropriate based on the nature, structure, or characteristics of the QCCP. The hypothetical capital requirement of a QCCP (K_{CCP}), as determined by the Board-regulated institution, is equal to:

$$K_{CCP} = \sum_{CM_i} EAD_i * 1.6 \text{ percent}$$

Where:

CM_i is each clearing member of the QCCP; and

EAD_i is the exposure amount of the QCCP to each clearing member of the QCCP, as determined under paragraph (d)(6) of this section.

(6) *EAD of a QCCP to a clearing member.*

(i) The EAD of a QCCP to a clearing member is equal to the sum of the EAD for derivative contracts determined under paragraph (d)(6)(ii) of this section and the EAD for repo-style transactions determined under paragraph (d)(6)(iii) of this section.

(ii) With respect to any derivative contracts between the QCCP and the clearing member that are cleared transactions and any guarantees that the clearing member has provided to the QCCP with respect to performance of a clearing member client on a derivative contract, the EAD is equal to the exposure amount of the QCCP to the clearing member for all such derivative contracts and guarantees of derivative contracts calculated under SA-CCR in section 217.132(c) (or, with respect to a QCCP located outside the United States, under a substantially identical methodology in effect in the jurisdiction) using a value of 10 business days for purposes of section 217.132(c)(9)(iv); less the value of all collateral held by the QCCP posted by the clearing member or a client of the clearing member in connection with a derivative contract for which the clearing member has provided a guarantee to the QCCP and the amount of the prefunded

default fund contribution of the clearing member to the QCCP.

(iii) With respect to any repo-style transactions between the QCCP and a clearing member that are cleared transactions, EAD is equal to:

$$EAD = \max\{EBRM - IM - DF; 0\}$$

Where:

$EBRM_i$ is the exposure amount of the QCCP to each clearing member for all repo-style transactions between the QCCP and the clearing member, as determined under section 217.132(b)(2) and without recognition of the initial margin collateral posted by the clearing member to the QCCP with respect to the repo-style transactions or the prefunded default fund contribution of the clearing member institution to the QCCP;

IM_i is the initial margin collateral posted by each clearing member to the QCCP with respect to the repo-style transactions; and

DF_i is the prefunded default fund contribution of each clearing member to the QCCP that is not already deducted in paragraph (d)(6)(ii) of this section.

(iv) EAD must be calculated separately for each clearing member's sub-client accounts and sub-house account (i.e., for the clearing member's proprietary activities). If the clearing member's collateral and its client's collateral are held in the same default fund contribution account, then the EAD of that account is the sum of the EAD for the client-related transactions within the account and the EAD of the house-related transactions within the account. For purposes of determining such EADs, the independent collateral of the clearing member and its client must be allocated in proportion to the respective total amount of independent collateral posted by the clearing member to the QCCP.

(v) If any account or sub-account contains both derivative contracts and repo-style transactions, the EAD of that account is the sum of the EAD for the derivative contracts within the account

and the EAD of the repo-style transactions within the account. If independent collateral is held for an account containing both derivative contracts and repo-style transactions, then such collateral must be allocated to the derivative contracts and repo-style transactions in proportion to the respective product specific exposure amounts, calculated, excluding the effects of collateral, according to section 217.132(b) for repo-style transactions and to section 217.132(c)(5) for derivative contracts.

(vi) Notwithstanding any other provision of paragraph (d) of this section, with the prior approval of the Board, a Board-regulated institution may determine the risk-weighted asset amount for a default fund contribution to a QCCP according to section 217.35(d)(3)(ii).

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SECTION 217.134—Guarantees and Credit Derivatives: PD Substitution and LGD Adjustment Approaches

(a) *Scope.*

(1) This section applies to wholesale exposures for which:

- (i) Credit risk is fully covered by an eligible guarantee or eligible credit derivative; or
- (ii) Credit risk is covered on a pro rata basis (that is, on a basis in which the Board-regulated institution and the protection provider share losses proportionately) by an eligible guarantee or eligible credit derivative.

(2) Wholesale exposures on which there is a tranching of credit risk (reflecting at least two different levels of seniority) are securitization exposures subject to section 217.141 through section 217.145.

(3) A Board-regulated institution may elect to recognize the credit risk mitigation benefits of an eligible guarantee or eligible credit derivative covering an exposure described in paragraph (a)(1) of this section by using the PD substitution approach or the LGD adjustment approach in paragraph (c) of this section or, if the transaction

qualifies, using the double default treatment in section 217.135. A Board-regulated institution's PD and LGD for the hedged exposure may not be lower than the PD and LGD floors described in section 217.131(d)(2) and (d)(3).

(4) If multiple eligible guarantees or eligible credit derivatives cover a single exposure described in paragraph (a)(1) of this section, a Board-regulated institution may treat the hedged exposure as multiple separate exposures each covered by a single eligible guarantee or eligible credit derivative and may calculate a separate risk-based capital requirement for each separate exposure as described in paragraph (a)(3) of this section.

(5) If a single eligible guarantee or eligible credit derivative covers multiple hedged wholesale exposures described in paragraph (a)(1) of this section, a Board-regulated institution must treat each hedged exposure as covered by a separate eligible guarantee or eligible credit derivative and must calculate a separate risk-based capital requirement for each exposure as described in paragraph (a)(3) of this section.

(6) A Board-regulated institution must use the same risk parameters for calculating ECL as it uses for calculating the risk-based capital requirement for the exposure.

(b) *Rules of recognition.*

(1) A Board-regulated institution may only recognize the credit risk mitigation benefits of eligible guarantees and eligible credit derivatives.

(2) A Board-regulated institution may only recognize the credit risk mitigation benefits of an eligible credit derivative to hedge an exposure that is different from the credit derivative's reference exposure used for determining the derivative's cash settlement value, deliverable obligation, or occurrence of a credit event if:

- (i) The reference exposure ranks *pari passu* (that is, equally) with or is junior to the hedged exposure; and
- (ii) The reference exposure and the hedged exposure are exposures to the same legal entity, and legally enforceable cross-default or cross-acceleration clauses

are in place to assure payments under the credit derivative are triggered when the obligor fails to pay under the terms of the hedged exposure.

(c) *Risk parameters for hedged exposures.*

(1) *PD substitution approach.*

(i) *Full coverage.* If an eligible guarantee or eligible credit derivative meets the conditions in paragraphs (a) and (b) of this section and the protection amount (P) of the guarantee or credit derivative is greater than or equal to the EAD of the hedged exposure, a Board-regulated institution may recognize the guarantee or credit derivative in determining the Board-regulated institution's risk-based capital requirement for the hedged exposure by substituting the PD associated with the rating grade of the protection provider for the PD associated with the rating grade of the obligor in the risk-based capital formula applicable to the guarantee or credit derivative in Table 1 of section 217.131 and using the appropriate LGD as described in paragraph (c)(1)(iii) of this section. If the Board-regulated institution determines that full substitution of the protection provider's PD leads to an inappropriate degree of risk mitigation, the Board-regulated institution may substitute a higher PD than that of the protection provider.

(ii) *Partial coverage.* If an eligible guarantee or eligible credit derivative meets the conditions in paragraphs (a) and (b) of this section and P of the guarantee or credit derivative is less than the EAD of the hedged exposure, the Board-regulated institution must treat the hedged exposure as two separate exposures (protected and unprotected) in order to recognize the credit risk mitigation benefit of the guarantee or credit derivative.

(A) The Board-regulated institution must calculate its risk-based capital requirement for the protected exposure under section 217.131, where PD is the protection provider's PD, LGD is determined under paragraph (c)(1)(iii) of this section, and EAD is P. If the Board-regulated institution determines

that full substitution leads to an inappropriate degree of risk mitigation, the Board-regulated institution may use a higher PD than that of the protection provider.

(B) The Board-regulated institution must calculate its risk-based capital requirement for the unprotected exposure under section 217.131, where PD is the obligor's PD, LGD is the hedged exposure's LGD (not adjusted to reflect the guarantee or credit derivative), and EAD is the EAD of the original hedged exposure minus P.

(C) The treatment in paragraph (c)(1)(ii) of this section is applicable when the credit risk of a wholesale exposure is covered on a partial pro rata basis or when an adjustment is made to the effective notional amount of the guarantee or credit derivative under paragraphs (d), (e), or (f) of this section.

(iii) *LGD of hedged exposures.* The LGD of a hedged exposure under the PD substitution approach is equal to:

(A) The lower of the LGD of the hedged exposure (not adjusted to reflect the guarantee or credit derivative) and the LGD of the guarantee or credit derivative, if the guarantee or credit derivative provides the Board-regulated institution with the option to receive immediate payout upon triggering the protection; or

(B) The LGD of the guarantee or credit derivative, if the guarantee or credit derivative does not provide the Board-regulated institution with the option to receive immediate payout upon triggering the protection.

(2) *LGD adjustment approach.*

(i) *Full coverage.* If an eligible guarantee or eligible credit derivative meets the conditions in paragraphs (a) and (b) of this section and the protection amount (P) of the guarantee or credit derivative is greater than or equal to the EAD of the hedged exposure, the Board-regulated institution's risk-based capital requirement for the hedged exposure is the greater of:

(A) The risk-based capital requirement

for the exposure as calculated under section 217.131, with the LGD of the exposure adjusted to reflect the guarantee or credit derivative; or

(B) The risk-based capital requirement for a direct exposure to the protection provider as calculated under section 217.131, using the PD for the protection provider, the LGD for the guarantee or credit derivative, and an EAD equal to the EAD of the hedged exposure.

(ii) *Partial coverage.* If an eligible guarantee or eligible credit derivative meets the conditions in paragraphs (a) and (b) of this section and the protection amount (P) of the guarantee or credit derivative is less than the EAD of the hedged exposure, the Board-regulated institution must treat the hedged exposure as two separate exposures (protected and unprotected) in order to recognize the credit risk mitigation benefit of the guarantee or credit derivative.

(A) The Board-regulated institution's risk-based capital requirement for the protected exposure would be the greater of:

(1) The risk-based capital requirement for the protected exposure as calculated under section 217.131, with the LGD of the exposure adjusted to reflect the guarantee or credit derivative and EAD set equal to P; or

(2) The risk-based capital requirement for a direct exposure to the guarantor as calculated under section 217.131, using the PD for the protection provider, the LGD for the guarantee or credit derivative, and an EAD set equal to P.

(B) The Board-regulated institution must calculate its risk-based capital requirement for the unprotected exposure under section 217.131, where PD is the obligor's PD, LGD is the hedged exposure's LGD (not adjusted to reflect the guarantee or credit derivative), and EAD is the EAD of the original hedged exposure minus P.

(3) *M of hedged exposures.* For purposes of

this paragraph (c), the M of the hedged exposure is the same as the M of the exposure if it were unhedged.

(d) *Maturity mismatch.*

(1) A Board-regulated institution that recognizes an eligible guarantee or eligible credit derivative in determining its risk-based capital requirement for a hedged exposure must adjust the effective notional amount of the credit risk mitigant to reflect any maturity mismatch between the hedged exposure and the credit risk mitigant.

(2) A maturity mismatch occurs when the residual maturity of a credit risk mitigant is less than that of the hedged exposure(s).

(3) The residual maturity of a hedged exposure is the longest possible remaining time before the obligor is scheduled to fulfil its obligation on the exposure. If a credit risk mitigant has embedded options that may reduce its term, the Board-regulated institution (protection purchaser) must use the shortest possible residual maturity for the credit risk mitigant. If a call is at the discretion of the protection provider, the residual maturity of the credit risk mitigant is at the first call date. If the call is at the discretion of the Board-regulated institution (protection purchaser), but the terms of the arrangement at origination of the credit risk mitigant contain a positive incentive for the Board-regulated institution to call the transaction before contractual maturity, the remaining time to the first call date is the residual maturity of the credit risk mitigant.³¹

(4) A credit risk mitigant with a maturity mismatch may be recognized only if its original maturity is greater than or equal to one year and its residual maturity is greater than three months.

(5) When a maturity mismatch exists, the Board-regulated institution must apply the following adjustment to the effective notional amount of the credit risk mitigant: $P_m = E \times (t - 0.25)/(T - 0.25)$, where:

(i) P_m = effective notional amount of the

³¹ For example, where there is a step-up in cost in conjunction with a call feature or where the effective cost of protection increases over time even if credit quality remains the same or improves, the residual maturity of the credit risk mitigant will be the remaining time to the first call.

credit risk mitigant, adjusted for maturity mismatch;

(ii) E = effective notional amount of the credit risk mitigant;

(iii) t = the lesser of T or the residual maturity of the credit risk mitigant, expressed in years; and

(iv) T = the lesser of five or the residual maturity of the hedged exposure, expressed in years.

(e) *Credit derivatives without restructuring as a credit event.* If a Board-regulated institution recognizes an eligible credit derivative that does not include as a credit event a restructuring of the hedged exposure involving forgiveness or postponement of principal, interest, or fees that results in a credit loss event (that is, a charge-off, specific provision, or other similar debit to the profit and loss account), the Board-regulated institution must apply the following adjustment to the effective notional amount of the credit derivative: $P_r = P_m \times 0.60$, where:

(1) P_r = effective notional amount of the credit risk mitigant, adjusted for lack of restructuring event (and maturity mismatch, if applicable); and

(2) P_m = effective notional amount of the credit risk mitigant adjusted for maturity mismatch (if applicable).

(f) *Currency mismatch.*

(1) If a Board-regulated institution recognizes an eligible guarantee or eligible credit derivative that is denominated in a currency different from that in which the hedged exposure is denominated, the Board-regulated institution must apply the following formula to the effective notional amount of the guarantee or credit derivative: $P_c = P_r \times (1 - H_{FX})$, where:

(i) P_c = effective notional amount of the credit risk mitigant, adjusted for currency mismatch (and maturity mismatch and lack of restructuring event, if applicable);

(ii) P_r = effective notional amount of the credit risk mitigant (adjusted for maturity mismatch and lack of restructuring event, if applicable); and

(iii) H_{FX} = haircut appropriate for the currency mismatch between the credit risk mitigant and the hedged exposure.

(2) A Board-regulated institution must set H_{FX} equal to 8 percent unless it qualifies for the use of and uses its own internal estimates of foreign exchange volatility based on a ten-business-day holding period and daily marking-to-market and remargining. A Board-regulated institution qualifies for the use of its own internal estimates of foreign exchange volatility if it qualifies for:

(i) The own-estimates haircuts in section 217.132(b)(2)(iii);

(ii) The simple VaR methodology in section 217.132(b)(3); or

(iii) The internal models methodology in section 217.132(d).

(3) A Board-regulated institution must adjust H_{FX} calculated in paragraph (f)(2) of this section upward if the Board-regulated institution revalues the guarantee or credit derivative less frequently than once every ten business days using the square root of time formula provided in section 217.132(b)(2)(iii)(A)(2).

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SECTION 217.135—Guarantees and Credit Derivatives: Double Default Treatment

(a) *Eligibility and operational criteria for double default treatment.* A Board-regulated institution may recognize the credit risk mitigation benefits of a guarantee or credit derivative covering an exposure described in section 217.134(a)(1) by applying the double default treatment in this section if all the following criteria are satisfied:

(1) The hedged exposure is fully covered or covered on a pro rata basis by:

(i) An eligible guarantee issued by an eligible double default guarantor; or

(ii) An eligible credit derivative that meets the requirements of section 217.134(b)(2) and that is issued by an eligible double default guarantor.

(2) The guarantee or credit derivative is:

(i) An uncollateralized guarantee or uncollateralized credit derivative (for example, a credit default swap) that provides protection with respect to a single reference obligor; or

(ii) An n^{th} -to-default credit derivative

(subject to the requirements of section 217.142(m)).

(3) The hedged exposure is a wholesale exposure (other than a sovereign exposure).

(4) The obligor of the hedged exposure is not:

(i) An eligible double default guarantor or an affiliate of an eligible double default guarantor; or

(ii) An affiliate of the guarantor.

(5) The Board-regulated institution does not recognize any credit risk mitigation benefits of the guarantee or credit derivative for the hedged exposure other than through application of the double default treatment as provided in this section.

(6) The Board-regulated institution has implemented a process (which has received the prior, written approval of the Board) to detect excessive correlation between the creditworthiness of the obligor of the hedged exposure and the protection provider. If excessive correlation is present, the Board-regulated institution may not use the double default treatment for the hedged exposure.

(b) *Full coverage.* If a transaction meets the criteria in paragraph (a) of this section and the protection amount (P) of the guarantee or credit derivative is at least equal to the EAD of the hedged exposure, the Board-regulated institution may determine its risk-weighted asset amount for the hedged exposure under paragraph (e) of this section.

(c) *Partial coverage.* If a transaction meets the criteria in paragraph (a) of this section and the protection amount (P) of the guarantee or credit derivative is less than the EAD of the hedged exposure, the Board-regulated institution must treat the hedged exposure as two separate exposures (protected and unprotected) in order to recognize double default treatment on the protected portion of the exposure:

(1) For the protected exposure, the Board-regulated institution must set EAD equal to P and calculate its risk-weighted asset amount as provided in paragraph (e) of this section; and

(2) For the unprotected exposure, the Board-regulated institution must set EAD equal to the EAD of the original exposure minus P and then calculate its risk-weighted asset amount as provided in section 217.131.

(d) *Mismatches.* For any hedged exposure to which a Board-regulated institution applies double default treatment under this part, the Board-regulated institution must make applicable adjustments to the protection amount as required in section 217.134(d), (e), and (f).

(e) *The double default dollar risk-based capital requirement.* The dollar risk-based capital requirement for a hedged exposure to which a Board-regulated institution has applied double default treatment is K_{DD} multiplied by the EAD of the exposure. K_{DD} is calculated according to the following formula: $K_{DD} = K_o \times (0.15 + 160 \times PD_g)$, where:

$$(1) K_o = LGD_g \times \left[N \left(\frac{N^{-1}(PD_o) + N^{-1}(0.999)\sqrt{\rho_{os}}}{\sqrt{1-\rho_{os}}} \right) - PD_o \right] \times \left[\frac{1 + (M-2.5) \times b}{1 - 1.5 \times b} \right]$$

(2) PD_g = PD of the protection provider.

(3) PD_o = PD of the obligor of the hedged exposure.

(4) LGD_g =

(i) The lower of the LGD of the hedged exposure (not adjusted to reflect the guarantee or credit derivative) and the LGD of the guarantee or credit derivative, if the guarantee or credit derivative provides the Board-regulated institution with the option to receive immediate payout on triggering the protection; or

(ii) The LGD of the guarantee or credit derivative, if the guarantee or credit derivative does not provide the Board-regulated institution with the option to receive immediate payout on triggering the protection; and

(5) ρ_{os} (asset value correlation of the obligor) is calculated according to the appropriate formula for (R) provided in Table 1 in section 217.131, with PD equal to PD_o .

(6) b (maturity adjustment coefficient) is calculated according to the formula for b

provided in Table 1 in section 217.131, with PD equal to the lesser of PD_o and PD_g; and

(7) M (maturity) is the effective maturity of the guarantee or credit derivative, which may not be less than one year or greater than five years.

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SECTION 217.136—Unsettled Transactions

(a) *Definitions.* For purposes of this section:

(1) Delivery-versus-payment (DvP) transaction means a securities or commodities transaction in which the buyer is obligated to make payment only if the seller has made delivery of the securities or commodities and the seller is obligated to deliver the securities or commodities only if the buyer has made payment.

(2) Payment-versus-payment (PvP) transaction means a foreign exchange transaction in which each counterparty is obligated to make a final transfer of one or more currencies only if the other counterparty has made a final transfer of one or more currencies.

(3) A transaction has a normal settlement period if the contractual settlement period for the transaction is equal to or less than the market standard for the instrument underlying the transaction and equal to or less than five business days.

(4) The positive current exposure of a Board-regulated institution for a transaction is the difference between the transaction value at the agreed settlement price and the current market price of the transaction, if the difference results in a credit exposure of the Board-regulated institution to the counterparty.

(b) *Scope.* This section applies to all transactions involving securities, foreign exchange instruments, and commodities that have a risk of delayed settlement or delivery. This section does not apply to:

(1) Cleared transactions that are subject to daily marking-to-market and daily receipt and payment of variation margin;

(2) Repo-style transactions, including un-

settled repo-style transactions (which are addressed in sections 217.131 and 132);

(3) One-way cash payments on OTC derivative contracts (which are addressed in sections 217.131 and 132); or

(4) Transactions with a contractual settlement period that is longer than the normal settlement period (which are treated as OTC derivative contracts and addressed in sections 217.131 and 132).

(c) *System-wide failures.* In the case of a system-wide failure of a settlement or clearing system, or a central counterparty, the Board may waive risk-based capital requirements for unsettled and failed transactions until the situation is rectified.

(d) *Delivery-versus-payment (DvP) and payment-versus-payment (PvP) transactions.* A Board-regulated institution must hold risk-based capital against any DvP or PvP transaction with a normal settlement period if the Board-regulated institution's counterparty has not made delivery or payment within five business days after the settlement date. The Board-regulated institution must determine its risk-weighted asset amount for such a transaction by multiplying the positive current exposure of the transaction for the Board-regulated institution by the appropriate risk weight in Table 1 to section 217.136.

Table 1 to section 217.136—Risk weights for unsettled DvP and PvP transactions

Number of business days after contractual settlement date	Risk weight to be applied to positive current exposure (in percent)
From 5 to 15	100
From 16 to 30	625
From 31 to 45	937.5
46 or more	1,250

(e) *Non-DvP/non-PvP (non-delivery-versus-payment/non-payment-versus-payment) transactions.*

(1) A Board-regulated institution must hold risk-based capital against any non-DvP/non-PvP transaction with a normal settlement period if the Board-regulated institution has delivered cash, securities, commodities, or currencies to its counterparty but has not received its corresponding deliverables by

the end of the same business day. The Board-regulated institution must continue to hold risk-based capital against the transaction until the Board-regulated institution has received its corresponding deliverables.

(2) From the business day after the Board-regulated institution has made its delivery until five business days after the counterparty delivery is due, the Board-regulated institution must calculate its risk-based capital requirement for the transaction by treating the current fair value of the deliverables owed to the Board-regulated institution as a wholesale exposure.

(i) A Board-regulated institution may use a 45 percent LGD for the transaction rather than estimating LGD for the transaction provided the Board-regulated institution uses the 45 percent LGD for all transactions described in paragraphs (e)(1) and (2) of this section.

(ii) A Board-regulated institution may use a 100 percent risk weight for the transaction provided the Board-regulated institution uses this risk weight for all transactions described in paragraphs (e)(1) and (2) of this section.

(3) If the Board-regulated institution has not received its deliverables by the fifth business day after the counterparty delivery was due, the Board-regulated institution must apply a 1,250 percent risk weight to the current fair value of the deliverables owed to the Board-regulated institution.

(f) *Total risk-weighted assets for unsettled transactions.* Total risk-weighted assets for unsettled transactions is the sum of the risk-weighted asset amounts of all DvP, PvP, and non-DvP/non-PvP transactions.

SECTIONS 217.137–217.140—
[Reserved]

3-2241

RISK-WEIGHTED ASSETS FOR SECURITIZATION EXPOSURES

SECTION 217.141—Operational Criteria for Recognizing the Transfer of Risk

(a) *Operational criteria for traditional securitizations.* A Board-regulated institution

that transfers exposures it has originated or purchased to a securitization SPE or other third party in connection with a traditional securitization may exclude the exposures from the calculation of its risk-weighted assets only if each of the conditions in this paragraph (a) is satisfied. A Board-regulated institution that meets these conditions must hold risk-based capital against any securitization exposures it retains in connection with the securitization. A Board-regulated institution that fails to meet these conditions must hold risk-based capital against the transferred exposures as if they had not been securitized and must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from the transaction. The conditions are:

(1) The exposures are not reported on the Board-regulated institution's consolidated balance sheet under GAAP;

(2) The Board-regulated institution has transferred to one or more third parties credit risk associated with the underlying exposures;

(3) Any clean-up calls relating to the securitization are eligible clean-up calls; and

(4) The securitization does not:

(i) Include one or more underlying exposures in which the borrower is permitted to vary the drawn amount within an agreed limit under a line of credit; and

(ii) Contain an early amortization provision.

(b) *Operational criteria for synthetic securitizations.* For synthetic securitizations, a Board-regulated institution may recognize for risk-based capital purposes under this subpart the use of a credit risk mitigant to hedge underlying exposures only if each of the conditions in this paragraph (b) is satisfied. A Board-regulated institution that meets these conditions must hold risk-based capital against any credit risk of the exposures it retains in connection with the synthetic securitization. A Board-regulated institution that fails to meet these conditions or chooses not to recognize the credit risk mitigant for purposes of this section must hold risk-based capital under this subpart against the underlying exposures as if they had not been synthetically securitized. The conditions are:

- (1) The credit risk mitigant is:
- (i) Financial collateral; or
 - (ii) A guarantee that meets all of the requirements of an eligible guarantee in section 217.2 except for paragraph (3) of the definition; or
 - (iii) A credit derivative that meets all of the requirements of an eligible credit derivative except for paragraph (3) of the definition of eligible guarantee in section 217.2.
- (2) The Board-regulated institution transfers credit risk associated with the underlying exposures to third parties, and the terms and conditions in the credit risk mitigants employed do not include provisions that:
- (i) Allow for the termination of the credit protection due to deterioration in the credit quality of the underlying exposures;
 - (ii) Require the Board-regulated institution to alter or replace the underlying exposures to improve the credit quality of the underlying exposures;
 - (iii) Increase the Board-regulated institution's cost of credit protection in response to deterioration in the credit quality of the underlying exposures;
 - (iv) Increase the yield payable to parties other than the Board-regulated institution in response to a deterioration in the credit quality of the underlying exposures; or
 - (v) Provide for increases in a retained first loss position or credit enhancement provided by the Board-regulated institution after the inception of the securitization;
- (3) The Board-regulated institution obtains a well-reasoned opinion from legal counsel that confirms the enforceability of the credit risk mitigant in all relevant jurisdictions; and
- (4) Any clean-up calls relating to the securitization are eligible clean-up calls.

(c) *Due diligence requirements for securitization exposures.*

- (1) Except for exposures that are deducted from common equity tier 1 capital and exposures subject to section 217.142(k), if a Board-regulated institution is unable to demonstrate to the satisfaction of the Board

a comprehensive understanding of the features of a securitization exposure that would materially affect the performance of the exposure, the Board-regulated institution must assign a 1,250 percent risk weight to the securitization exposure. The Board-regulated institution's analysis must be commensurate with the complexity of the securitization exposure and the materiality of the position in relation to regulatory capital according to this part.

- (2) A Board-regulated institution must demonstrate its comprehensive understanding of a securitization exposure under paragraph (c)(1) of this section, for each securitization exposure by:

(i) Conducting an analysis of the risk characteristics of a securitization exposure prior to acquiring the exposure and document such analysis within three business days after acquiring the exposure, considering:

(A) Structural features of the securitization that would materially impact the performance of the exposure, for example, the contractual cash flow waterfall, waterfall-related triggers, credit enhancements, liquidity enhancements, fair value triggers, the performance of organizations that service the position, and deal-specific definitions of default;

(B) Relevant information regarding the performance of the underlying credit exposure(s), for example, the percentage of loans 30, 60, and 90 days past due; default rates; prepayment rates; loans in foreclosure; property types; occupancy; average credit score or other measures of creditworthiness; average loan-to-value ratio; and industry and geographic diversification data on the underlying exposure(s);

(C) Relevant market data of the securitization, for example, bid-ask spreads, most recent sales price and historical price volatility, trading volume, implied market rating, and size, depth and concentration level of the market for the securitization; and

(D) For resecuritization exposures, performance information on the underlying securitization exposures, for ex-

ample, the issuer name and credit quality, and the characteristics and performance of the exposures underlying the securitization exposures; and

(ii) On an on-going basis (no less frequently than quarterly), evaluating, reviewing, and updating as appropriate the analysis required under this section for each securitization exposure.

3-2242

SECTION 217.142—Risk-Weighted Assets for Securitization Exposures

(a) *Hierarchy of approaches.* Except as provided elsewhere in this section and in section 217.141:

(1) A Board-regulated institution must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from a securitization and must apply a 1,250 percent risk weight to the portion of any CEIO that does not constitute after tax gain-on-sale;

(2) If a securitization exposure does not require deduction or a 1,250 percent risk weight under paragraph (a)(1) of this section, the Board-regulated institution must apply the supervisory formula approach in section 217.143 to the exposure if the Board-regulated institution and the exposure qualify for the supervisory formula approach according to section 217.143(a);

(3) If a securitization exposure does not require deduction or a 1,250 percent risk weight under paragraph (a)(1) of this section and does not qualify for the supervisory formula approach, the Board-regulated institution may apply the simplified supervisory formula approach under section 217.144;

(4) If a securitization exposure does not require deduction or a 1,250 percent risk weight under paragraph (a)(1) of this section, does not qualify for the supervisory formula approach in section 217.143, and the Board-regulated institution does not apply the simplified supervisory formula approach in section 217.144, the Board-regulated institution must apply a 1,250 percent risk weight to the exposure; and

(5) If a securitization exposure is a derivative contract (other than protection provided by a Board-regulated institution in the form

of a credit derivative) that has a first priority claim on the cash flows from the underlying exposures (notwithstanding amounts due under interest rate or currency derivative contracts, fees due, or other similar payments), a Board-regulated institution may choose to set the risk-weighted asset amount of the exposure equal to the amount of the exposure as determined in paragraph (e) of this section rather than apply the hierarchy of approaches described in paragraphs (a)(1) through (4) of this section.

(b) *Total risk-weighted assets for securitization exposures.* A Board-regulated institution's total risk-weighted assets for securitization exposures is equal to the sum of its risk-weighted assets calculated using sections 217.141 through 146.

(c) *Deductions.* A Board-regulated institution may calculate any deduction from common equity tier 1 capital for a securitization exposure net of any DTLs associated with the securitization exposure.

(d) *Maximum risk-based capital requirement.* Except as provided in section 217.141(c), unless one or more underlying exposures does not meet the definition of a wholesale, retail, securitization, or equity exposure, the total risk-based capital requirement for all securitization exposures held by a single Board-regulated institution associated with a single securitization (excluding any risk-based capital requirements that relate to the Board-regulated institution's gain-on-sale or CEIOs associated with the securitization) may not exceed the sum of:

(1) The Board-regulated institution's total risk-based capital requirement for the underlying exposures calculated under this subpart as if the Board-regulated institution directly held the underlying exposures; and

(2) The total ECL of the underlying exposures calculated under this subpart.

(e) *Exposure amount of a securitization exposure.*

(1) The exposure amount of an on-balance sheet securitization exposure that is not a repo-style transaction, eligible margin loan, OTC derivative contract, or cleared transac-

tion is the Board-regulated institution's carrying value.

(2) Except as provided in paragraph (m) of this section, the exposure amount of an off-balance sheet securitization exposure that is not an OTC derivative contract (other than a credit derivative), repo-style transaction, eligible margin loan, or cleared transaction (other than a credit derivative) is the notional amount of the exposure. For an off-balance-sheet securitization exposure to an ABCP program, such as an eligible ABCP liquidity facility, the notional amount may be reduced to the maximum potential amount that the Board-regulated institution could be required to fund given the ABCP program's current underlying assets (calculated without regard to the current credit quality of those assets).

(3) The exposure amount of a securitization exposure that is a repo-style transaction, eligible margin loan, or OTC derivative contract (other than a credit derivative) or cleared transaction (other than a credit derivative) is the EAD of the exposure as calculated in section 217.132 or section 217.133.

(f) *Overlapping exposures.* If a Board-regulated institution has multiple securitization exposures that provide duplicative coverage of the underlying exposures of a securitization (such as when a Board-regulated institution provides a program-wide credit enhancement and multiple pool-specific liquidity facilities to an ABCP program), the Board-regulated institution is not required to hold duplicative risk-based capital against the overlapping position. Instead, the Board-regulated institution may assign to the overlapping securitization exposure the applicable risk-based capital treatment under this subpart that results in the highest risk-based capital requirement.

(g) *Securitizations of non-IRB exposures.* Except as provided in section 217.141(c), if a Board-regulated institution has a securitization exposure where any underlying exposure is not a wholesale exposure, retail exposure, securitization exposure, or equity exposure, the Board-regulated institution:

(1) Must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting

from the securitization and apply a 1,250 percent risk weight to the portion of any CEIO that does not constitute gain-on-sale, if the Board-regulated institution is an originating Board-regulated institution;

(2) May apply the simplified supervisory formula approach in section 217.144 to the exposure, if the securitization exposure does not require deduction or a 1,250 percent risk weight under paragraph (g)(1) of this section;

(3) Must assign a 1,250 percent risk weight to the exposure if the securitization exposure does not require deduction or a 1,250 percent risk weight under paragraph (g)(1) of this section, does not qualify for the supervisory formula approach in section 217.143, and the Board-regulated institution does not apply the simplified supervisory formula approach in section 217.144 to the exposure.

(h) *Implicit support.* If a Board-regulated institution provides support to a securitization in excess of the Board-regulated institution's contractual obligation to provide credit support to the securitization (implicit support):

(1) The Board-regulated institution must calculate a risk-weighted asset amount for underlying exposures associated with the securitization as if the exposures had not been securitized and must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from the securitization; and

(2) The Board-regulated institution must disclose publicly:

(i) That it has provided implicit support to the securitization; and

(ii) The regulatory capital impact to the Board-regulated institution of providing such implicit support.

(i) *Undrawn portion of a servicer cash advance facility.*

(1) Notwithstanding any other provision of this subpart, a Board-regulated institution that is a servicer under an eligible servicer cash advance facility is not required to hold risk-based capital against potential future cash advance payments that it may be required to provide under the contract governing the facility.

(2) For a Board-regulated institution that acts as a servicer, the exposure amount for a servicer cash advance facility that is not an eligible servicer cash advance facility is equal to the amount of all potential future cash advance payments that the Board-regulated institution may be contractually required to provide during the subsequent 12 month period under the contract governing the facility.

(j) *Interest-only mortgage-backed securities.* Regardless of any other provisions in this part, the risk weight for a non-credit-enhancing interest-only mortgage-backed security may not be less than 100 percent.

(k) *Small-business loans and leases on personal property transferred with recourse.*

(1) Notwithstanding any other provisions of this subpart E, a Board-regulated institution that has transferred small-business loans and leases on personal property (small-business obligations) with recourse must include in risk-weighted assets only the contractual amount of retained recourse if all the following conditions are met:

- (i) The transaction is a sale under GAAP.
- (ii) The Board-regulated institution establishes and maintains, pursuant to GAAP, a non-capital reserve sufficient to meet the Board-regulated institution's reasonably estimated liability under the recourse arrangement.
- (iii) The loans and leases are to businesses that meet the criteria for a small-business concern established by the Small Business Administration under section 3(a) of the Small Business Act (15 U.S.C. 632 *et seq.*); and

(iv) (A) In the case of a state member bank, the bank is well capitalized, as defined in section 208.43 of this chapter. For purposes of determining whether a state member bank is well capitalized for purposes of this paragraph, the state member bank's capital ratios must be calculated without regard to the capital treatment for transfers of small-business obligations with recourse specified in this paragraph (k)(1).

(B) In the case of a bank holding company or savings and loan holding

company, the bank holding company or savings and loan holding company is well capitalized, as defined in 12 CFR 225.2. For purposes of determining whether a bank holding company or savings and loan holding company is well capitalized for purposes of this paragraph, the bank holding company or savings and loan holding company's capital ratios must be calculated without regard to the capital treatment for transfers of small-business obligations with recourse specified in this paragraph (k)(1).

(2) The total outstanding amount of recourse retained by a Board-regulated institution on transfers of small-business obligations subject to paragraph (k)(1) of this section cannot exceed 15 percent of the Board-regulated institution's total capital.

(3) If a Board-regulated institution ceases to be well capitalized or exceeds the 15 percent capital limitation in paragraph (k)(2) of this section, the preferential capital treatment specified in paragraph (k)(1) of this section will continue to apply to any transfers of small-business obligations with recourse that occurred during the time that the Board-regulated institution was well capitalized and did not exceed the capital limit.

(4) The risk-based capital ratios of a Board-regulated institution must be calculated without regard to the capital treatment for transfers of small-business obligations with recourse specified in paragraph (k)(1) of this section.

(l) *Nth-to-default credit derivatives.*

(1) *Protection provider.* A Board-regulated institution must determine a risk weight using the supervisory formula approach (SFA) pursuant to section 217.143 or the simplified supervisory formula approach (SSFA) pursuant to section 217.144 for an nth-to-default credit derivative in accordance with this paragraph (l). In the case of credit protection sold, a Board-regulated institution must determine its exposure in the nth-to-default credit derivative as the largest notional amount of all the underlying exposures.

(2) For purposes of determining the risk weight for an n^{th} -to-default credit derivative using the SFA or the SSFA, the Board-regulated institution must calculate the attachment point and detachment point of its exposure as follows:

(i) The attachment point (parameter A) is the ratio of the sum of the notional amounts of all underlying exposures that are subordinated to the Board-regulated institution's exposure to the total notional amount of all underlying exposures. For purposes of the SSFA, parameter A is expressed as a decimal value between zero and one. For purposes of using the SFA to calculate the risk weight for its exposure in an n^{th} -to-default credit derivative, parameter A must be set equal to the credit enhancement level (L) input to the SFA formula. In the case of a first-to-default credit derivative, there are no underlying exposures that are subordinated to the Board-regulated institution's exposure. In the case of a second-or-subsequent-to-default credit derivative, the smallest (n-1) risk-weighted asset amounts of the underlying exposure(s) are subordinated to the Board-regulated institution's exposure.

(ii) The detachment point (parameter D) equals the sum of parameter A plus the ratio of the notional amount of the Board-regulated institution's exposure in the n^{th} -to-default credit derivative to the total notional amount of all underlying exposures. For purposes of the SSFA, parameter W is expressed as a decimal value between zero and one. For purposes of the SFA, parameter D must be set to equal L plus the thickness of tranche T input to the SFA formula.

(3) A Board-regulated institution that does not use the SFA or the SSFA to determine a risk weight for its exposure in an n^{th} -to-default credit derivative must assign a risk weight of 1,250 percent to the exposure.

(4) *Protection purchaser.*

(i) *First-to-default credit derivatives.* A Board-regulated institution that obtains credit protection on a group of underlying exposures through a first-to-default credit derivative that meets the rules of

recognition of section 217.134(b) must determine its risk-based capital requirement under this subpart for the underlying exposures as if the Board-regulated institution synthetically securitized the underlying exposure with the lowest risk-based capital requirement and had obtained no credit risk mitigant on the other underlying exposures. A Board-regulated institution must calculate a risk-based capital requirement for counterparty credit risk according to section 217.132 for a first-to-default credit derivative that does not meet the rules of recognition of section 217.134(b).

(ii) *Second-or-subsequent-to-default credit derivatives.*

(A) A Board-regulated institution that obtains credit protection on a group of underlying exposures through a n^{th} -to-default credit derivative that meets the rules of recognition of section 217.134(b) (other than a first-to-default credit derivative) may recognize the credit risk mitigation benefits of the derivative only if:

(1) The Board-regulated institution also has obtained credit protection on the same underlying exposures in the form of first-through-(n-1)-to-default credit derivatives; or

(2) If n-1 of the underlying exposures have already defaulted.

(B) If a Board-regulated institution satisfies the requirements of paragraph (1)(3)(ii)(A) of this section, the Board-regulated institution must determine its risk-based capital requirement for the underlying exposures as if the bank had only synthetically securitized the underlying exposure with the n^{th} smallest risk-based capital requirement and had obtained no credit risk mitigant on the other underlying exposures.

(C) A Board-regulated institution must calculate a risk-based capital requirement for counterparty credit risk according to section 217.132 for a n^{th} -to-default credit derivative that does not meet the rules of recognition of section 217.134(b).

(m) *Guarantees and credit derivatives other than nth-to-default credit derivatives.*

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

(2) *Protection purchaser.*

(i) A Board-regulated institution that purchases an OTC credit derivative (other than an nth-to-default credit derivative) that is recognized under section 217.145 as a credit risk mitigant (including via recognized collateral) is not required to compute a separate counterparty credit risk capital requirement under section 217.131 in accordance with section 217.132(c)(3).

(ii) If a Board-regulated institution cannot, or chooses not to, recognize a purchased credit derivative as a credit risk mitigant under section 217.145, the Board-regulated institution must determine the exposure amount of the credit derivative under section 217.132(c).

(A) If the Board-regulated institution purchases credit protection from a counterparty that is not a securitization SPE, the Board-regulated institution must determine the risk weight for the exposure according section 217.131.

(B) If the Board-regulated institution purchases the credit protection from a counterparty that is a securitization SPE, the Board-regulated institution must determine the risk weight for the exposure according to this section, including paragraph (a)(5) of this section for a credit derivative that has a first priority claim on the cash flows from

the underlying exposures of the securitization SPE (notwithstanding amounts due under interest rate or currency derivative contracts, fees due, or other similar payments).

3-2243

SECTION 217.143—Supervisory Formula Approach (SFA)

(a) *Eligibility requirements.* A Board-regulated institution must use the SFA to determine its risk-weighted asset amount for a securitization exposure if the Board-regulated institution can calculate on an ongoing basis each of the SFA parameters in paragraph (e) of this section.

(b) *Mechanics.* The risk-weighted asset amount for a securitization exposure equals its SFA risk-based capital requirement as calculated under paragraph (c) and (d) of this section, multiplied by 12.5.

(c) *The SFA risk-based capital requirement.*

(1) If K_{IRB} is greater than or equal to $L+T$, an exposure's SFA risk-based capital requirement equals the exposure amount.

(2) If K_{IRB} is less than or equal to L , an exposure's SFA risk-based capital requirement is UE multiplied by TP multiplied by the greater of:

(i) $F \cdot T$ (where F is 0.016 for all securitization exposures); or

(ii) $S[L + T] - S[L]$.

(3) If K_{IRB} is greater than L and less than $L + T$, the Board-regulated institution must apply a 1,250 percent risk weight to an amount equal to $UE \cdot TP \cdot (K_{IRB} - L)$, and the exposure's SFA risk-based capital requirement is UE multiplied by TP multiplied by the greater of:

(i) $F \cdot (T - (K_{IRB} - L))$ (where F is 0.016 for all other securitization exposures); or

(ii) $S[L + T] - S[K_{IRB}]$.

(d) *The supervisory formula:*

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

$$(2) \quad K[Y] = (1-h) \cdot [(1-\beta[Y;a,b]) \cdot Y + \beta[Y;a+1,b] \cdot c]$$

$$(3) \quad h = \left(1 - \frac{K_{IRB}}{EWALGD} \right)^N$$

$$(4) \quad a = g \cdot c$$

$$(5) \quad b = g \cdot (1-c)$$

$$(6) \quad c = \frac{K_{IRB}}{1-h}$$

$$(7) \quad g = \frac{(1-c) \cdot c}{f} - 1$$

$$(8) \quad f = \frac{v + K_{IRB}^2}{1-h} - c^2 + \frac{(1-K_{IRB}) \cdot K_{IRB} - v}{(1-h) \cdot 1000}$$

$$(9) \quad v = K_{IRB} \cdot \frac{(EWALGD - K_{IRB}) + .25 \cdot (1 - EWALGD)}{N}$$

$$(10) \quad d = 1 - (1-h) \cdot (1 - \beta[K_{IRB};a,b]).$$

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

(e) *SFA parameters.* For purposes of the calculations in paragraphs (c) and (d) of this section:

(1) *Amount of the underlying exposures (UE).* UE is the EAD of any underlying exposures that are wholesale and retail exposures (including the amount of any funded spread accounts, cash collateral accounts, and other similar funded credit enhancements) plus the amount of any underlying exposures that are securitization exposures (as defined in section 217.142(e)) plus the adjusted carrying value of any underlying exposures that are equity exposures (as defined in section 217.151(b)).

(2) *Tranche percentage (TP).* TP is the ratio of the amount of the Board-regulated institution's securitization exposure to the amount of the tranche that contains the securitization exposure.

(3) *Capital requirement on underlying ex-*

posures (K_{IRB}).

(i) K_{IRB} is the ratio of:

(A) The sum of the risk-based capital requirements for the underlying exposures plus the expected credit losses of the underlying exposures (as determined under this subpart E as if the underlying exposures were directly held by the Board-regulated institution); to

(B) UE.

(ii) The calculation of K_{IRB} must reflect the effects of any credit risk mitigant applied to the underlying exposures (either to an individual underlying exposure, to a group of underlying exposures, or to all of the underlying exposures).

(iii) All assets related to the securitization are treated as underlying exposures, including assets in a reserve account (such as a cash collateral account).

(4) *Credit enhancement level (L).*

(i) L is the ratio of:

(A) The amount of all securitization exposures subordinated to the tranche that contains the Board-regulated institution's securitization exposure; to

(B) UE.

(ii) A Board-regulated institution must determine L before considering the ef-

fects of any tranche-specific credit enhancements.

(iii) Any gain-on-sale or CEIO associated with the securitization may not be included in L.

(iv) Any reserve account funded by accumulated cash flows from the underlying exposures that is subordinated to the tranche that contains the Board-regulated institution's securitization exposure may be included in the numerator and denominator of L to the extent cash has accumulated in the account. Unfunded reserve accounts (that is, reserve accounts that are to be funded from future cash flows from the underlying exposures) may not be included in the calculation of L.

(v) In some cases, the purchase price of receivables will reflect a discount that provides credit enhancement (for example, first loss protection) for all or certain tranches of the securitization. When this arises, L should be calculated inclusive of this discount if the discount provides credit enhancement for the securitization exposure.

(5) *Thickness of tranche (T)*. T is the ratio of:

(i) The amount of the tranche that contains the Board-regulated institution's securitization exposure; to

(ii) UE.

(6) *Effective number of exposures (N)*.

(i) Unless the Board-regulated institution elects to use the formula provided in paragraph (f) of this section,

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

where EAD_i represents the EAD associated with the i^{th} instrument in the underlying exposures.

(ii) Multiple exposures to one obligor must be treated as a single underlying exposure.

(iii) In the case of a resecuritization, the Board-regulated institution must treat each underlying exposure as a single underlying exposure and must not look

through to the originally securitized underlying exposures.

(7) *Exposure-weighted average loss given default (EWALGD)*. EWALGD is calculated as:

$$EWALGD = \frac{\sum_i LGD_i \cdot EAD_i}{\sum_i EAD_i}$$

where LGD_i represents the average LGD associated with all exposures to the i^{th} obligor. In the case of a resecuritization, an LGD of 100 percent must be assumed for the underlying exposures that are themselves securitization exposures.

(f) *Simplified method for computing N and EWALGD*.

(1) If all underlying exposures of a securitization are retail exposures, a Board-regulated institution may apply the SFA using the following simplifications:

(i) $h = 0$; and

(ii) $v = 0$.

(2) Under the conditions in sections 217.143(f)(3) and (f)(4), a Board-regulated institution may employ a simplified method for calculating N and EWALGD.

(3) If C_1 is no more than 0.03, a Board-regulated institution may set $EWALGD = 0.50$ if none of the underlying exposures is a securitization exposure, or may set $EWALGD = 1$ if one or more of the underlying exposures is a securitization exposure, and may set N equal to the following amount:

$$N = \frac{1}{C_1 C_m + \left(\frac{C_m - C_1}{m - 1} \right) \max(1 - m C_1, 0)}$$

where:

(i) C_m is the ratio of the sum of the amounts of the 'm' largest underlying exposures to UE; and

(ii) The level of m is to be selected by the Board-regulated institution.

(4) Alternatively, if only C_1 is available and C_1 is no more than 0.03, the Board regulated institution may set $EWALGD = 0.50$ if none of the underlying exposures is

a securitization exposure, or may set $EWALGD = 1$ if one or more of the underlying exposures is a securitization exposure and may set $N = 1/C_1$.

3-2244

SECTION 217.144—Simplified Supervisory Formula Approach (SSFA)

(a) *General requirements for the SSFA.* To use the SSFA to determine the risk weight for a securitization exposure, a Board-regulated institution must have data that enables it to assign accurately the parameters described in paragraph (b) of this section. Data used to assign the parameters described in paragraph (b) of this section must be the most currently available data; if the contracts governing the underlying exposures of the securitization require payments on a monthly or quarterly basis, the data used to assign the parameters described in paragraph (b) of this section must be no more than 91 calendar days old. A Board-regulated institution that does not have the appropriate data to assign the parameters described in paragraph (b) of this section must assign a risk weight of 1,250 percent to the exposure.

(b) *SSFA parameters.* To calculate the risk weight for a securitization exposure using the SSFA, a Board-regulated institution must have accurate information on the following five inputs to the SSFA calculation:

(1) K_G is the weighted-average (with unpaid principal used as the weight for each exposure) total capital requirement of the underlying exposures calculated using subpart D of this part. K_G is expressed as a decimal value between zero and one (that is, an average risk weight of 100 percent represents a value of K_G equal to 0.08).

(2) Parameter W is expressed as a decimal value between zero and one. Parameter W is the ratio of the sum of the dollar amounts of any underlying exposures of the securitization that meet any of the criteria as set forth in paragraphs (b)(2)(i) through (vi) of this section to the balance, measured in dollars, of underlying exposures:

- (i) Ninety days or more past due;
- (ii) Subject to a bankruptcy or insolvency proceeding;

- (iii) In the process of foreclosure;
- (iv) Held as real estate owned;
- (v) Has contractually deferred payments for 90 days or more, other than principal or interest payments deferred on:

(A) Federally-guaranteed student loans, in accordance with the terms of those guarantee programs; or

(B) Consumer loans, including non-federally-guaranteed student loans, provided that such payments are deferred pursuant to provisions included in the contract at the time funds are disbursed that provide for period(s) of deferral that are not initiated based on changes in the creditworthiness of the borrower; or

- (vi) Is in default.

(3) Parameter A is the attachment point for the exposure, which represents the threshold at which credit losses will first be allocated to the exposure. Except as provided in section 142(l) for n^{th} -to-default credit derivatives, parameter A equals the ratio of the current dollar amount of underlying exposures that are subordinated to the exposure of the Board-regulated institution to the current dollar amount of underlying exposures. Any reserve account funded by the accumulated cash flows from the underlying exposures that is subordinated to the Board-regulated institution's securitization exposure may be included in the calculation of parameter A to the extent that cash is present in the account. Parameter A is expressed as a decimal value between zero and one.

(4) Parameter D is the detachment point for the exposure, which represents the threshold at which credit losses of principal allocated to the exposure would result in a total loss of principal. Except as provided in section 142(l) for n^{th} -to-default credit derivatives, parameter D equals parameter A plus the ratio of the current dollar amount of the securitization exposures that are *pari passu* with the exposure (that is, have equal seniority with respect to credit risk) to the current dollar amount of the underlying exposures. Parameter D is expressed as a decimal value between zero and one.

(5) A supervisory calibration parameter, p ,

is equal to 0.5 for securitization exposures that are not resecuritization exposures and equal to 1.5 for resecuritization exposures.

(c) *Mechanics of the SSFA.* K_G and W are used to calculate K_A , the augmented value of K_G , which reflects the observed credit quality of the underlying exposures. K_A is defined in paragraph (d) of this section. The values of parameters A and D , relative to K_A determine the risk weight assigned to a securitization exposure as described in paragraph (d) of this section. The risk weight assigned to a securitization exposure, or portion of a securitization exposure, as appropriate, is the larger of the risk weight determined in accordance with this paragraph (c), paragraph (d) of this section, and a risk weight of 20 percent.

(1) When the detachment point, parameter D , for a securitization exposure is less than or equal to K_A , the exposure must be assigned a risk weight of 1,250 percent;

(2) When the attachment point, parameter A , for a securitization exposure is greater than or equal to K_A , the Board-regulated institution must calculate the risk weight in accordance with paragraph (d) of this section;

(3) When A is less than K_A and D is greater than K_A , the risk weight is a weighted-average of 1,250 percent and 1,250 percent times K_{SSFA} calculated in accordance with paragraph (d) of this section. For the purpose of this weighted-average calculation:

(i) The weight assigned to 1,250 percent equals $\frac{K_A - A}{D - A}$; and

(ii) The weight assigned to 1,250 percent times K_{SSFA} equals $\frac{D - K_A}{D - A}$. The risk

weight will be set equal to:

Risk Weight =

$$\left[\left(\frac{K_A - A}{D - A} \right) \cdot 1,250 \text{ percent} \right] + \left[\left(\frac{D - K_A}{D - A} \right) \cdot 1,250 \text{ percent} \cdot K_{SSFA} \right]$$

(d) *SSFA equation.*

(1) The Board-regulated institution must define the following parameters:

$$K_A = (1 - W) \cdot K_G + (0.5 \cdot W)$$

$$u = D - K_A$$

$$a = -\frac{1}{p \cdot K_A}$$

$$l = \max(A - K_A, 0)$$

$e = 2.71828$, the base of the natural logarithms.

(2) Then the Board-regulated institution must calculate K_{SSFA} according to the following equation:

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

(3) The risk weight for the exposure (expressed as a percent) is equal to $K_{SSFA} \times 1,250$.

3-2245

SECTION 217.145—Recognition of Credit Risk Mitigants for Securitization Exposures

(a) *General.* An originating Board-regulated institution that has obtained a credit risk mitigant to hedge its securitization exposure to a synthetic or traditional securitization that satisfies the operational criteria in section 217.141 may recognize the credit risk mitigant, but only as provided in this section. An investing Board-regulated institution that has obtained a credit risk mitigant to hedge a securitization exposure may recognize the credit risk mitigant, but only as provided in this section.

(b) *Collateral.*

(1) *Rules of recognition.* A Board-regulated institution may recognize financial collateral in determining the Board-regulated institution's risk-weighted asset amount for a securitization exposure (other than a repo-style transaction, an eligible margin loan, or an OTC derivative contract for which the Board-regulated institution has reflected collateral in its determination of exposure amount under section 217.132) as follows. The Board-regulated institution's risk-weighted asset amount for the collateralized securitization exposure is equal to the risk weighted asset amount for the securitization exposure as calculated under the SSFA in section 217.144 or under the SFA in section 217.143 multiplied by the ratio of adjusted

exposure amount (SE*) to original exposure amount (SE), where:

- (i) $SE^* = \max \{0, [SE - C \times (1 - H_s - H_{fx})]\}$;
- (ii) SE = the amount of the securitization exposure calculated under section 217.142(e);
- (iii) C = the current fair value of the collateral;
- (iv) H_s = the haircut appropriate to the collateral type; and
- (v) H_{fx} = the haircut appropriate for any currency mismatch between the collateral and the exposure.

(2) *Mixed collateral.* Where the collateral is a basket of different asset types or a basket of assets denominated in different currencies, the haircut on the basket will be

$$H = \sum_i a_i H_i,$$

where a_i is the current fair value of the asset in the basket divided by the current fair value of all assets in the basket and H_i is the haircut applicable to that asset.

(3) *Standard supervisory haircuts.* Unless a Board-regulated institution qualifies for use of and uses own-estimates haircuts in paragraph (b)(4) of this section:

- (i) A Board-regulated institution must use the collateral type haircuts (H_c) in Table 1 to section 217.132 of this subpart;
- (ii) A Board-regulated institution must use a currency mismatch haircut (H_{fx}) of 8 percent if the exposure and the collateral are denominated in different currencies;
- (iii) A Board-regulated institution must multiply the supervisory haircuts obtained in paragraphs (b)(3)(i) and (ii) of this section by the square root of 6.5 (which equals 2.549510); and
- (iv) A Board-regulated institution must adjust the supervisory haircuts upward on the basis of a holding period longer than 65 business days where and as appropriate to take into account the illiquidity of the collateral.

(4) *Own estimates for haircuts.* With the prior written approval of the Board, a Board-regulated institution may calculate

haircuts using its own internal estimates of market price volatility and foreign exchange volatility, subject to section 217.132(b)(2)(iii). The minimum holding period (T_M) for securitization exposures is 65 business days.

(c) *Guarantees and credit derivatives.*

(1) *Limitations on recognition.* A Board-regulated institution may only recognize an eligible guarantee or eligible credit derivative provided by an eligible guarantor in determining the Board-regulated institution's risk-weighted asset amount for a securitization exposure.

(2) *ECL for securitization exposures.* When a Board-regulated institution recognizes an eligible guarantee or eligible credit derivative provided by an eligible guarantor in determining the Board-regulated institution's risk-weighted asset amount for a securitization exposure, the Board-regulated institution must also:

- (i) Calculate ECL for the protected portion of the exposure using the same risk parameters that it uses for calculating the risk-weighted asset amount of the exposure as described in paragraph (c)(3) of this section; and
- (ii) Add the exposure's ECL to the Board-regulated institution's total ECL.

(3) *Rules of recognition.* A Board-regulated institution may recognize an eligible guarantee or eligible credit derivative provided by an eligible guarantor in determining the Board-regulated institution's risk-weighted asset amount for the securitization exposure as follows:

- (i) *Full coverage.* If the protection amount of the eligible guarantee or eligible credit derivative equals or exceeds the amount of the securitization exposure, the Board-regulated institution may set the risk-weighted asset amount for the securitization exposure equal to the risk-weighted asset amount for a direct exposure to the eligible guarantor (as determined in the wholesale risk weight function described in section 217.131), using the Board-regulated institution's PD for the guarantor, the Board-regulated institution's LGD for the guarantee or

credit derivative, and an EAD equal to the amount of the securitization exposure (as determined in section 217.142(e)).

(ii) *Partial coverage.* If the protection amount of the eligible guarantee or eligible credit derivative is less than the amount of the securitization exposure, the Board-regulated institution may set the risk-weighted asset amount for the securitization exposure equal to the sum of:

(A) *Covered portion.* The risk-weighted asset amount for a direct exposure to the eligible guarantor (as determined in the wholesale risk weight function described in section 217.131), using the Board-regulated institution's PD for the guarantor, the Board-regulated institution's LGD for the guarantee or credit derivative, and an EAD equal to the protection amount of the credit risk mitigant; and

(B) *Uncovered portion.*

(1) 1.0 minus the ratio of the protection amount of the eligible guarantee or eligible credit derivative to the amount of the securitization exposure); multiplied by

(2) The risk-weighted asset amount for the securitization exposure without the credit risk mitigant (as determined in sections 217.142 through 146).

(4) *Mismatches.* The Board-regulated institution must make applicable adjustments to the protection amount as required in section 217.134(d), (e), and (f) for any hedged securitization exposure and any more senior securitization exposure that benefits from the hedge. In the context of a synthetic securitization, when an eligible guarantee or eligible credit derivative covers multiple hedged exposures that have different residual maturities, the Board-regulated institution must use the longest residual maturity of any of the hedged exposures as the residual maturity of all the hedged exposures.

SECTIONS 217.146–217.150—
[Reserved]

3-2251

RISK-WEIGHTED ASSETS FOR EQUITY EXPOSURES

SECTION 217.151—Introduction and Exposure Measurement

(a) *General.*

(1) To calculate its risk-weighted asset amounts for equity exposures that are not equity exposures to investment funds, a Board-regulated institution may apply either the Simple Risk Weight Approach (SRWA) in section 217.152 or, if it qualifies to do so, the Internal Models Approach (IMA) in section 217.153. A Board-regulated institution must use the look-through approaches provided in section 217.154 to calculate its risk-weighted asset amounts for equity exposures to investment funds.

(2) A Board-regulated institution must treat an investment in a separate account (as defined in section 217.2), as if it were an equity exposure to an investment fund as provided in section 217.154.

(3) *Stable value protection.*

(i) Stable value protection means a contract where the provider of the contract is obligated to pay:

(A) The policy owner of a separate account an amount equal to the shortfall between the fair value and cost basis of the separate account when the policy owner of the separate account surrenders the policy, or

(B) The beneficiary of the contract an amount equal to the shortfall between the fair value and book value of a specified portfolio of assets.

(ii) A Board-regulated institution that purchases stable value protection on its investment in a separate account must treat the portion of the carrying value of its investment in the separate account attributable to the stable value protection as an exposure to the provider of the protection and the remaining portion of the carrying value of its separate account as an equity exposure to an investment fund.

(iii) A Board-regulated institution that provides stable value protection must treat the exposure as an equity derivative

with an adjusted carrying value determined as the sum of section 217.151(b)(1) and (2).

(b) *Adjusted carrying value.* For purposes of this subpart, the adjusted carrying value of an equity exposure is:

(1) For the on-balance sheet component of an equity exposure, the Board-regulated institution's carrying value of the exposure;

(2) For the off-balance sheet component of an equity exposure, the effective notional principal amount of the exposure, the size of which is equivalent to a hypothetical on-balance sheet position in the underlying equity instrument that would evidence the same change in fair value (measured in dollars) for a given small change in the price of the underlying equity instrument, minus the adjusted carrying value of the on-balance sheet component of the exposure as calculated in paragraph (b)(1) of this section.

(3) For unfunded equity commitments that are unconditional, the effective notional principal amount is the notional amount of the commitment. For unfunded equity commitments that are conditional, the effective notional principal amount is the Board-regulated institution's best estimate of the amount that would be funded under economic downturn conditions.

3-2252

SECTION 217.152—Simple Risk Weight Approach (SRWA)

(a) *General.* Under the SRWA, a Board-regulated institution's aggregate risk-weighted asset amount for its equity exposures is equal to the sum of the risk-weighted asset amounts for each of the Board-regulated institution's individual equity exposures (other than equity exposures to an investment fund) as determined in this section and the risk-weighted asset amounts for each of the Board-regulated institution's individual equity exposures to an investment fund as determined in section 217.154.

(b) *SRWA computation for individual equity exposures.* A Board-regulated institution must determine the risk-weighted asset amount for an individual equity exposure (other than an

equity exposure to an investment fund) by multiplying the adjusted carrying value of the equity exposure or the effective portion and ineffective portion of a hedge pair (as defined in paragraph (c) of this section) by the lowest applicable risk weight in this section.

(1) *Zero percent risk weight equity exposures.* An equity exposure to an entity whose credit exposures are exempt from the 0.03 percent PD floor in section 217.131(d)(2) is assigned a zero percent risk weight.

(2) *20 percent risk weight equity exposures.* An equity exposure to a Federal Home Loan Bank or the Federal Agricultural Mortgage Corporation (Farmer Mac) is assigned a 20 percent risk weight.

(3) *100 percent risk weight equity exposures.* The following equity exposures are assigned a 100 percent risk weight:

(i) *Community development equity exposures.*

(A) For state member banks and bank holding companies, an equity exposure that qualifies as a community development investment under 12 U.S.C. 24 (Eleventh), excluding equity exposures to an unconsolidated small business investment company and equity exposures held through a consolidated small business investment company described in section 302 of the Small Business Investment Act of 1958 (15 U.S.C. 682).

(B) For savings and loan holding companies, an equity exposure that is designed primarily to promote community welfare, including the welfare of low- and moderate-income communities or families, such as by providing services or employment, and excluding equity exposures to an unconsolidated small business investment company and equity exposures held through a small business investment company described in section 302 of the Small Business Investment Act of 1958 (15 U.S.C. 682).

(ii) *Effective portion of hedge pairs.* The effective portion of a hedge pair.

(iii) *Non-significant equity exposures.* Equity exposures, excluding significant

investments in the capital of an unconsolidated institution in the form of common stock and exposures to an investment firm that would meet the definition of a traditional securitization were it not for the Board's application of paragraph (8) of that definition in section 217.2 and has greater than immaterial leverage, to the extent that the aggregate adjusted carrying value of the exposures does not exceed 10 percent of the Board-regulated institution's total capital.

(A) To compute the aggregate adjusted carrying value of a Board-regulated institution's equity exposures for purposes of this section, the Board-regulated institution may exclude equity exposures described in paragraphs (b)(1), (b)(2), (b)(3)(i), and (b)(3)(ii) of this section, the equity exposure in a hedge pair with the smaller adjusted carrying value, and a proportion of each equity exposure to an investment fund equal to the proportion of the assets of the investment fund that are not equity exposures or that meet the criterion of paragraph (b)(3)(i) of this section. If a Board-regulated institution does not know the actual holdings of the investment fund, the Board-regulated institution may calculate the proportion of the assets of the fund that are not equity exposures based on the terms of the prospectus, partnership agreement, or similar contract that defines the fund's permissible investments. If the sum of the investment limits for all exposure classes within the fund exceeds 100 percent, the Board-regulated institution must assume for purposes of this section that the investment fund invests to the maximum extent possible in equity exposures.

(B) When determining which of a Board-regulated institution's equity exposures qualifies for a 100 percent risk weight under this section, a Board-regulated institution first must include equity exposures to unconsolidated small business investment companies or held through consolidated small

business investment companies described in section 302 of the Small Business Investment Act, then must include publicly traded equity exposures (including those held indirectly through investment funds), and then must include non-publicly traded equity exposures (including those held indirectly through investment funds).

(4) *250 percent risk weight equity exposures.* Significant investments in the capital of unconsolidated financial institutions in the form of common stock that are not deducted from capital pursuant to section 217.22(b)(4) are assigned a 250 percent risk weight.

(5) *300 percent risk weight equity exposures.* A publicly traded equity exposure (other than an equity exposure described in paragraph (b)(7) of this section and including the ineffective portion of a hedge pair) is assigned a 300 percent risk weight.

(6) *400 percent risk weight equity exposures.* An equity exposure (other than an equity exposure described in paragraph (b)(7) of this section) that is not publicly traded is assigned a 400 percent risk weight.

(7) *600 percent risk weight equity exposures.* An equity exposure to an investment firm that:

- (i) Would meet the definition of a traditional securitization were it not for the Board's application of paragraph (8) of that definition in section 217.2; and
- (ii) Has greater than immaterial leverage is assigned a 600 percent risk weight.

(c) *Hedge transactions.*

(1) *Hedge pair.* A hedge pair is two equity exposures that form an effective hedge so long as each equity exposure is publicly traded or has a return that is primarily based on a publicly traded equity exposure.

(2) *Effective hedge.* Two equity exposures form an effective hedge if the exposures either have the same remaining maturity or each has a remaining maturity of at least three months; the hedge relationship is formally documented in a prospective manner (that is, before the Board-regulated institution acquires at least one of the equity ex-

posures); the documentation specifies the measure of effectiveness (E) the Board-regulated institution will use for the hedge relationship throughout the life of the transaction; and the hedge relationship has an E greater than or equal to 0.8. A Board-regulated institution must measure E at least quarterly and must use one of three alternative measures of E:

(i) Under the dollar-offset method of measuring effectiveness, the Board-regulated institution must determine the ratio of value change (RVC). The RVC is the ratio of the cumulative sum of the periodic changes in value of one equity exposure to the cumulative sum of the periodic changes in the value of the other equity exposure. If RVC is positive, the hedge is not effective and E equals zero. If RVC is negative and greater than or equal to -1 (that is, between zero and -1), then E equals the absolute value of RVC. If RVC is negative and less than -1 , then E equals 2 plus RVC.

(ii) Under the variability-reduction method of measuring effectiveness:

$$E = 1 - \frac{\sum_{t=1}^T (X_t - X_{t-1})^2}{\sum_{t=1}^T (A_t - A_{t-1})^2}, \text{ where}$$

(A) $X_t = A_t - B_t$;

(B) A_t = the value at time t of one exposure in a hedge pair; and

(C) B_t = the value at time t of the other exposure in a hedge pair.

(iii) Under the regression method of measuring effectiveness, E equals the coefficient of determination of a regression in which the change in value of one exposure in a hedge pair is the dependent variable and the change in value of the other exposure in a hedge pair is the independent variable. However, if the estimated regression coefficient is positive, then the value of E is zero.

(3) The effective portion of a hedge pair is E multiplied by the greater of the adjusted carrying values of the equity exposures forming a hedge pair.

(4) The ineffective portion of a hedge pair is $(1-E)$ multiplied by the greater of the

adjusted carrying values of the equity exposures forming a hedge pair.

3-2253

SECTION 217.153—Internal Models Approach (IMA)

(a) *General.* A Board-regulated institution may calculate its risk-weighted asset amount for equity exposures using the IMA by modeling publicly traded and non-publicly traded equity exposures (in accordance with paragraph (c) of this section) or by modeling only publicly traded equity exposures (in accordance with paragraphs (c) and (d) of this section).

(b) *Qualifying criteria.* To qualify to use the IMA to calculate risk-weighted assets for equity exposures, a Board-regulated institution must receive prior written approval from the Board. To receive such approval, the Board-regulated institution must demonstrate to the Board's satisfaction that the Board-regulated institution meets the following criteria:

(1) The Board-regulated institution must have one or more models that:

(i) Assess the potential decline in value of its modeled equity exposures;

(ii) Are commensurate with the size, complexity, and composition of the Board-regulated institution's modeled equity exposures; and

(iii) Adequately capture both general market risk and idiosyncratic risk.

(2) The Board-regulated institution's model must produce an estimate of potential losses for its modeled equity exposures that is no less than the estimate of potential losses produced by a VaR methodology employing a 99th percentile one-tailed confidence interval of the distribution of quarterly returns for a benchmark portfolio of equity exposures comparable to the Board-regulated institution's modeled equity exposures using a long-term sample period.

(3) The number of risk factors and exposures in the sample and the data period used for quantification in the Board-regulated institution's model and benchmarking exercise must be sufficient to provide confidence in the accuracy and

robustness of the Board-regulated institution's estimates.

(4) The Board-regulated institution's model and benchmarking process must incorporate data that are relevant in representing the risk profile of the Board-regulated institution's modeled equity exposures, and must include data from at least one equity market cycle containing adverse market movements relevant to the risk profile of the Board-regulated institution's modeled equity exposures. In addition, the Board-regulated institution's benchmarking exercise must be based on daily market prices for the benchmark portfolio. If the Board-regulated institution's model uses a scenario methodology, the Board-regulated institution must demonstrate that the model produces a conservative estimate of potential losses on the Board-regulated institution's modeled equity exposures over a relevant long-term market cycle. If the Board-regulated institution employs risk factor models, the Board-regulated institution must demonstrate through empirical analysis the appropriateness of the risk factors used.

(5) The Board-regulated institution must be able to demonstrate, using theoretical arguments and empirical evidence, that any proxies used in the modeling process are comparable to the Board-regulated institution's modeled equity exposures and that the Board-regulated institution has made appropriate adjustments for differences. The Board-regulated institution must derive any proxies for its modeled equity exposures and benchmark portfolio using historical market data that are relevant to the Board-regulated institution's modeled equity exposures and benchmark portfolio (or, where not, must use appropriately adjusted data), and such proxies must be robust estimates of the risk of the Board-regulated institution's modeled equity exposures.

(c) *Risk-weighted assets calculation for a Board-regulated institution using the IMA for publicly traded and non-publicly traded equity exposures.* If a Board-regulated institution models publicly traded and non-publicly traded equity exposures, the Board-regulated

institution's aggregate risk-weighted asset amount for its equity exposures is equal to the sum of:

(1) The risk-weighted asset amount of each equity exposure that qualifies for a 0 percent, 20 percent, or 100 percent risk weight under section 217.152(b)(1) through (b)(3)(i) (as determined under section 217.152) and each equity exposure to an investment fund (as determined under section 217.154); and

(2) The greater of:

(i) The estimate of potential losses on the Board-regulated institution's equity exposures (other than equity exposures referenced in paragraph (c)(1) of this section) generated by the Board-regulated institution's internal equity exposure model multiplied by 12.5; or

(ii) The sum of:

(A) 200 percent multiplied by the aggregate adjusted carrying value of the Board-regulated institution's publicly traded equity exposures that do not belong to a hedge pair, do not qualify for a 0 percent, 20 percent, or 100 percent risk weight under section 217.152(b)(1) through (b)(3)(i), and are not equity exposures to an investment fund;

(B) 200 percent multiplied by the aggregate ineffective portion of all hedge pairs; and

(C) 300 percent multiplied by the aggregate adjusted carrying value of the Board-regulated institution's equity exposures that are not publicly traded, do not qualify for a 0 percent, 20 percent, or 100 percent risk weight under section 217.152(b)(1) through (b)(3)(i), and are not equity exposures to an investment fund.

(d) *Risk-weighted assets calculation for a Board-regulated institution using the IMA only for publicly traded equity exposures.* If a Board-regulated institution models only publicly traded equity exposures, the Board-regulated institution's aggregate risk-weighted asset amount for its equity exposures is equal to the sum of:

(1) The risk-weighted asset amount of each equity exposure that qualifies for a 0 per-

cent, 20 percent, or 100 percent risk weight under sections 217.152(b)(1) through (b)(3)(i) (as determined under section 217.152), each equity exposure that qualifies for a 400 percent risk weight under section 217.152(b)(5) or a 600 percent risk weight under section 217.152(b)(6) (as determined under section 217.152), and each equity exposure to an investment fund (as determined under section 217.154); and

(2) The greater of:

(i) The estimate of potential losses on the Board-regulated institution's equity exposures (other than equity exposures referenced in paragraph (d)(1) of this section) generated by the Board-regulated institution's internal equity exposure model multiplied by 12.5; or

(ii) The sum of:

(A) 200 percent multiplied by the aggregate adjusted carrying value of the Board-regulated institution's publicly traded equity exposures that do not belong to a hedge pair, do not qualify for a 0 percent, 20 percent, or 100 percent risk weight under section 217.152(b)(1) through (b)(3)(i), and are not equity exposures to an investment fund; and

(B) 200 percent multiplied by the aggregate ineffective portion of all hedge pairs.

3-2254

SECTION 217.154—Equity Exposures to Investment Funds

(a) *Available approaches.*

(1) Unless the exposure meets the requirements for a community development equity exposure in section 217.152(b)(3)(i), a Board-regulated institution must determine the risk-weighted asset amount of an equity exposure to an investment fund under the full look-through approach in paragraph (b) of this section, the simple modified look-through approach in paragraph (c) of this section, or the alternative modified look-through approach in paragraph (d) of this section.

(2) The risk-weighted asset amount of an equity exposure to an investment fund that meets the requirements for a community de-

velopment equity exposure in section 217.152(b)(3)(i) is its adjusted carrying value.

(3) If an equity exposure to an investment fund is part of a hedge pair and the Board-regulated institution does not use the full look-through approach, the Board-regulated institution may use the ineffective portion of the hedge pair as determined under section 217.152(c) as the adjusted carrying value for the equity exposure to the investment fund. The risk-weighted asset amount of the effective portion of the hedge pair is equal to its adjusted carrying value.

(b) *Full look-through approach.* A Board-regulated institution that is able to calculate a risk-weighted asset amount for its proportional ownership share of each exposure held by the investment fund (as calculated under this subpart E of this part as if the proportional ownership share of each exposure were held directly by the Board-regulated institution) may either:

(1) Set the risk-weighted asset amount of the Board-regulated institution's exposure to the fund equal to the product of:

(i) The aggregate risk-weighted asset amounts of the exposures held by the fund as if they were held directly by the Board-regulated institution; and

(ii) The Board-regulated institution's proportional ownership share of the fund; or

(2) Include the Board-regulated institution's proportional ownership share of each exposure held by the fund in the Board-regulated institution's IMA.

(c) *Simple modified look-through approach.* Under this approach, the risk-weighted asset amount for a Board-regulated institution's equity exposure to an investment fund equals the adjusted carrying value of the equity exposure multiplied by the highest risk weight assigned according to subpart D of this part that applies to any exposure the fund is permitted to hold under its prospectus, partnership agreement, or similar contract that defines the fund's permissible investments (excluding derivative contracts that are used for hedging rather than speculative purposes and that do not constitute a material portion of the fund's exposures).

(d) *Alternative modified look-through approach.* Under this approach, a Board-regulated institution may assign the adjusted carrying value of an equity exposure to an investment fund on a pro rata basis to different risk weight categories assigned according to subpart D of this part based on the investment limits in the fund's prospectus, partnership agreement, or similar contract that defines the fund's permissible investments. The risk-weighted asset amount for the Board-regulated institution's equity exposure to the investment fund equals the sum of each portion of the adjusted carrying value assigned to an exposure class multiplied by the applicable risk weight. If the sum of the investment limits for all exposure types within the fund exceeds 100 percent, the Board-regulated institution must assume that the fund invests to the maximum extent permitted under its investment limits in the exposure type with the highest risk weight under subpart D of this part, and continues to make investments in order of the exposure type with the next highest risk weight under subpart D of this part until the maximum total investment level is reached. If more than one exposure type applies to an exposure, the Board-regulated institution must use the highest applicable risk weight. A Board-regulated institution may exclude derivative contracts held by the fund that are used for hedging rather than for speculative purposes and do not constitute a material portion of the fund's exposures.

3-2255

SECTION 217.155—Equity Derivative Contracts

(a) Under the IMA, in addition to holding risk-based capital against an equity derivative contract under this part, a Board-regulated institution must hold risk-based capital against the counterparty credit risk in the equity derivative contract by also treating the equity derivative contract as a wholesale exposure and computing a supplemental risk-weighted asset amount for the contract under section 217.132.

(b) Under the SRWA, a Board-regulated institution may choose not to hold risk-based capital against the counterparty credit risk of eq-

uity derivative contracts, as long as it does so for all such contracts. Where the equity derivative contracts are subject to a qualified master netting agreement, a Board-regulated institution using the SRWA must either include all or exclude all of the contracts from any measure used to determine counterparty credit risk exposure.

SECTIONS 217.156–217.160— [Reserved]

3-2261

RISK-WEIGHTED ASSETS FOR OPERATIONAL RISK

SECTION 217.161—Qualification Requirements for Incorporation of Operational Risk Mitigants

(a) *Qualification to use operational risk mitigants.* A Board-regulated institution may adjust its estimate of operational risk exposure to reflect qualifying operational risk mitigants if:

- (1) The Board-regulated institution's operational risk quantification system is able to generate an estimate of the Board-regulated institution's operational risk exposure (which does not incorporate qualifying operational risk mitigants) and an estimate of the Board-regulated institution's operational risk exposure adjusted to incorporate qualifying operational risk mitigants; and
- (2) The Board-regulated institution's methodology for incorporating the effects of insurance, if the Board-regulated institution uses insurance as an operational risk mitigant, captures through appropriate discounts to the amount of risk mitigation:

- (i) The residual term of the policy, where less than one year;
- (ii) The cancellation terms of the policy, where less than one year;
- (iii) The policy's timeliness of payment;
- (iv) The uncertainty of payment by the provider of the policy; and
- (v) Mismatches in coverage between the policy and the hedged operational loss event.

(b) *Qualifying operational risk mitigants.*

Qualifying operational risk mitigants are:

(1) Insurance that:

- (i) Is provided by an unaffiliated company that the Board-regulated institution deems to have strong capacity to meet its claims payment obligations and the obligor rating category to which the Board-regulated institution assigns the company is assigned a PD equal to or less than 10 basis points;
- (ii) Has an initial term of at least one year and a residual term of more than 90 days;
- (iii) Has a minimum notice period for cancellation by the provider of 90 days;
- (iv) Has no exclusions or limitations based upon regulatory action or for the receiver or liquidator of a failed depository institution; and
- (v) Is explicitly mapped to a potential operational loss event;

(2) Operational risk mitigants other than insurance for which the Board has given prior written approval. In evaluating an operational risk mitigant other than insurance, the Board will consider whether the operational risk mitigant covers potential operational losses in a manner equivalent to holding total capital.

3-2262

SECTION 217.162—Mechanics of Risk-Weighted Asset Calculation

(a) If a Board-regulated institution does not qualify to use or does not have qualifying operational risk mitigants, the Board-regulated institution's dollar risk-based capital requirement for operational risk is its operational risk exposure minus eligible operational risk offsets (if any).

(b) If a Board-regulated institution qualifies to use operational risk mitigants and has qualifying operational risk mitigants, the Board-regulated institution's dollar risk-based capital requirement for operational risk is the greater of:

- (1) The Board-regulated institution's operational risk exposure adjusted for qualifying operational risk mitigants minus eligible operational risk offsets (if any); or

(2) 0.8 multiplied by the difference between:

- (i) The Board-regulated institution's operational risk exposure; and
- (ii) Eligible operational risk offsets (if any).

(c) The Board-regulated institution's risk-weighted asset amount for operational risk equals the Board-regulated institution's dollar risk-based capital requirement for operational risk determined under sections 162(a) or (b) multiplied by 12.5.

SECTIONS 217.163–217.170—
[Reserved]

3-2271

DISCLOSURES

SECTION 217.171—Purpose and Scope

Sections 217.171 through 217.173 establish public disclosure requirements related to the capital requirements of a Board-regulated institution that is an advanced approaches Board-regulated institution.

3-2272

SECTION 217.172—Disclosure Requirements

(a) A Board-regulated institution that is an advanced approaches Board-regulated institution that has completed the parallel run process and that has received notification from the Board pursuant to section 121(d) of subpart E of this part must publicly disclose each quarter its total and tier 1 risk-based capital ratios and their components as calculated under this subpart (that is, common equity tier 1 capital, additional tier 1 capital, tier 2 capital, total qualifying capital, and total risk-weighted assets).

(b) A Board-regulated institution that is an advanced approaches Board-regulated institution that has completed the parallel run process and that has received notification from the Board pursuant to section 121(d) of subpart E of this part must comply with paragraph (c) of this section unless it is a consolidated subsidiary of a bank holding company,

savings and loan holding company, or depository institution that is subject to these disclosure requirements or a subsidiary of a non-U.S. banking organization that is subject to comparable public disclosure requirements in its home jurisdiction.

(c) (1) A Board-regulated institution described in paragraph (b) of this section must provide timely public disclosures each calendar quarter of the information in the applicable tables in section 217.173. If a significant change occurs, such that the most recent reported amounts are no longer reflective of the Board-regulated institution's capital adequacy and risk profile, then a brief discussion of this change and its likely impact must be disclosed as soon as practicable thereafter. Qualitative disclosures that typically do not change each quarter (for example, a general summary of the Board-regulated institution's risk management objectives and policies, reporting system, and definitions) may be disclosed annually after the end of the fourth calendar quarter, provided that any significant changes to these are disclosed in the interim. Management may provide all of the disclosures required by this subpart in one place on the Board-regulated institution's public website or may provide the disclosures in more than one public financial report or other regulatory reports, provided that the Board-regulated institution publicly provides a summary table specifically indicating the location(s) of all such disclosures.

(2) A Board-regulated institution described in paragraph (b) of this section must have a formal disclosure policy approved by the board of directors that addresses its approach for determining the disclosures it makes. The policy must address the associated internal controls and disclosure controls and procedures. The board of directors and senior management are responsible for establishing and maintaining an effective internal control structure over financial reporting, including the disclosures required by this subpart, and must ensure that appropriate review of the disclosures takes place. One or more senior officers of the Board-

regulated institution must attest that the disclosures meet the requirements of this subpart.

(3) If a Board-regulated institution described in paragraph (b) of this section believes that disclosure of specific commercial or financial information would prejudice seriously its position by making public information that is either proprietary or confidential in nature, the Board-regulated institution is not required to disclose those specific items, but must disclose more general information about the subject matter of the requirement, together with the fact that, and the reason why, the specific items of information have not been disclosed.

(d) (1) A Board-regulated institution that meets any of the criteria in section 217.100(b)(1) before January 1, 2015, must publicly disclose each quarter its supplementary leverage ratio and the components thereof (that is, tier 1 capital and total leverage exposure) as calculated under subpart B of this part, beginning with the first quarter in 2015. This disclosure requirement applies without regard to whether the Board-regulated institution has completed the parallel run process and received notification from the Board pursuant to section 217.121(d).

(2) A Board-regulated institution that meets any of the criteria in section 217.100(b)(1) on or after January 1, 2015, or a Category III Board-regulated institution must publicly disclose each quarter its supplementary leverage ratio and the components thereof (that is, tier 1 capital and total leverage exposure) as calculated under subpart B of this part beginning with the calendar quarter immediately following the quarter in which the Board-regulated institution becomes an advanced approaches Board-regulated institution or a Category III Board-regulated institution. This disclosure requirement applies without regard to whether the Board-regulated institution has completed the parallel run process and has received notification from the Board pursuant to section 217.121(d).

3-2273

**SECTION 217.173—Disclosures by
Certain Advanced Approaches
Board-Regulated Institutions and
Category III Board-Regulated Institutions**

(a) (1) An advanced approaches Board-regulated institution described in section 217.172(b) must make the disclosures described in Tables 1 through 12 to section 217.173.

(2) An advanced approaches Board-regulated institution and a Category III Board-regulated institution that is required to publicly disclose its supplementary leverage ratio pursuant to section 217.172(d) must make the disclosures required under Table 13 to this section unless the Board-regulated institution is a consolidated subsidiary of a bank holding company, savings and loan holding company, or depository institution that is subject to these disclosure

requirements or a subsidiary of a non-U.S. banking organization that is subject to comparable public disclosure requirements in its home jurisdiction.

(3) The disclosures described in Tables 1 through 12 to section 217.173 must be made publicly available for twelve consecutive quarters beginning on January 1, 2014, or a shorter period, as applicable, for the quarters after the Board-regulated institution has completed the parallel run process and received notification from the Board pursuant to section 217.121(d). The disclosures described in Table 13 to section 217.173 must be made publicly available for twelve consecutive quarters beginning on January 1, 2015, or a shorter period, as applicable, for the quarters after the Board-regulated institution becomes subject to the disclosure of the supplementary leverage ratio pursuant to section 217.172(d) and section 217.173(a)(2).

Table 1 to section 217.173—Scope of application

Qualitative disclosures	(a)	The name of the top corporate entity in the group to which subpart E of this part applies.
	(b)	A brief description of the differences in the basis for consolidating entities ¹ for accounting and regulatory purposes, with a description of those entities: (1) That are fully consolidated; (2) That are deconsolidated and deducted from total capital; (3) For which the total capital requirement is deducted; and (4) That are neither consolidated nor deducted (for example, where the investment in the entity is assigned a risk weight in accordance with this subpart).
	(c)	Any restrictions, or other major impediments, on transfer of funds or total capital within the group.
Quantitative disclosures	(d)	The aggregate amount of surplus capital of insurance subsidiaries included in the total capital of the consolidated group.
	(e)	The aggregate amount by which actual total capital is less than the minimum total capital requirement in all subsidiaries, with total capital requirements and the name(s) of the subsidiaries with such deficiencies.

¹ Such entities include securities, insurance and other financial subsidiaries, commercial subsidiaries (where permitted), and significant minority equity investments in insurance, financial and commercial entities.

Table 2 to section 217.173—Capital structure

Qualitative disclosures	(a)	Summary information on the terms and conditions of the main features of all regulatory capital instruments.
Quantitative disclosures	(b)	The amount of common equity tier 1 capital, with separate disclosure of: (1) Common stock and related surplus; (2) Retained earnings; (3) Common equity minority interest; (4) AOCI (net of tax) and other reserves; and (5) Regulatory adjustments and deductions made to common equity tier 1 capital.
	(c)	The amount of tier 1 capital, with separate disclosure of: (1) Additional tier 1 capital elements, including additional tier 1 capital instruments and tier 1 minority interest not included in common equity tier 1 capital; and (2) Regulatory adjustments and deductions made to tier 1 capital.
	(d)	The amount of total capital, with separate disclosure of: (1) Tier 2 capital elements, including tier 2 capital instruments and total capital minority interest not included in tier 1 capital; and (2) Regulatory adjustments and deductions made to total capital.
	(e)	(1) Whether the Board-regulated institution has elected to phase in recognition of the transitional amounts as defined in section 217.300(f). (2) The Board-regulated institution's common equity tier 1 capital, tier 1 capital, and total capital without including the transitional amounts as defined in section 217.300(f).

Table 3 to section 217.173—Capital adequacy

Qualitative disclosures	(a)	A summary discussion of the Board-regulated institution's approach to assessing the adequacy of its capital to support current and future activities.
Quantitative disclosures	(b)	Risk-weighted assets for credit risk from: (1) Wholesale exposures; (2) Residential mortgage exposures; (3) Qualifying revolving exposures; (4) Other retail exposures; (5) Securitization exposures; (6) Equity exposures; (7) Equity exposures subject to the simple risk weight approach; and (8) Equity exposures subject to the internal models approach.
	(c)	Standardized market risk-weighted assets and advanced market risk-weighted assets as calculated under subpart F of this part: (1) Standardized approach for specific risk; and (2) Internal models approach for specific risk.
	(d)	Risk-weighted assets for operational risk.
	(e)	(1) Common equity tier 1, tier 1 and total risk-based capital ratios reflecting the transition provisions described in section 217.300(f): (A) For the top consolidated group; and (2) For each depository institution subsidiary.
	(f)	Common equity tier 1, tier 1 and total risk-based capital ratios, reflecting the full adoption of CECL: (1) For the top consolidated group; and (2) For each depository institution subsidiary.
	(g)	Total risk-weighted assets.

Table 4 to section 217.173—Capital conservation and countercyclical capital buffers

Qualitative disclosures	(a)	The Board-regulated institution must publicly disclose the geographic breakdown of its private sector credit exposures used in the calculation of the countercyclical capital buffer.
Quantitative disclosures	(b)	At least quarterly, the Board-regulated institution must calculate and publicly disclose the capital conservation buffer and the countercyclical capital buffer as described under section 217.11 of subpart B.
	(c)	At least quarterly, the Board-regulated institution must calculate and publicly disclose the buffer retained income of the Board-regulated institution, as described under section 217.11 of subpart B.
	(d)	At least quarterly, the Board-regulated institution must calculate and publicly disclose any limitations it has on distributions and discretionary bonus payments resulting from the capital conservation buffer and the countercyclical capital buffer framework described under section 217.11 of subpart B, including the maximum payout amount for the quarter.

(b) *General qualitative disclosure requirement.* For each separate risk area described in Tables 5 through 12 to section 217.173, the Board-regulated institution must describe its risk management objectives and policies, including:

- (1) Strategies and processes;
- (2) The structure and organization of the relevant risk management function;

- (3) The scope and nature of risk reporting and/or measurement systems; and
- (4) Policies for hedging and/or mitigating risk and strategies and processes for monitoring the continuing effectiveness of hedges/mitigants.

Table 5¹ to section 217.173—Credit risk: general disclosures

Qualitative disclosures	(a) The general qualitative disclosure requirement with respect to credit risk (excluding counterparty credit risk disclosed in accordance with Table 7 to section 217.173), including: (1) Policy for determining past due or delinquency status; (2) Policy for placing loans on nonaccrual; (3) Policy for returning loans to accrual status; (4) Definition of and policy for identifying impaired loans (for financial accounting purposes). (5) Description of the methodology that the entity uses to estimate its allowance for loan and lease losses or adjusted allowance for credit losses, as applicable, including statistical methods used where applicable; (6) Policy for charging-off uncollectible amounts; and (7) Discussion of the Board-regulated institution's credit risk management policy.
Quantitative disclosures	<p>(b) Total credit risk exposures and average credit risk exposures, after accounting offsets in accordance with GAAP,² without taking into account the effects of credit risk mitigation techniques (for example, collateral and netting not permitted under GAAP), over the period categorized by major types of credit exposure. For example, Board-regulated institutions could use categories similar to that used for financial statement purposes. Such categories might include, for instance: (1) Loans, off-balance sheet commitments, and other non-derivative off-balance sheet exposures; (2) Debt securities; and (3) OTC derivatives.</p> <p>(c) Geographi³distribution of exposures, categorized in significant areas by major types of credit exposure.</p> <p>(d) Industry or counterparty type distribution of exposures, categorized by major types of credit exposure.</p> <p>(e) By major industry or counterparty type: (1) Amount of impaired loans for which there was a related allowance under GAAP; (2) Amount of impaired loans for which there was no related allowance under GAAP; (3) Amount of loans past due 90 days and on nonaccrual; (4) Amount of loans past due 90 days and still accruing;⁴ The balance in the allowance for loan and lease losses or adjusted allowance for credit losses, as applicable, at the end of each period, disaggregated on the basis of the entity's impairment method. To disaggregate the information required on the basis of impairment methodology, an entity shall separately disclose the amounts based on the requirements in GAAP; and (6) Charge-offs during the period.</p> <p>(f) Amount of impaired loans and, if available, the amount of past due loans categorized by significant geographic areas including, if practical, the amounts of allowances related to each geographical area⁵, further categorized as required by GAAP.</p> <p>(g) Reconciliation of changes in ALLL or AACL, as applicable.⁶</p> <p>(h) Remaining contractual maturity breakdown (for example, one year or less) of the whole portfolio, categorized by credit exposure.</p>

¹ Table 5 to section 217.173 does not cover equity exposures, which should be reported in Table 9.

² See, for example, ASC Topic 815-10 and 210-20 as they may be amended from time to time.

³ Geographical areas may comprise individual countries, groups of countries, or regions within countries. A Board-regulated institution might choose to define the geographical areas based on the way the company's portfolio is geographically managed. The criteria used to allocate the loans to geographical areas must be specified.

⁴ A Board-regulated institution is encouraged also to provide an analysis of the aging of past-due loans.

⁵ The portion of the general allowance that is not allocated to a geographical area should be disclosed separately.

⁶ The reconciliation should include the following: a description of the allowance; the opening balance of the allowance; charge-offs taken against the allowance during the period; amounts provided (or reversed) for estimated probable loan losses during the period; any other adjustments (for example, exchange rate differences, business combinations, acquisitions and disposals of subsidiaries), including transfers between allowances; and the closing balance of the allowance. Charge-offs and recoveries that have been recorded directly to the income statement should be disclosed separately.

Table 6 to section 217.173—Credit risk: Disclosures for portfolios subject to IRB risk-based capital formulas

Qualitative disclosures	(a)	Explanation and review of the: (1) Structure of internal rating systems and if the Board-regulated institution considers external ratings, the relation between internal and external ratings; (2) Use of risk parameter estimates other than for regulatory capital purposes; (3) Process for managing and recognizing credit risk mitigation (<i>see</i> Table 8 to section 217.173); and (4) Control mechanisms for the rating system, including discussion of independence, accountability, and rating systems review.
	(b)	Description of the internal ratings process, provided separately for the following: (1) Wholesale category; (2) Retail subcategories; (i) Residential mortgage exposures; (ii) Qualifying revolving exposures; and (iii) Other retail exposures. For each category and subcategory above the description should include: (A) The types of exposure included in the category/subcategories; and (B) The definitions, methods and data for estimation and validation of PD, LGD, and EAD, including assumptions employed in the derivation of these variables. ¹
Quantitative disclosures: risk assessment	(c)	(1) For wholesale exposures, present the following information across a sufficient number of PD grades (including default) to allow for a meaningful differentiation of credit risk: ² (i) Total EAD; ³ (ii) Exposure-weighted average LGD (percentage); (iii) Exposure-weighted average risk weight; and (iv) Amount of undrawn commitments and exposure-weighted average EAD including average drawdowns prior to default for wholesale exposures. (2) For each retail subcategory, present the disclosures outlined above across a sufficient number of segments to allow for a meaningful differentiation of credit risk.
Quantitative disclosures: historical results	(d)	Actual losses in the preceding period for each category and subcategory and how this differs from past experience. A discussion of the factors that impacted the loss experience in the preceding period—for example, has the Board-regulated institution experienced higher than average default rates, loss rates or EADs.
	(e)	The Board-regulated institution's estimates compared against actual outcomes over a longer period. ⁴ At a minimum, this should include information on estimates of losses against actual losses in the wholesale category and each retail subcategory over a period sufficient to allow for a meaningful assessment of the performance of the internal rating processes for each category/subcategory. ⁵ Where appropriate, the Board-regulated institution should further decompose this to provide analysis of PD, LGD, and EAD outcomes against estimates provided in the quantitative risk assessment disclosures above. ⁶

¹ This disclosure item does not require a detailed description of the model in full—it should provide the reader with a broad overview of the model approach, describing definitions of the variables and methods for estimating and validating those variables set out in the quantitative risk disclosures below. This should be done for each of the four category/subcategories. The Board-regulated institution must disclose any significant differences in approach to estimating these variables within each category/subcategories.

² The PD, LGD and EAD disclosures in Table 6 (c) to section 217.173 should reflect the effects of collateral, qualifying master netting agreements, eligible guarantees and eligible credit derivatives as defined under this part. Disclosure of each PD grade should include the exposure-weighted average PD for each grade. Where a Board-regulated institution aggregates PD grades for the purposes of disclosure, this should be a representative breakdown of the distribution of PD grades used for regulatory capital purposes.

³ Outstanding loans and EAD on undrawn commitments can be presented on a combined basis for these disclosures.

⁴ These disclosures are a way of further informing the reader about the reliability of the information provided in the “quantitative disclosures: risk assessment” over the long run. The disclosures are requirements from year-end 2010; in the meantime, early adoption is encouraged. The phased implementation is to allow a Board-regulated institution sufficient time to build up a longer run of data that will make these disclosures meaningful.

⁵ This disclosure item is not intended to be prescriptive about the period used for this assessment. Upon implementation, it is expected that a Board-regulated institution would provide these disclosures for as long a set of data as possible—for example, if a Board-regulated institution has 10 years of data, it might choose to disclose the average default rates for each PD grade over that 10-year period. Annual amounts need not be disclosed.

⁶ A Board-regulated institution must provide this further decomposition where it will allow users greater insight into the reliability of the estimates provided in the “quantitative disclosures: risk assessment.” In particular, it must provide this information where there are material differences between its estimates of PD, LGD, or EAD compared to actual outcomes over the long run. The Board-regulated institution must also provide explanations for such differences.

Table 7 to section 217.173—General disclosure for counterparty credit risk of OTC derivative contracts, repo-style transactions, and eligible margin loans

Qualitative disclosures	(a) The general qualitative disclosure requirement with respect to OTC derivatives, eligible margin loans, and repo-style transactions, including: (1) Discussion of methodology used to assign economic capital and credit limits for counterparty credit exposures; (2) Discussion of policies for securing collateral, valuing and managing collateral, and establishing credit reserves; (3) Discussion of the primary types of collateral taken; (4) Discussion of policies with respect to wrong-way risk exposures; and (5) Discussion of the impact of the amount of collateral the Board-regulated institution would have to provide if the Board-regulated institution were to receive a credit rating downgrade.
Quantitative disclosures	(b) Gross positive fair value of contracts, netting benefits, netted current credit exposure, collateral held (including type, for example, cash, government securities), and net unsecured credit exposure. ¹ Also report measures for EAD used for regulatory capital for these transactions, the notional value of credit derivative hedges purchased for counterparty credit risk protection, and, for Board-regulated institutions not using the internal models methodology in section 217.132(d), the distribution of current credit exposure by types of credit exposure. ²
	(c) Notional amount of purchased and sold credit derivatives, segregated between use for the Board-regulated institution's own credit portfolio and for its intermediation activities, including the distribution of the credit derivative products used, categorized further by protection bought and sold within each product group.
	(d) The estimate of alpha if the Board-regulated institution has received supervisory approval to estimate alpha.

¹ Net unsecured credit exposure is the credit exposure after considering the benefits from legally enforceable netting agreements and collateral arrangements, without taking into account haircuts for price volatility, liquidity, etc.

² This may include interest rate derivative contracts, foreign exchange derivative contracts, equity derivative contracts, credit derivatives, commodity or other derivative contracts, repo-style transactions, and eligible margin loans.

Table 8 to section 217.173—Credit risk mitigation^{1,2}

Qualitative disclosures	(a) The general qualitative disclosure requirement with respect to credit risk mitigation, including: (1) Policies and processes for, and an indication of the extent to which the Board-regulated institution uses, on- or off-balance sheet netting; (2) Policies and processes for collateral valuation and management; (3) A description of the main types of collateral taken by the Board-regulated institution; (4) The main types of guarantors/credit derivative counterparties and their creditworthiness; and (5) Information about (market or credit) risk concentrations within the mitigation taken.
Quantitative disclosures	(b) For each separately disclosed portfolio, the total exposure (after, where applicable, on- or off-balance sheet netting) that is covered by guarantees/credit derivatives.

¹ At a minimum, a Board-regulated institution must provide the disclosures in Table 8 in relation to credit risk mitigation that has been recognized for the purposes of reducing capital requirements under this subpart. Where relevant, Board-regulated institutions are encouraged to give further information about mitigants that have not been recognized for that purpose.

² Credit derivatives and other credit mitigation that are treated for the purposes of this subpart as synthetic securitization exposures should be excluded from the credit risk mitigation disclosures (in Table 8 to section 217.173) and included within those relating to securitization (in Table 9 to section 217.173).

Table 9 to section 217.173—Securitization

Qualitative disclosures	(a)	The general qualitative disclosure requirement with respect to securitization (including synthetic securitizations), including a discussion of: (1) The Board-regulated institution's objectives for securitizing assets, including the extent to which these activities transfer credit risk of the underlying exposures away from the Board-regulated institution to other entities and including the type of risks assumed and retained with resecuritization activity; ¹ (2) The nature of the risks (e.g. liquidity risk) inherent in the securitized assets; (3) The roles played by the Board-regulated institution in the securitization process ² and an indication of the extent of the Board-regulated institution's involvement in each of them; (4) The processes in place to monitor changes in the credit and market risk of securitization exposures including how those processes differ for resecuritization exposures; (5) The Board-regulated institution's policy for mitigating the credit risk retained through securitization and resecuritization exposures; and (6) The risk-based capital approaches that the Board-regulated institution follows for its securitization exposures including the type of securitization exposure to which each approach applies.
	(b)	A list of: (1) The type of securitization SPEs that the Board-regulated institution, as sponsor, uses to securitize third-party exposures. The Board-regulated institution must indicate whether it has exposure to these SPEs, either on- or off- balance sheet; and (2) Affiliated entities: (i) That the Board-regulated institution manages or advises; and (ii) That invest either in the securitization exposures that the Board-regulated institution has securitized or in securitization SPEs that the Board-regulated institution sponsors. ³
	(c)	Summary of the Board-regulated institution's accounting policies for securitization activities, including: (1) Whether the transactions are treated as sales or financings; (2) Recognition of gain-on-sale; (3) Methods and key assumptions and inputs applied in valuing retained or purchased interests; (4) Changes in methods and key assumptions and inputs from the previous period for valuing retained interests and impact of the changes; (5) Treatment of synthetic securitizations; (6) How exposures intended to be securitized are valued and whether they are recorded under subpart E of this part; and (7) Policies for recognizing liabilities on the balance sheet for arrangements that could require the Board-regulated institution to provide financial support for securitized assets.
	(d)	An explanation of significant changes to any of the quantitative information set forth below since the last reporting period.
Quantitative disclosures	(e)	The total outstanding exposures securitized ⁴ by the Board-regulated institution in securitizations that meet the operational criteria in section 217.141 (categorized into traditional/synthetic), by underlying exposure type ⁵ separately for securitizations of third-party exposures for which the bank acts only as sponsor.
	(f)	For exposures securitized by the Board-regulated institution in securitizations that meet the operational criteria in section 217.141: (1) Amount of securitized assets that are impaired ⁶ /past due categorized by exposure type; and (2) Losses recognized by the Board-regulated institution during the current period categorized by exposure type. ⁷
	(g)	The total amount of outstanding exposures intended to be securitized categorized by exposure type.
	(h)	Aggregate amount of: (1) On-balance sheet securitization exposures retained or purchased categorized by exposure type; and (2) Off-balance sheet securitization exposures categorized by exposure type.

Table 9 to section 217.173—Securitization—continued

Quantitative disclosures	(i)	(1) Aggregate amount of securitization exposures retained or purchased and the associated capital requirements for these exposures, categorized between securitization and resecuritization exposures, further categorized into a meaningful number of risk weight bands and by risk-based capital approach (e.g., SA, SFA, or SSFA). (2) Aggregate amount disclosed separately by type of underlying exposure in the pool of any: (i) After-tax gain-on-sale on a securitization that has been deducted from common equity tier 1 capital; and (ii) Credit-enhancing interest-only strip that is assigned a 1,250 percent risk weight.
	(j)	Summary of current year’s securitization activity, including the amount of exposures securitized (by exposure type), and recognized gain or loss on sale by asset type.
	(k)	Aggregate amount of resecuritization exposures retained or purchased categorized according to: (1) Exposures to which credit risk mitigation is applied and those not applied; and (2) Exposures to guarantors categorized according to guarantor creditworthiness categories or guarantor name.

¹ The Board-regulated institution must describe the structure of resecuritizations in which it participates; this description must be provided for the main categories of resecuritization products in which the Board-regulated institution is active.

² For example, these roles would include originator, investor, servicer, provider of credit enhancement, sponsor, liquidity provider, or swap provider.

³ For example, money market mutual funds should be listed individually, and personal and private trusts, should be noted collectively.

⁴ “Exposures securitized” include underlying exposures originated by the bank, whether generated by them or purchased, and recognized in the balance sheet, from third parties, and third-party exposures included in sponsored transactions. Securitization transactions (including underlying exposures originally on the bank’s balance sheet and underlying exposures acquired by the bank from third-party entities) in which the originating bank does not retain any securitization exposure should be shown separately but need only be reported for the year of inception.

⁵ A Board-regulated institution is required to disclose exposures regardless of whether there is a capital charge under this part.

⁶ A Board-regulated institution must include credit-related other than temporary impairment (OTTI).

⁷ For example, charge-offs/allowances (if the assets remain on the bank’s balance sheet) or credit-related OTTI of I/O strips and other retained residual interests, as well as recognition of liabilities for probable future financial support required of the bank with respect to securitized assets.

Table 10 to section 217.173—Operational risk

Qualitative disclosures	(a)	The general qualitative disclosure requirement for operational risk.
	(b)	Description of the AMA, including a discussion of relevant internal and external factors considered in the Board-regulated institution’s measurement approach.
	(c)	A description of the use of insurance for the purpose of mitigating operational risk.

Table 11 to section 217.173—Equities not subject to subpart F of this part

Qualitative disclosures	(a)	The general qualitative disclosure requirement with respect to the equity risk of equity holdings not subject to subpart F of this part, including: (1) Differentiation between holdings on which capital gains are expected and those held for other objectives, including for relationship and strategic reasons; and (2) Discussion of important policies covering the valuation of and accounting for equity holdings not subject to subpart F of this part. This includes the accounting methodology and valuation methodologies used, including key assumptions and practices affecting valuation as well as significant changes in these practices.
Quantitative disclosures	(b)	Carrying value on the balance sheet of equity investments, as well as the fair value of those investments.
	(c)	The types and nature of investments, including the amount that is: (1) Publicly traded; and (2) Non-publicly traded.
	(d)	The cumulative realized gains (losses) arising from sales and liquidations in the reporting period.
	(e)	(1) Total unrealized gains (losses) ¹ (2) Total latent revaluation gains (losses) ² (3) Any amounts of the above included in tier 1 and/or tier 2 capital.
	(f)	Capital requirements categorized by appropriate equity groupings, consistent with the Board-regulated institution's methodology, as well as the aggregate amounts and the type of equity investments subject to any supervisory transition regarding total capital requirements. ³

¹ Unrealized gains (losses) recognized in the balance sheet but not through earnings.

² Unrealized gains (losses) not recognized either in the balance sheet or through earnings.

³ This disclosure must include a breakdown of equities that are subject to the 0 percent, 20 percent, 100 percent, 300 percent, 400 percent, and 600 percent risk weights, as applicable.

Table 12 to section 217.173—Interest rate risk for non-trading activities

Qualitative disclosures	(a)	The general qualitative disclosure requirement, including the nature of interest rate risk for non-trading activities and key assumptions, including assumptions regarding loan prepayments and behavior of non-maturity deposits, and frequency of measurement of interest rate risk for non-trading activities.
Quantitative disclosures	(b)	The increase (decline) in earnings or economic value (or relevant measure used by management) for upward and downward rate shocks according to management's method for measuring interest rate risk for non-trading activities, categorized by currency (as appropriate).

(c) Except as provided in section 217.172(b), a Board-regulated institution described in section 217.172(d) must make the disclosures described in Table 13 to section 217.173; provided, however, the disclosures required under this paragraph are required without regard to whether the Board-regulated institution has completed the parallel run process and has received notification from the Board pursuant to section 217.121(d). The Board-regulated institution must make these disclosures publicly available beginning on January 1, 2015.

Table 13 to section 217.173—Supplementary leverage ratio

	Dollar amounts in thousands			
	Tril	Bil	Mil	Thou
Part 1: Summary comparison of accounting assets and total leverage exposure				
1 Total consolidated assets as reported in published financial statements.				
2 Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation.				
3 Adjustment for fiduciary assets recognized on balance sheet but excluded from total leverage exposure.				
4 Adjustment for derivative exposures.				
5 Adjustment for repo-style transactions.				
6 Adjustment for off-balance sheet exposures (that is, conversion to credit equivalent amounts of off-balance sheet exposures).				
7 Other adjustments.				
8 Total leverage exposure.				
Part 2: Supplementary leverage ratio				
On-balance sheet exposures				
1 On-balance sheet assets (excluding on-balance sheet assets for repo-style transactions and derivative exposures, but including cash collateral received in derivative transactions).				
2 LESS: Amounts deducted from tier 1 capital.				
3 Total on-balance sheet exposures (excluding on-balance sheet assets for repo-style transactions and derivative exposures, but including cash collateral received in derivative transactions) (sum of lines 1 and 2).				
Derivative exposures				
4 Current exposure for derivative exposures (that is, net of cash variation margin).				
5 Add-on amounts for potential future exposure (PFE) for derivative exposures.				
6 Gross-up for cash collateral posted if deducted from the on-balance sheet assets, except for cash variation margin.				
7 LESS: Deductions of receivable assets for cash variation margin posted in derivative transactions, if included in on-balance sheet assets.				
8 LESS: Exempted CCP leg of client-cleared transactions.				
9 Effective notional principal amount of sold credit protection.				
10 LESS: Effective notional principal amount offsets and PFE adjustments for sold credit protection.				
11 Total derivative exposures (sum of lines 4 to 10).				

Table 13 to section 217.173—Supplementary leverage ratio—continued

	Dollar amounts in thousands			
	Tril	Bil	Mil	Thou
Repo-style transactions				
12 On-balance sheet assets for repo-style transactions, except include the gross value of receivables for reverse repurchase transactions. Exclude from this item the value of securities received in a security-for-security repo-style transaction where the securities lender has not sold or re-hypothecated the securities received. Include in this item the value of securities that qualified for sales treatment that must be reversed.				
13 LESS: Reduction of the gross value of receivables in reverse repurchase transactions by cash payables in repurchase transactions under netting agreements.				
14 Counterparty credit risk for all repo-style transactions.				
15 Exposure for repo-style transactions where a banking organization acts as an agent.				
16 Total exposures for repo-style transactions (sum of lines 12 to 15).				
Other off-balance sheet exposures				
17 Off-balance sheet exposures at gross notional amounts.				
18 LESS: Adjustments for conversion to credit equivalent amounts.				
19 Off-balance sheet exposures (sum of lines 17 and 18).				
Capital and total leverage exposure				
20 Tier 1 capital.				
21 Total leverage exposure (sum of lines 3, 11, 16, and 19).				
Supplementary leverage ratio				
22 Supplementary leverage ratio	(in percent)			

SECTIONS 217.174–217.200—
[Reserved]

3-2301

SUBPART F—RISK-WEIGHTED
ASSETS—MARKET RISK

SECTION 217.201—Purpose,
Applicability, and Reservation of
Authority

(a) *Purpose.* This subpart F establishes risk-based capital requirements for Board-regulated institutions with significant exposure to market risk, provides methods for these Board-regulated institutions to calculate their standardized measure for market risk and, if applicable, advanced measure for market risk, and establishes public disclosure requirements.

(b) *Applicability.*

(1) This subpart applies to any Board-regulated institution with aggregate trading assets and trading liabilities (as reported in the Board-regulated institution’s most recent

quarterly Call Report, for a state member bank, or FR Y-9C, for a bank holding company or savings and loan holding company, as applicable, any savings and loan holding company that does not file the FR Y-9C should follow the instructions to the FR Y-9C) equal to:

- (i) 10 percent or more of quarter-end total assets as reported on the most recent quarterly [Call Report or FR Y-9C]; or
 - (ii) \$1 billion or more.
- (2) The Board may apply this subpart to any Board-regulated institution if the Board deems it necessary or appropriate because of the level of market risk of the Board-regulated institution or to ensure safe and sound banking practices.
- (3) The Board may exclude a Board-regulated institution that meets the criteria of paragraph (b)(1) of this section from application of this subpart if the Board determines that the exclusion is appropriate based on the level of market risk of the

Board-regulated institution and is consistent with safe and sound banking practices.

(c) *Reservation of authority.*

(1) The Board may require a Board-regulated institution to hold an amount of capital greater than otherwise required under this subpart if the Board determines that the Board-regulated institution's capital requirement for market risk as calculated under this subpart is not commensurate with the market risk of the Board-regulated institution's covered positions. In making determinations under paragraphs (c)(1) through (c)(3) of this section, the Board will apply notice and response procedures generally in the same manner as the notice and response procedures set forth in 12 CFR 263.202.

(2) If the Board determines that the risk-based capital requirement calculated under this subpart by the Board-regulated institution for one or more covered positions or portfolios of covered positions is not commensurate with the risks associated with those positions or portfolios, the Board may require the Board-regulated institution 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 Board may also require a Board-regulated institution to calculate risk-based capital requirements for specific positions or portfolios under this subpart, or under subpart D or subpart E of this part, as appropriate, to more accurately reflect the risks of the positions.

(4) Nothing in this subpart limits the authority of the Board 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.

3-2302

SECTION 217.202—Definitions

(a) Terms set forth in section 217.2 and used in this subpart have the definitions assigned thereto in section 217.2.

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

Backtesting means the comparison of a Board-regulated institution's internal estimates with actual outcomes during a sample period not used in model development. For purposes of this subpart, backtesting is one form of out-of-sample testing.

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

Corporate debt position means a debt position that is an exposure to a company that is not a sovereign entity, the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, the European Stability Mechanism, the European Financial Stability Facility, a multilateral development bank, a depository institution, a foreign bank, a credit union, a public sector entity, a GSE, or a securitization.

Correlation trading position means:

(1) A securitization position for which all or substantially all of the value of the underlying exposures is based on the credit quality of a single company for which a two-way market exists, or on commonly traded indices based on such exposures for which a two-way market exists on the indices; or

(2) A position that is not a securitization position and that hedges a position described in paragraph (1) of this definition; and

(3) A correlation trading position does not include:

(i) A resc securitization position;

(ii) A derivative of a securitization position that does not provide a pro rata share in the proceeds of a securitization tranche; or

(iii) A securitization position for which the underlying assets or reference exposures are retail exposures, residential mortgage exposures, or commercial mortgage exposures.

Covered position means the following positions:

(1) A trading asset or trading liability

(whether on- or off-balance sheet),³² as reported on Schedule RC-D of the Call Report or Schedule HC-D of the FR Y-9C (any savings and loan holding companies that does not file the FR Y-9C should follow the instructions to the FR Y-9C), that meets the following conditions:

- (i) The position is a trading position or hedges another covered position,³³ and
 - (ii) The position is free of any restrictive covenants on its tradability or the Board-regulated institution is able to hedge the material risk elements of the position in a two-way market;
- (2) A foreign exchange or commodity position, regardless of whether the position is a trading asset or trading liability (excluding any structural foreign currency positions that the Board-regulated institution chooses to exclude with prior supervisory approval); and
- (3) Notwithstanding paragraphs (1) and (2) of this definition, a covered position does not include:
- (i) An intangible asset, including any servicing asset;
 - (ii) Any hedge of a trading position that the Board determines to be outside the scope of the Board-regulated institution's hedging strategy required in paragraph (a)(2) of section 217.203;
 - (iii) Any position that, in form or substance, acts as a liquidity facility that provides support to asset-backed commercial paper;
 - (iv) A credit derivative the Board-regulated institution recognizes as a guarantee for risk-weighted asset amount calculation purposes under subpart D or subpart E of this part;
 - (v) Any position that is recognized as a credit valuation adjustment hedge under section 217.132(e)(5) or section 217.132(e)(6), except as provided in section 217.132(e)(6)(vii);
 - (vi) Any equity position that is not publicly traded, other than a derivative that

references a publicly traded equity and other than a position in an investment company as defined in and registered with the SEC under the Investment Company Act of 1940 (15 U.S.C. 80a-1 *et seq.*), provided that all the underlying equities held by the investment company are publicly traded;

- (vii) Any equity position that is not publicly traded, other than a derivative that references a publicly traded equity and other than a position in an entity not domiciled in the United States (or a political subdivision thereof) that is supervised and regulated in a manner similar to entities described in paragraph (3)(vi) of this definition;
- (viii) Any position a Board-regulated institution holds with the intent to securitize; or
- (ix) Any direct real estate holding.

Debt position means a covered position that is not a securitization position or a correlation trading position and that has a value that reacts primarily to changes in interest rates or credit spreads.

Default by a sovereign entity has the same meaning as the term sovereign default under section 217.2.

Equity position means a covered position that is not a securitization position or a correlation trading position and that has a value that reacts primarily to changes in equity prices.

Event risk means the risk of loss on equity or hybrid equity positions as a result of a financial event, such as the announcement or occurrence of a company merger, acquisition, spin-off, or dissolution.

Foreign exchange position means a position for which price risk arises from changes in foreign exchange rates.

General market risk means the risk of loss that could result from broad market movements, such as changes in the general level of interest rates, credit spreads, equity prices, foreign exchange rates, or commodity prices.

Hedge means a position or positions that off-

³² Securities subject to repurchase and lending agreements are included as if they are still owned by the lender.

³³ A position that hedges a trading position must be within the scope of the bank's hedging strategy as described in paragraph (a)(2) of section 203 of this subpart.

set all, or substantially all, of one or more material risk factors of another position.

Idiosyncratic risk means the risk of loss in the value of a position that arises from changes in risk factors unique to that position.

Incremental risk means the default risk and credit migration risk of a position. Default risk means the risk of loss on a position that could result from the failure of an obligor to make timely payments of principal or interest on its debt obligation, and the risk of loss that could result from bankruptcy, insolvency, or similar proceeding. Credit migration risk means the price risk that arises from significant changes in the underlying credit quality of the position.

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

Resecuritization position means a covered position that is:

- (1) An on- or off-balance sheet exposure to a resecuritization; or
- (2) An exposure that directly or indirectly references a resecuritization exposure in paragraph (1) of this definition.

Securitization means a transaction in which:

- (1) All or a portion of the credit risk of one or more underlying exposures is transferred to one or more third parties;
- (2) The credit risk associated with the underlying exposures has been separated into at least two tranches that reflect different levels of seniority;
- (3) Performance of the securitization exposures depends upon the performance of the underlying exposures;
- (4) All or substantially all of the underlying exposures are financial exposures (such as loans, commitments, credit derivatives, guarantees, receivables, asset-backed securities, mortgage-backed securities, other debt securities, or equity securities);
- (5) For non-synthetic securitizations, the underlying exposures are not owned by an operating company;
- (6) The underlying exposures are not owned by a small business investment com-

pany described in section 302 of the Small Business Investment Act;

(7) The underlying exposures are not owned by a firm an investment in which qualifies as a community development investment under section 24 (Eleventh) of the National Bank Act;

(8) The Board may determine that a transaction in which the underlying exposures are owned by an investment firm that exercises substantially unfettered control over the size and composition of its assets, liabilities, and off-balance sheet exposures is not a securitization based on the transaction's leverage, risk profile, or economic substance;

(9) The Board may deem an exposure to a transaction that meets the definition of a securitization, notwithstanding paragraph (5), (6), or (7) of this definition, to be a securitization based on the transaction's leverage, risk profile, or economic substance; and

(10) The transaction is not:

- (i) An investment fund;
- (ii) A collective investment fund (as defined in 12 CFR 208.34);
- (iii) An employee benefit plan as defined in paragraphs (3) and (32) of section 3 of ERISA, a "governmental plan" (as defined in 29 U.S.C. 1002(32)) that complies with the tax deferral qualification requirements provided in the Internal Revenue Code, or any similar employee benefit plan established under the laws of a foreign jurisdiction; or
- (iv) Registered with the SEC under the Investment Company Act of 1940 (15 U.S.C. 80a-1 *et seq.*) or foreign equivalents thereof.

Securitization position means a covered position that is:

- (1) An on-balance sheet or off-balance sheet credit exposure (including credit-enhancing representations and warranties) that arises from a securitization (including a resecuritization); or
- (2) An exposure that directly or indirectly references a securitization exposure described in paragraph (1) of this definition.

Sovereign debt position means a direct exposure to a sovereign entity.

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

Structural position in a foreign currency means a position that is not a trading position and that is:

- (1) Subordinated debt, equity, or minority interest in a consolidated subsidiary that is denominated in a foreign currency;
- (2) Capital assigned to foreign branches that is denominated in a foreign currency;
- (3) A position related to an unconsolidated subsidiary or another item that is denominated in a foreign currency and that is deducted from the Board-regulated institution's tier 1 or tier 2 capital; or
- (4) A position designed to hedge a Board-regulated institution's capital ratios or earnings against the effect on paragraphs (1), (2), or (3) of this definition of adverse exchange rate movements.

Term repo-style transaction means a repo-style transaction that has an original maturity in excess of one business day.

Trading position means a position that is held by the Board-regulated institution for the purpose of short-term resale or with the intent of benefiting from actual or expected short-term price movements, or to lock in arbitrage profits.

Two-way market means a market where there are independent bona fide offers to buy and sell so that a price reasonably related to the last sales price or current bona fide competitive bid and offer quotations can be determined within one day and settled at that price within a relatively short time frame 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.

3-2303

SECTION 217.203—Requirements for Application of this Subpart F

(a) *Trading positions.*

(1) *Identification of trading positions.* A Board-regulated institution must have clearly defined policies and procedures for determining which of its trading assets and trading liabilities are trading positions and which of its trading positions are correlation trading positions. These policies and procedures must take into account:

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

(2) *Trading and hedging strategies.* A Board-regulated institution must have clearly defined trading and hedging strategies for its trading positions that are approved by senior management of the Board-regulated institution.

(i) The trading strategy must articulate the expected holding period of, and the market risk associated with, each portfolio of trading positions.

(ii) The hedging strategy must articulate for each portfolio of trading positions the level of market risk the Board-regulated institution is willing to accept and must detail the instruments, techniques, and strategies the Board-regulated institution will use to hedge the risk of the portfolio.

(b) *Management of covered positions.*

(1) *Active management.* A Board-regulated institution 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 Board-regulated institution'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 Board-regulated institution must have a process for prudent valuation of its covered positions that includes policies and procedures on the valuation of positions, marking positions to market or to model, independent price verification, and valuation adjustments or reserves. The valuation process must consider, as appropriate, unearned credit spreads, close-out costs, early termination costs, investing and funding costs, liquidity, and model risk.

(c) *Requirements for internal models.*

(1) A Board-regulated institution must obtain the prior written approval of the Board before using any internal model to calculate its risk-based capital requirement under this subpart.

(2) A Board-regulated institution must meet all of the requirements of this section on an ongoing basis. The Board-regulated institution must promptly notify the Board when:

(i) The Board-regulated institution plans to extend the use of a model that the Board has approved under this subpart to an additional business line or product type;

(ii) The Board-regulated institution makes any change to an internal model approved by the Board under this subpart that would result in a material change in the Board-regulated institution's risk-

weighted asset amount for a portfolio of covered positions; or

(iii) The Board-regulated institution makes any material change to its modeling assumptions.

(3) The Board may rescind its approval of the use of any internal model (in whole or in part) or of the determination of the approach under section 217.209(a)(2)(ii) for a Board-regulated institution's modeled correlation trading positions and determine an appropriate capital requirement for the covered positions to which the model would apply, if the Board determines that the model no longer complies with this subpart or fails to reflect accurately the risks of the Board-regulated institution's covered positions.

(4) The Board-regulated institution must periodically, but no less frequently than annually, review its internal models in light of developments in financial markets and modeling technologies, and enhance those models as appropriate to ensure that they continue to meet the Board's standards for model approval and employ risk measurement methodologies that are most appropriate for the Board-regulated institution's covered positions.

(5) The Board-regulated institution must incorporate its internal models into its risk management process and integrate the internal models used for calculating its VaR-based measure into its daily risk management process.

(6) The level of sophistication of a Board-regulated institution's internal models must be commensurate with the complexity and amount of its covered positions. A Board-regulated institution's internal models may use any of the generally accepted approaches, including but not limited to variance-covariance models, historical simulations, or Monte Carlo simulations, to measure market risk.

(7) The Board-regulated institution's internal models must properly measure all the material risks in the covered positions to which they are applied.

(8) The Board-regulated institution's internal models must conservatively assess the risks arising from less liquid positions and

positions with limited price transparency under realistic market scenarios.

(9) The Board-regulated institution must have a rigorous and well-defined process for re-estimating, re-evaluating, and updating its internal models to ensure continued applicability and relevance.

(10) If a Board-regulated institution uses internal models to measure specific risk, the internal models must also satisfy the requirements in paragraph (b)(1) of section 217.207.

(d) *Control, oversight, and validation mechanisms.*

(1) The Board-regulated institution must have a risk control unit that reports directly to senior management and is independent from the business trading units.

(2) The Board-regulated institution must validate its internal models initially and on an ongoing basis. The Board-regulated institution's validation process must be independent of the internal models' development, implementation, and operation, or the validation process must be subjected to an independent review of its adequacy and effectiveness. Validation must include:

(i) An evaluation of the conceptual soundness of (including developmental evidence supporting) the internal models;

(ii) An ongoing monitoring process that includes verification of processes and the comparison of the Board-regulated institution's model outputs with relevant internal and external data sources or estimation techniques; and

(iii) An outcomes analysis process that includes backtesting. For internal models used to calculate the VaR-based measure, this process must include a comparison of the changes in the Board-regulated institution's portfolio value that would have occurred were end-of-day positions to remain unchanged (therefore, excluding fees, commissions, reserves, net interest income, and intraday trading) with VaR-based measures during a sample period not used in model development.

(3) The Board-regulated institution 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 Board-regulated institution's trading activities that may not be adequately captured in its internal models.

(4) The Board-regulated institution must have an internal audit function independent of business-line management that at least annually assesses the effectiveness of the controls supporting the Board-regulated institution's market risk measurement systems, including the activities of the business trading units and independent risk control unit, compliance with policies and procedures, and calculation of the Board-regulated institution's measures for market risk under this subpart. At least annually, the internal audit function must report its findings to the Board-regulated institution's board of directors (or a committee thereof).

(e) *Internal assessment of capital adequacy.*

The Board-regulated institution must have a rigorous process for assessing its overall capital adequacy in relation to its market risk. The assessment must take into account risks that may not be captured fully in the VaR-based measure, including concentration and liquidity risk under stressed market conditions.

(f) *Documentation.* The Board-regulated institution must adequately document all material aspects of its internal models, management and valuation of covered positions, control, oversight, validation and review processes and results, and internal assessment of capital adequacy.

3-2304

SECTION 217.204—Measure for Market Risk

(a) *General requirement.*

(1) A Board-regulated institution must calculate its standardized measure for market risk by following the steps described in paragraph (a)(2) of this section. An advanced approaches Board-regulated institution also must calculate an advanced mea-

sure for market risk by following the steps in paragraph (a)(2) of this section.

(2) *Measure for market risk.* A Board-regulated institution must calculate the standardized measure for market risk, which equals the sum of the VaR-based capital requirement, stressed VaR-based capital requirement, specific risk add-ons, incremental risk capital requirement, comprehensive risk capital requirement, and capital requirement for *de minimis* exposures all as defined under this paragraph (a)(2), (except, that the Board-regulated institution may not use the SFA in section 210(b)(2)(vii)(B) of this subpart for purposes of this calculation), plus any additional capital requirement established by the Board]. An advanced approaches Board-regulated institution that has completed the parallel run process and that has received notifications from the Board pursuant to section 217.121(d) also must calculate the advanced measure for market risk, which equals the sum of the VaR-based capital requirement, stressed VaR-based capital requirement, specific risk add-ons, incremental risk capital requirement, comprehensive risk capital requirement, and capital requirement for *de minimis* exposures as defined under this paragraph (a)(2) [, plus any additional capital requirement established by the Board].

(i) *VaR-based capital requirement.* A Board-regulated institution's VaR-based capital requirement equals the greater of:

(A) The previous day's VaR-based measure as calculated under section 217.205; or

(B) The average of the daily VaR-based measures as calculated under section 217.205 for each of the preceding 60 business days multiplied by three, except as provided in paragraph (b) of this section.

(ii) *Stressed VaR-based capital requirement.* A Board-regulated institution's stressed VaR-based capital requirement equals the greater of:

(A) The most recent stressed VaR-based measure as calculated under section 217.206; or

(B) The average of the stressed VaR-based measures as calculated under

section 217.206 for each of the preceding 12 weeks multiplied by three, except as provided in paragraph (b) of this section.

(iii) *Specific risk add-ons.* A Board-regulated institution's specific risk add-ons equal any specific risk add-ons that are required under section 217.207 and are calculated in accordance with section 217.210.

(iv) *Incremental risk capital requirement.* A Board-regulated institution's incremental risk capital requirement equals any incremental risk capital requirement as calculated under section 208 of this subpart.

(v) *Comprehensive risk capital requirement.* A Board-regulated institution's comprehensive risk capital requirement equals any comprehensive risk capital requirement as calculated under section 209 of this subpart.

(vi) *Capital requirement for de minimis exposures.* A Board-regulated institution's capital requirement for *de minimis* exposures equals:

(A) The absolute value of the fair value of those *de minimis* exposures that are not captured in the Board-regulated institution's VaR-based measure or under paragraph (a)(2)(vi)(B) of this section; and

(B) With the prior written approval of the Board, the capital requirement for any *de minimis* exposures using alternative techniques that appropriately measure the market risk associated with those exposures.

(b) *Backtesting.* A Board-regulated institution must compare each of its most recent 250 business days' trading losses (excluding fees, commissions, reserves, net interest income, and intraday trading) with the corresponding daily VaR-based measures calibrated to a one-day holding period and at a one-tail, 99.0 percent confidence level. A Board-regulated institution must begin backtesting as required by this paragraph (b) no later than one year after the later of January 1, 2014 and the date on which the Board-regulated institution becomes subject to this subpart. In the interim, consistent with safety and soundness prin-

ciples, a Board-regulated institution subject to this subpart as of January 1, 2014 should continue to follow backtesting procedures in accordance with the Board's supervisory expectations.

(1) Once each quarter, the Board-regulated institution 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 Board-regulated institution must use the multiplication factor in Table 1 to section 217.204 that corresponds to the number of exceptions identified in paragraph (b)(1) of this section to determine its VaR-based capital requirement for market risk under paragraph (a)(2)(i) of this section and to determine its stressed VaR-based capital requirement for market risk under paragraph (a)(2)(ii) of this section until it obtains the next quarter's backtesting results, unless the Board notifies the Board-regulated institution in writing that a different adjustment or other action is appropriate.

Table 1 to section 217.204—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

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SECTION 217.205—VaR-Based Measure

(a) *General requirement.* A Board-regulated institution must use one or more internal models to calculate daily a VaR-based measure of the general market risk of all covered positions. The daily VaR-based measure also may reflect the Board-regulated institution's specific risk for one or more portfolios of debt and equity positions, if the internal models meet the requirements of paragraph (b)(1) of section 217.207. The daily VaR-based measure must also reflect the Board-regulated institu-

tion's specific risk for any portfolio of correlation trading positions that is modeled under section 217.209. A Board-regulated institution may elect to include term repo-style transactions in its VaR-based measure, provided that the Board-regulated institution includes all such term repo-style transactions consistently over time.

(1) The Board-regulated institution's internal models for calculating its VaR-based measure must use risk factors sufficient to measure the market risk inherent in all covered positions. The market risk categories must include, as appropriate, interest rate risk, credit spread risk, equity price risk, foreign exchange risk, and commodity price risk. For material positions in the major currencies and markets, modeling techniques must incorporate enough segments of the yield curve—in no case less than six—to capture differences in volatility and less than perfect correlation of rates along the yield curve.

(2) The VaR-based measure may incorporate empirical correlations within and across risk categories, provided the Board-regulated institution validates and demonstrates the reasonableness of its process for measuring correlations. If the VaR-based measure does not incorporate empirical correlations across risk categories, the Board-regulated institution must add the separate measures from its internal models used to calculate the VaR-based measure for the appropriate market risk categories (interest rate risk, credit spread risk, equity price risk, foreign exchange rate risk, and/or commodity price risk) to determine its aggregate VaR-based measure.

(3) The VaR-based measure must include the risks arising from the nonlinear price characteristics of options positions or positions with embedded optionality and the sensitivity of the fair value of the positions to changes in the volatility of the underlying rates, prices, or other material risk factors. A Board-regulated institution with a large or complex options portfolio must measure the volatility of options positions or positions with embedded optionality by different maturities and/or strike prices, where material.

(4) The Board-regulated institution must be able to justify to the satisfaction of the Board the omission of any risk factors from the calculation of its VaR-based measure that the Board-regulated institution uses in its pricing models.

(5) The Board-regulated institution must demonstrate to the satisfaction of the Board the appropriateness of any proxies used to capture the risks of the Board-regulated institution's actual positions for which such proxies are used.

(b) *Quantitative requirements for VaR-based measure.*

(1) The VaR-based measure must be calculated on a daily basis using a one-tail, 99.0 percent confidence level, and a holding period equivalent to a 10-business-day movement in underlying risk factors, such as rates, spreads, and prices. To calculate VaR-based measures using a 10-business-day holding period, the Board-regulated institution may calculate 10-business-day measures directly or may convert VaR-based measures using holding periods other than 10 business days to the equivalent of a 10-business-day holding period. A Board-regulated institution that converts its VaR-based measure in such a manner must be able to justify the reasonableness of its approach to the satisfaction of the Board.

(2) The VaR-based measure must be based on a historical observation period of at least one year. Data used to determine the VaR-based measure must be relevant to the Board-regulated institution's actual exposures and of sufficient quality to support the calculation of risk-based capital requirements. The Board-regulated institution must update data sets at least monthly or more frequently as changes in market conditions or portfolio composition warrant. For a Board-regulated institution that uses a weighting scheme or other method for the historical observation period, the Board-regulated institution must either:

- (i) Use an effective observation period of at least one year in which the average time lag of the observations is at least six months; or
- (ii) Demonstrate to the Board that its

weighting scheme is more effective than a weighting scheme with an average time lag of at least six months representing the volatility of the Board-regulated institution's trading portfolio over a full business cycle. A Board-regulated institution using this option must update its data more frequently than monthly and in a manner appropriate for the type of weighting scheme.

(c) A Board-regulated institution must divide its portfolio into a number of significant subportfolios approved by the Board for subportfolio backtesting purposes. These subportfolios must be sufficient to allow the Board-regulated institution and the Board to assess the adequacy of the VaR model at the risk factor level; the Board will evaluate the appropriateness of these subportfolios relative to the value and composition of the Board-regulated institution's covered positions. The Board-regulated institution must retain and make available to the Board the following information for each subportfolio for each business day over the previous two years (500 business days), with no more than a 60-day lag:

- (1) A daily VaR-based measure for the subportfolio calibrated to a one-tail, 99.0 percent confidence level;
- (2) The daily profit or loss for the subportfolio (that is, the net change in price of the positions held in the portfolio at the end of the previous business day); and
- (3) The p-value of the profit or loss on each day (that is, the probability of observing a profit that is less than, or a loss that is greater than, the amount reported for purposes of paragraph (c)(2) of this section based on the model used to calculate the VaR-based measure described in paragraph (c)(1) of this section).

3-2306

SECTION 217.206—Stressed VaR-Based Measure

(a) *General requirement.* At least weekly, a Board-regulated institution must use the same internal model(s) used to calculate its VaR-based measure to calculate a stressed VaR-based measure.

(b) *Quantitative requirements for stressed VaR-based measure.*

(1) A Board-regulated institution must calculate a stressed VaR-based measure for its covered positions using the same model(s) used to calculate the VaR-based measure, subject to the same confidence level and holding period applicable to the VaR-based measure under section 217.205, but with model inputs calibrated to historical data from a continuous 12-month period that reflects a period of significant financial stress appropriate to the Board-regulated institution's current portfolio.

(2) The stressed VaR-based measure must be calculated at least weekly and be no less than the Board-regulated institution's VaR-based measure.

(3) A Board-regulated institution must have policies and procedures that describe how it determines the period of significant financial stress used to calculate the Board-regulated institution's stressed VaR-based measure under this section and must be able to provide empirical support for the period used. The Board-regulated institution must obtain the prior approval of the Board for, and notify the Board if the Board-regulated institution makes any material changes to, these policies and procedures. The policies and procedures must address:

- (i) How the Board-regulated institution links the period of significant financial stress used to calculate the stressed VaR-based measure to the composition and directional bias of its current portfolio; and
- (ii) The Board-regulated institution's process for selecting, reviewing, and updating the period of significant financial stress used to calculate the stressed VaR-based measure and for monitoring the appropriateness of the period to the Board-regulated institution's current portfolio.

(4) Nothing in this section prevents the Board from requiring a Board-regulated institution to use a different period of significant financial stress in the calculation of the stressed VaR-based measure.

institution must use one of the methods in this section to measure the specific risk for each of its debt, equity, and securitization positions with specific risk.

(b) *Modeled specific risk.* A Board-regulated institution may use models to measure the specific risk of covered positions as provided in paragraph (a) of section 205 of this subpart (therefore, excluding securitization positions that are not modeled under section 209 of this subpart). A Board-regulated institution must use models to measure the specific risk of correlation trading positions that are modeled under section 217.209.

(1) *Requirements for specific risk modeling.*

(i) If a Board-regulated institution uses internal models to measure the specific risk of a portfolio, the internal models must:

- (A) Explain the historical price variation in the portfolio;
- (B) Be responsive to changes in market conditions;
- (C) Be robust to an adverse environment, including signaling rising risk in an adverse environment; and
- (D) Capture all material components of specific risk for the debt and equity positions in the portfolio. Specifically, the internal models must:

- (1) Capture event risk and idiosyncratic risk; and
- (2) Capture and demonstrate sensitivity to material differences between positions that are similar but not identical and to changes in portfolio composition and concentrations.

(ii) If a Board-regulated institution calculates an incremental risk measure for a portfolio of debt or equity positions under section 208 of this subpart, the Board-regulated institution is not required to capture default and credit migration risks in its internal models used to measure the specific risk of those portfolios.

(2) *Specific risk fully modeled for one or more portfolios.* If the Board-regulated institution's VaR-based measure captures all material aspects of specific risk for one or more of its portfolios of debt, equity, or correlation trading positions, the Board-

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SECTION 217.207—Specific Risk

(a) *General requirement.* A Board-regulated

regulated institution has no specific risk add-on for those portfolios for purposes of paragraph (a)(2)(iii) of section 217.204.

(c) *Specific risk not modeled.*

(1) If the Board-regulated institution's VaR-based measure does not capture all material aspects of specific risk for a portfolio of debt, equity, or correlation trading positions, the Board-regulated institution must calculate a specific-risk add-on for the portfolio under the standardized measurement method as described in section 217.210.

(2) A Board-regulated institution must calculate a specific risk add-on under the standardized measurement method as described in section 217.210 for all of its securitization positions that are not modeled under section 217.209.

3-2308

SECTION 217.208—Incremental Risk

(a) *General requirement.* A Board-regulated institution that measures the specific risk of a portfolio of debt positions under section 217.207(b) using internal models must calculate at least weekly an incremental risk measure for that portfolio according to the requirements in this section. The incremental risk measure is the Board-regulated institution's measure of potential losses due to incremental risk over a one-year time horizon at a one-tail, 99.9 percent confidence level, either under the assumption of a constant level of risk, or under the assumption of constant positions. With the prior approval of the Board, a Board-regulated institution may choose to include portfolios of equity positions in its incremental risk model, provided that it consistently includes such equity positions in a manner that is consistent with how the Board-regulated institution internally measures and manages the incremental risk of such positions at the portfolio level. If equity positions are included in the model, for modeling purposes default is considered to have occurred upon the default of any debt of the issuer of the equity position. A Board-regulated institution may not include correlation trading positions or securitization positions in its incremental risk measure.

(b) *Requirements for incremental risk model-*
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ing. For purposes of calculating the incremental risk measure, the incremental risk model must:

(1) Measure incremental risk over a one-year time horizon and at a one-tail, 99.9 percent confidence level, either under the assumption of a constant level of risk, or under the assumption of constant positions.

(i) A constant level of risk assumption means that the Board-regulated institution rebalances, or rolls over, its trading positions at the beginning of each liquidity horizon over the one-year horizon in a manner that maintains the Board-regulated institution's initial risk level. The Board-regulated institution must determine the frequency of rebalancing in a manner consistent with the liquidity horizons of the positions in the portfolio. The liquidity horizon of a position or set of positions is the time required for a Board-regulated institution to reduce its exposure to, or hedge all of its material risks of, the position(s) in a stressed market. The liquidity horizon for a position or set of positions may not be less than the shorter of three months or the contractual maturity of the position.

(ii) A constant position assumption means that the Board-regulated institution maintains the same set of positions throughout the one-year horizon. If a Board-regulated institution uses this assumption, it must do so consistently across all portfolios.

(iii) A Board-regulated institution's selection of a constant position or a constant risk assumption must be consistent between the Board-regulated institution's incremental risk model and its comprehensive risk model described in section 209 of this subpart, if applicable.

(iv) A Board-regulated institution's treatment of liquidity horizons must be consistent between the Board-regulated institution's incremental risk model and its comprehensive risk model described in section 209, if applicable.

(2) Recognize the impact of correlations between default and migration events among obligors.

(3) Reflect the effect of issuer and market

concentrations, as well as concentrations that can arise within and across product classes during stressed conditions.

(4) Reflect netting only of long and short positions that reference the same financial instrument.

(5) Reflect any material mismatch between a position and its hedge.

(6) Recognize the effect that liquidity horizons have on dynamic hedging strategies. In such cases, a Board-regulated institution must:

(i) Choose to model the rebalancing of the hedge consistently over the relevant set of trading positions;

(ii) Demonstrate that the inclusion of rebalancing results in a more appropriate risk measurement;

(iii) Demonstrate that the market for the hedge is sufficiently liquid to permit rebalancing during periods of stress; and

(iv) Capture in the incremental risk model any residual risks arising from such hedging strategies.

(7) Reflect the nonlinear impact of options and other positions with material nonlinear behavior with respect to default and migration changes.

(8) Maintain consistency with the Board-regulated institution's internal risk management methodologies for identifying, measuring, and managing risk.

(c) *Calculation of incremental risk capital requirement.* The incremental risk capital requirement is the greater of:

(1) The average of the incremental risk measures over the previous 12 weeks; or

(2) The most recent incremental risk measure.

3-2309

SECTION 217.209—Comprehensive Risk

(a) *General requirement.*

(1) Subject to the prior approval of the Board, a Board-regulated institution may use the method in this section to measure comprehensive risk, that is, all price risk, for one or more portfolios of correlation trading positions.

(2) A Board-regulated institution that measures the price risk of a portfolio of correla-

tion trading positions using internal models must calculate at least weekly a comprehensive risk measure that captures all price risk according to the requirements of this section. The comprehensive risk measure is either:

(i) The sum of:

(A) The Board-regulated institution's modeled measure of all price risk determined according to the requirements in paragraph (b) of this section; and

(B) A surcharge for the Board-regulated institution's modeled correlation trading positions equal to the total specific risk add-on for such positions as calculated under section 210 of this subpart multiplied by 8.0 percent; or

(ii) With approval of the Board and provided the Board-regulated institution has met the requirements of this section for a period of at least one year and can demonstrate the effectiveness of the model through the results of ongoing model validation efforts including robust benchmarking, the greater of:

(A) The Board-regulated institution's modeled measure of all price risk determined according to the requirements in paragraph (b) of this section; or

(B) The total specific risk add-on that would apply to the bank's modeled correlation trading positions as calculated under section 210 of this subpart multiplied by 8.0 percent.

(b) *Requirements for modeling all price risk.*

If a Board-regulated institution uses an internal model to measure the price risk of a portfolio of correlation trading positions:

(1) The internal model must measure comprehensive risk over a one-year time horizon at a one-tail, 99.9 percent confidence level, either under the assumption of a constant level of risk, or under the assumption of constant positions.

(2) The model must capture all material price risk, including but not limited to the following:

(i) The risks associated with the contractual structure of cash flows of the position, its issuer, and its underlying exposures;

- (ii) Credit spread risk, including nonlinear price risks;
 - (iii) The volatility of implied correlations, including nonlinear price risks such as the cross-effect between spreads and correlations;
 - (iv) Basis risk;
 - (v) Recovery rate volatility as it relates to the propensity for recovery rates to affect tranche prices; and
 - (vi) To the extent the comprehensive risk measure incorporates the benefits of dynamic hedging, the static nature of the hedge over the liquidity horizon must be recognized. In such cases, a Board-regulated institution must:
 - (A) Choose to model the rebalancing of the hedge consistently over the relevant set of trading positions;
 - (B) Demonstrate that the inclusion of rebalancing results in a more appropriate risk measurement;
 - (C) Demonstrate that the market for the hedge is sufficiently liquid to permit rebalancing during periods of stress; and
 - (D) Capture in the comprehensive risk model any residual risks arising from such hedging strategies;
- (3) The Board-regulated institution must use market data that are relevant in representing the risk profile of the Board-regulated institution's correlation trading positions in order to ensure that the Board-regulated institution fully captures the material risks of the correlation trading positions in its comprehensive risk measure in accordance with this section; and
- (4) The Board-regulated institution must be able to demonstrate that its model is an appropriate representation of comprehensive risk in light of the historical price variation of its correlation trading positions.
- (c) *Requirements for stress testing.*
- (1) A Board-regulated institution must at least weekly apply specific, supervisory stress scenarios to its portfolio of correlation trading positions that capture changes in:
 - (i) Default rates;
 - (ii) Recovery rates;
 - (iii) Credit spreads;
 - (iv) Correlations of underlying exposures; and
 - (v) Correlations of a correlation trading position and its hedge.
 - (2) *Other requirements.*
 - (i) A Board-regulated institution must retain and make available to the Board the results of the supervisory stress testing, including comparisons with the capital requirements generated by the Board-regulated institution's comprehensive risk model.
 - (ii) A Board-regulated institution must report to the Board promptly any instances where the stress tests indicate any material deficiencies in the comprehensive risk model.
- (d) *Calculation of comprehensive risk capital requirement.* The comprehensive risk capital requirement is the greater of:
- (1) The average of the comprehensive risk measures over the previous 12 weeks; or
 - (2) The most recent comprehensive risk measure.

3-2310**SECTION 217.210—Standardized Measurement Method for Specific Risk**

(a) *General requirement.* A Board-regulated institution must calculate a total specific risk add-on for each portfolio of debt and equity positions for which the Board-regulated institution's VaR-based measure does not capture all material aspects of specific risk and for all securitization positions that are not modeled under section 217.209. A Board-regulated institution must calculate each specific risk add-on in accordance with the requirements of this section. Notwithstanding any other definition or requirement in this subpart, a position that would have qualified as a debt position or an equity position but for the fact that it qualifies as a correlation trading position under paragraph (2) of the definition of correlation trading position in section 217.2, shall be considered a debt position or an equity position, respectively, for purposes of this section 210 of this subpart.

- (1) The specific risk add-on for an individual debt or securitization position that

represents sold credit protection is capped at the notional amount of the credit derivative contract. The specific risk add-on for an individual debt or securitization position that represents purchased credit protection is capped at the current fair value of the transaction plus the absolute value of the present value of all remaining payments to the protection seller under the transaction. This sum is equal to the value of the protection leg of the transaction.

(2) For debt, equity, or securitization positions that are derivatives with linear payoffs, a Board-regulated institution must assign a specific risk-weighting factor to the fair value of the effective notional amount of the underlying instrument or index portfolio, except for a securitization position for which the Board-regulated institution directly calculates a specific risk add-on using the SFA in paragraph (b)(2)(vii)(B) of this section. A swap must be included as an effective notional position in the underlying instrument or portfolio, with the receiving side treated as a long position and the paying side treated as a short position. For debt, equity, or securitization positions that are derivatives with nonlinear payoffs, a Board-regulated institution must risk weight the fair value of the effective notional amount of the underlying instrument or portfolio multiplied by the derivative's delta.

(3) For debt, equity, or securitization positions, a Board-regulated institution may net long and short positions (including derivatives) in identical issues or identical indices. A Board-regulated institution may also net positions in depositary receipts against an opposite position in an identical equity in different markets, provided that the Board-regulated institution includes the costs of conversion.

(4) A set of transactions consisting of either a debt position and its credit derivative hedge or a securitization position and its credit derivative hedge has a specific risk add-on of zero if:

(i) The debt or securitization position is fully hedged by a total return swap (or similar instrument where there is a matching of swap payments and changes

in fair value of the debt or securitization position);

(ii) There is an exact match between the reference obligation of the swap and the debt or securitization position;

(iii) There is an exact match between the currency of the swap and the debt or securitization position; and

(iv) There is either an exact match between the maturity date of the swap and the maturity date of the debt or securitization position; or, in cases where a total return swap references a portfolio of positions with different maturity dates, the total return swap maturity date must match the maturity date of the underlying asset in that portfolio that has the latest maturity date.

(5) The specific risk add-on for a set of transactions consisting of either a debt position and its credit derivative hedge or a securitization position and its credit derivative hedge that does not meet the criteria of paragraph (a)(4) of this section is equal to 20.0 percent of the capital requirement for the side of the transaction with the higher specific risk add-on when:

(i) The credit risk of the position is fully hedged by a credit default swap or similar instrument;

(ii) There is an exact match between the reference obligation of the credit derivative hedge and the debt or securitization position;

(iii) There is an exact match between the currency of the credit derivative hedge and the debt or securitization position; and

(iv) There is either an exact match between the maturity date of the credit derivative hedge and the maturity date of the debt or securitization position; or, in the case where the credit derivative hedge has a standard maturity date:

(A) The maturity date of the credit derivative hedge is within 30 business days of the maturity date of the debt or securitization position; or

(B) For purchased credit protection, the maturity date of the credit derivative hedge is later than the maturity date of the debt or securitization posi-

tion, but is no later than the standard maturity date for that instrument that immediately follows the maturity date of the debt or securitization position. The maturity date of the credit derivative hedge may not exceed the maturity date of the debt or securitization position by more than 90 calendar days.

(6) The specific risk add-on for a set of transactions consisting of either a debt position and its credit derivative hedge or a securitization position and its credit derivative hedge that does not meet the criteria of either paragraph (a)(4) or (a)(5) of this section, but in which all or substantially all of the price risk has been hedged, is equal to the specific risk add-on for the side of the transaction with the higher specific risk add-on.

(b) *Debt and securitization positions.*

(1) The total specific risk add-on for a portfolio of debt or securitization positions is the sum of the specific risk add-ons for individual debt or securitization positions, as computed under this section. To determine the specific risk add-on for individual debt or securitization positions, a Board-

regulated institution must multiply the absolute value of the current fair value of each net long or net short debt or securitization position in the portfolio by the appropriate specific risk-weighting factor as set forth in paragraphs (b)(2)(i) through (b)(2)(vii) of this section.

(2) For the purpose of this section, the appropriate specific risk-weighting factors include:

(i) *Sovereign debt positions.*

(A) In accordance with Table 1 to section 217.210, a Board-regulated institution must assign a specific risk-weighting factor to a sovereign debt position based on the CRC applicable to the sovereign, and, as applicable, the remaining contractual maturity of the position, or if there is no CRC applicable to the sovereign, based on whether the sovereign entity is a member of the OECD. Notwithstanding any other provision in this subpart, sovereign debt positions that are backed by the full faith and credit of the United States are treated as having a CRC of 0.

Table 1 to section 217.210—Specific risk-weighting factors for sovereign debt positions

		Specific risk-weighting factor (in percent)	
CRC	0-1	0.0	
	2-3	Remaining contractual maturity of 6 months or less	0.25
		Remaining contractual maturity of greater than 6 and up to and including 24 months	1.0
		Remaining contractual maturity exceeds 24 months	1.6
	4-6	8.0	
7	12		
OECD member with no CRC		0.0	
Non-OECD member with no CRC		8.0	
Sovereign default		12.0	

(B) Notwithstanding paragraph (b)(2)(i)(A) of this section, a Board-regulated institution may assign to a sovereign debt position a specific risk-

weighting factor that is lower than the applicable specific risk-weighting factor in Table 1 to section 217.210 if:

(1) The position is denominated in the sovereign entity's currency;

(2) The Board-regulated institution has at least an equivalent amount of liabilities in that currency; and

(3) The sovereign entity allows banks under its jurisdiction to assign the lower specific risk-weighting factor to the same exposures to the sovereign entity.

(C) A Board-regulated institution must assign a 12.0 percent specific risk-weighting factor to a sovereign debt position immediately upon determination a default has occurred; or if a default has occurred within the previous five years.

(D) A Board-regulated institution must assign a 0.0 percent specific risk-weighting factor to a sovereign debt position if the sovereign entity is a member of the OECD and does not have a CRC assigned to it, except as provided in paragraph (b)(2)(i)(C) of this section.

(E) A Board-regulated institution must assign an 8.0 percent specific risk-weighting factor to a sovereign debt position if the sovereign is not a member of the OECD and does not have a CRC assigned to it, except as provided in paragraph (b)(2)(i)(C) of this section.

(ii) *Certain supranational entity and multilateral development bank debt positions.* A Board-regulated institution may assign a 0.0 percent specific risk-weighting factor to a debt position that is an exposure to the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, the European Stability Mechanism, the European Financial Stability Facility, or an MDB.

(iii) *GSE debt positions.* A Board-regulated institution must assign a 1.6 percent specific risk-weighting factor to a debt position that is an exposure to a GSE. Notwithstanding the foregoing, a Board-regulated institution must assign

an 8.0 percent specific risk-weighting factor to preferred stock issued by a GSE.

(iv) *Depository institution, foreign bank, and credit union debt positions.*

(A) Except as provided in paragraph (b)(2)(iv)(B) of this section, a Board-regulated institution must assign a specific risk-weighting factor to a debt position that is an exposure to a depository institution, a foreign bank, or a credit union, in accordance with Table 2 to section 217.210, based on the CRC that corresponds to that entity's home country or the OECD membership status of that entity's home country if there is no CRC applicable to the entity's home country, and, as applicable, the remaining contractual maturity of the position.

(B) A Board-regulated institution must assign a specific risk-weighting factor of 8.0 percent to a debt position that is an exposure to a depository institution or a foreign bank that is includable in the depository institution's or foreign bank's regulatory capital and that is not subject to deduction as a reciprocal holding under section 217.22.

(C) A Board-regulated institution must assign a 12.0 percent specific risk-weighting factor to a debt position that is an exposure to a foreign bank immediately upon determination that a default by the foreign bank's home country has occurred or if a default by the foreign bank's home country has occurred within the previous five years.

(v) *PSE debt positions.*

(A) Except as provided in paragraph (b)(2)(v)(B) of this section, a Board-regulated institution must assign a specific risk-weighting factor to a debt position that is an exposure to a PSE in accordance with Tables 3 and 4 to section 217.210 depending on the position's categorization as a general obligation or revenue obligation based on the CRC that corresponds to the PSE's home country or the OECD membership status of the PSE's home country if there is no CRC applicable to the

PSE’s home country, and, as applicable, the remaining contractual maturity of the position, as set forth in Tables 3 and 4 of this section.

(B) A Board-regulated institution may assign a lower specific risk-weighting factor than would otherwise apply under Tables 3 and 4 of this section to a debt position that is an exposure to a foreign PSE if:

(I) The PSE’s home country allows banks under its jurisdiction to assign a lower specific risk-weighting factor to such position; and

(2) The specific risk-weighting factor is not lower than the risk weight that corresponds to the PSE’s home country in accordance with Tables 3 and 4 of this section.

(C) A Board-regulated institution must assign a 12.0 percent specific risk-weighting factor to a PSE debt position immediately upon determination that a default by the PSE’s home country has occurred or if a default by the PSE’s home country has occurred within the previous five years.

Table 2 to section 217.210—Specific risk-weighting factors for depository institution, foreign bank, and credit union debt positions

Specific risk-weighting factor (in percent)		
CRC 0-2 or OECD member with no CRC	Remaining contractual maturity of 6 months or less	0.25
	Remaining contractual maturity of greater than 6 and up to and including 24 months	1.0
	Remaining contractual maturity exceeds 24 months	1.6
CRC 3	8.0	
CRC 4-7	12.0	
Non-OECD member with no CRC	8.0	
Sovereign default	12.0	

(vi) *Corporate debt positions.* Except as otherwise provided in paragraph (b)(2)(vi)(B) of this section, a Board-regulated institution must assign a specific risk-weighting factor to a corporate debt position in accordance with the investment grade methodology in paragraph (b)(2)(vi)(A) of this section.

(A) *Investment grade methodology.*

(I) For corporate debt positions that are exposures to entities that have issued and outstanding publicly

traded instruments, a Board-regulated institution must assign a specific risk-weighting factor based on the category and remaining contractual maturity of the position, in accordance with Table 5 to section 217.210. For purposes of this paragraph (b)(2)(vi)(A)(I), the Board-regulated institution must determine whether the position is in the investment grade or not investment grade category.

Table 3 to section 217.210—Specific risk-weighting factors for PSE general obligation debt positions

	General obligation specific risk-weighting factor (in percent)	
CRC 0-2 or OECD member with no CRC	Remaining contractual maturity of 6 months or less	0.25
	Remaining contractual maturity of greater than 6 and up to and including 24 months	1.0
	Remaining contractual maturity exceeds 24 months	1.6
CRC 3	8.0	
CRC 4-7	12.0	
Non-OECD member with no CRC	8.0	
Sovereign default	12.0	

Table 4 to section 217.210—Specific risk-weighting factors for PSE revenue obligation debt positions

	Revenue obligation specific risk-weighting factor (in percent)	
CRC 0-1 or OECD member with no CRC	Remaining contractual maturity of 6 months or less	0.25
	Remaining contractual maturity of greater than 6 and up to and including 24 months	1.0
	Remaining contractual maturity exceeds 24 months	1.6
CRC 2-3	8.0	
CRC 4-7	12.0	
Non-OECD member with no CRC	8.0	
Sovereign default	12.0	

Table 5 to section 217.210—Specific risk-weighting factors for corporate debt positions under the investment grade methodology

Category	Remaining contractual maturity	Specific risk-weighting factor (in percent)
Investment grade	6 months or less	0.50
	Greater than 6 and up to and including 24 months	2.00
	Greater than 24 months	4.00
Non-investment grade	12.00	

(2) A Board-regulated institution must assign an 8.0 percent specific risk-weighting factor for corporate debt positions that are exposures to entities that do not have publicly traded instruments outstanding.

(B) *Limitations.*

(1) A Board-regulated institution

must assign a specific risk-weighting factor of at least 8.0 percent to an interest-only mortgage-backed security that is not a securitization position.

(2) A Board-regulated institution shall not assign a corporate debt position a specific risk-weighting factor

that is lower than the specific risk-weighting factor that corresponds to the CRC of the issuer's home country, if applicable, in table 1 of this section.

(vii) *Securitization positions.*

(A) *General requirements.*

(1) A Board-regulated institution that is not an advanced approaches Board-regulated institution or is a U.S. intermediate holding company that is required to be established or designated pursuant to 12 CFR 252.153 and that is not calculating risk-weighted assets according to subpart E must assign a specific risk-weighting factor to a securitization position using either the simplified supervisory formula approach (SSFA) in paragraph (b)(2)(vii)(C) of this section (and section 217.211) or assign a specific risk-weighting factor of 100 percent to the position.

(2) A Board-regulated institution that is an advanced approaches Board-regulated institution or is a U.S. intermediate holding company that is required to be established or designated pursuant to 12 CFR 252.153 and that is calculating risk-weighted assets according to subpart E must calculate a specific risk add-on for a securitization position in accordance with paragraph (b)(2)(vii)(B) of this section if the Board-regulated institution and the securitization position each qualifies to use the SFA in section 217.143. A Board-regulated institution that is an advanced approaches Board-regulated institution or is a U.S. intermediate holding company that is required to be established or designated pursuant to 12 CFR 252.153 and that is calculating risk-weighted assets according to subpart E with a securitization position that does not qualify for the SFA under paragraph (b)(2)(vii)(B) of this section may assign a specific risk-weighting factor to the securitization position using the SSFA in accordance with para-

graph (b)(2)(vii)(C) of this section or assign a specific risk-weighting factor of 100 percent to the position.

(3) A Board-regulated institution must treat a short securitization position as if it is a long securitization position solely for calculation purposes when using the SFA in paragraph (b)(2)(vii)(B) of this section or the SSFA in paragraph (b)(2)(vii)(C) of this section.

(B) *SFA.* To calculate the specific risk add-on for a securitization position using the SFA, a Board-regulated institution that is an advanced approaches Board-regulated institution must set the specific risk add-on for the position equal to the risk-based capital requirement as calculated under section 217.143.

(C) *SSFA.* To use the SSFA to determine the specific risk-weighting factor for a securitization position, a Board-regulated institution must calculate the specific risk-weighting factor in accordance with section 217.211.

(D) *Nth-to-default credit derivatives.* A Board-regulated institution must determine a specific risk add-on using the SFA in paragraph (b)(2)(vii)(B) of this section, or assign a specific risk-weighting factor using the SSFA in paragraph (b)(2)(vii)(C) of this section to an nth-to-default credit derivative in accordance with this paragraph (b)(2)(vii)(D), regardless of whether the Board-regulated institution is a net protection buyer or net protection seller. A Board-regulated institution must determine its position in the nth-to-default credit derivative as the largest notional amount of all the underlying exposures.

(1) For purposes of determining the specific risk add-on using the SFA in paragraph (b)(2)(vii)(B) of this section or the specific risk-weighting factor for an nth-to-default credit derivative using the SSFA in paragraph (b)(2)(vii)(C) of this section the Board-regulated institution must cal-

culate the attachment point and detachment point of its position as follows:

(i) The attachment point (parameter A) is the ratio of the sum of the notional amounts of all underlying exposures that are subordinated to the Board-regulated institution's position to the total notional amount of all underlying exposures. For purposes of the SSFA, parameter A is expressed as a decimal value between zero and one. For purposes of using the SFA in paragraph (b)(2)(vii)(B) of this section to calculate the specific add-on for its position in an n^{th} -to-default credit derivative, parameter A must be set equal to the *credit enhancement level* (L) input to the SFA formula in section 143 of this subpart. In the case of a first-to-default credit derivative, there are no underlying exposures that are subordinated to the Board-regulated institution's position. In the case of a second-or-subsequent-to-default credit derivative, the smallest (n-1) notional amounts of the underlying exposure(s) are subordinated to the Board-regulated institution's position.

(ii) The detachment point (parameter D) equals the sum of parameter A plus the ratio of the notional amount of the Board-regulated institution's position in the n^{th} -to-default credit derivative to the total notional amount of all underlying exposures. For purposes of the SSFA, parameter A is expressed as a decimal value between zero and one. For purposes of using the SFA in paragraph (b)(2)(vii)(B) of this section to calculate the specific risk add-on for its position in an n^{th} -to-default credit derivative, parameter D must be set to equal the L input plus the *thickness of tranche* T in-

put to the SFA formula in section 217.143 of this subpart.

(2) A Board-regulated institution that does not use the SFA in paragraph (b)(2)(vii)(B) of this section to determine a specific risk-add on, or the SSFA in paragraph (b)(2)(vii)(C) of this section to determine a specific risk-weighting factor for its position in an n^{th} -to-default credit derivative must assign a specific risk-weighting factor of 100 percent to the position.

(c) *Modeled correlation trading positions.* For purposes of calculating the comprehensive risk measure for modeled correlation trading positions under either paragraph (a)(2)(i) or (a)(2)(ii) of section 217.209, the total specific risk add-on is the greater of:

(1) The sum of the Board-regulated institution's specific risk add-ons for each net long correlation trading position calculated under this section; or

(2) The sum of the Board-regulated institution's specific risk add-ons for each net short correlation trading position calculated under this section.

(d) *Non-modeled securitization positions.* For securitization positions that are not correlation trading positions and for securitizations that are correlation trading positions not modeled under section 217.209, the total specific risk add-on is the greater of:

(1) The sum of the Board-regulated institution's specific risk add-ons for each net long securitization position calculated under this section; or

(2) The sum of the Board-regulated institution's specific risk add-ons for each net short securitization position calculated under this section.

(e) *Equity positions.* The total specific risk add-on for a portfolio of equity positions is the sum of the specific risk add-ons of the individual equity positions, as computed under this section. To determine the specific risk add-on of individual equity positions, a Board-regulated institution must multiply the absolute value of the current fair value of each net long or net short equity position by

the appropriate specific risk-weighting factor as determined under this paragraph (e):

(1) The Board-regulated institution must multiply the absolute value of the current fair value of each net long or net short equity position by a specific risk-weighting factor of 8.0 percent. For equity positions that are index contracts comprising a well-diversified portfolio of equity instruments, the absolute value of the current fair value of each net long or net short position is multiplied by a specific risk-weighting factor of 2.0 percent.³⁴

(2) For equity positions arising from the following futures-related arbitrage strategies, a Board-regulated institution may apply a 2.0 percent specific risk-weighting factor to one side (long or short) of each position with the opposite side exempt from an additional capital requirement:

- (i) Long and short positions in exactly the same index at different dates or in different market centers; or
- (ii) Long and short positions in index contracts at the same date in different, but similar indices.

(3) For futures contracts on main indices that are matched by offsetting positions in a basket of stocks comprising the index, a Board-regulated institution may apply a 2.0 percent specific risk-weighting factor to the futures and stock basket positions (long and short), provided that such trades are deliberately entered into and separately controlled, and that the basket of stocks is comprised of stocks representing at least 90.0 percent of the capitalization of the index. A main index refers to the Standard & Poor's 500 Index, the FTSE All-World Index, and any other index for which the Board-regulated institution can demonstrate to the satisfaction of the Board that the equities represented in the index have liquidity, depth of market, and size of bid-ask spreads comparable to equities in the Standard & Poor's 500 Index and FTSE All-World Index.

(f) *Due diligence requirements for securitization positions.*

³⁴ A portfolio is well-diversified if it contains a large number of individual equity positions, with no single position representing a substantial portion of the portfolio's total fair value.

(1) A Board-regulated institution must demonstrate to the satisfaction of the Board a comprehensive understanding of the features of a securitization position that would materially affect the performance of the position by conducting and documenting the analysis set forth in paragraph (f)(2) of this section. The Board-regulated institution's analysis must be commensurate with the complexity of the securitization position and the materiality of the position in relation to capital.

(2) A Board-regulated institution must demonstrate its comprehensive understanding for each securitization position by:

(i) Conducting an analysis of the risk characteristics of a securitization position prior to acquiring the position and document such analysis within three business days after acquiring position, considering:

(A) Structural features of the securitization that would materially impact the performance of the position, for example, the contractual cash flow waterfall, waterfall-related triggers, credit enhancements, liquidity enhancements, fair value triggers, the performance of organizations that service the position, and deal-specific definitions of default;

(B) Relevant information regarding the performance of the underlying credit exposure(s), for example, the percentage of loans 30, 60, and 90 days past due; default rates; prepayment rates; loans in foreclosure; property types; occupancy; average credit score or other measures of creditworthiness; average loan-to-value ratio; and industry and geographic diversification data on the underlying exposure(s);

(C) Relevant market data of the securitization, for example, bid-ask spreads, most recent sales price and historical price volatility, trading volume, implied market rating, and size, depth and concentration level of the market for the securitization; and

(D) For resecuritization positions, performance information on the underlying securitization exposures, for example, the issuer name and credit quality, and the characteristics and per-

formance of the exposures underlying the securitization exposures.

- (ii) On an on-going basis (no less frequently than quarterly), evaluating, reviewing, and updating as appropriate the analysis required under paragraph (f)(1) of this section for each securitization position.

3-2311

SECTION 217.211—Simplified Supervisory Formula Approach (SSFA)

(a) *General requirements.* To use the SSFA to determine the specific risk-weighting factor for a securitization position, a Board-regulated institution must have data that enables it to assign accurately the parameters described in paragraph (b) of this section. Data used to assign the parameters described in paragraph (b) of this section must be the most currently available data; if the contracts governing the underlying exposures of the securitization require payments on a monthly or quarterly basis, the data used to assign the parameters described in paragraph (b) of this section must be no more than 91 calendar days old. A Board-regulated institution that does not have the appropriate data to assign the parameters described in paragraph (b) of this section must assign a specific risk-weighting factor of 100 percent to the position.

(b) *SSFA parameters.* To calculate the specific risk-weighting factor for a securitization position using the SSFA, a Board-regulated institution must have accurate information on the five inputs to the SSFA calculation described in paragraphs (b)(1) through (b)(5) of this section.

(1) K_G is the weighted-average (with unpaid principal used as the weight for each exposure) total capital requirement of the underlying exposures calculated using subpart D. K_G is expressed as a decimal value between zero and one (that is, an average risk weight of 100 percent represents a value of K_G equal to 0.08).

(2) Parameter W is expressed as a decimal value between zero and one. Parameter W is the ratio of the sum of the dollar amounts of any underlying exposures of the securitization that meet any of the criteria

as set forth in paragraphs (b)(2)(i) through (vi) of this section to the balance, measured in dollars, of underlying exposures:

- (i) Ninety days or more past due;
- (ii) Subject to a bankruptcy or insolvency proceeding;
- (iii) In the process of foreclosure;
- (iv) Held as real estate owned;
- (v) Has contractually deferred payments for 90 days or more, other than principal or interest payments deferred on:
 - (A) Federally-guaranteed student loans, in accordance with the terms of those guarantee programs; or
 - (B) Consumer loans, including non-federally-guaranteed student loans, provided that such payments are deferred pursuant to provisions included in the contract at the time funds are disbursed that provide for period(s) of deferral that are not initiated based on changes in the creditworthiness of the borrower; or
- (vi) Is in default.

(3) Parameter A is the attachment point for the position, which represents the threshold at which credit losses will first be allocated to the position. Except as provided in section 217.210(b)(2)(vii)(D) for n^{th} -to-default credit derivatives, parameter A equals the ratio of the current dollar amount of underlying exposures that are subordinated to the position of the Board-regulated institution to the current dollar amount of underlying exposures. Any reserve account funded by the accumulated cash flows from the underlying exposures that is subordinated to the position that contains the Board-regulated institution's securitization exposure may be included in the calculation of parameter A to the extent that cash is present in the account. Parameter A is expressed as a decimal value between zero and one.

(4) Parameter D is the detachment point for the position, which represents the threshold at which credit losses of principal allocated to the position would result in a total loss of principal. Except as provided in section 217.210(b)(2)(vii)(D) for n^{th} -to-default credit derivatives, parameter D equals parameter A plus the ratio of the current dollar amount of the securitization positions

that are *pari passu* with the position (that is, have equal seniority with respect to credit risk) to the current dollar amount of the underlying exposures. Parameter D is expressed as a decimal value between zero and one.

(5) A supervisory calibration parameter, p, is equal to 0.5 for securitization positions that are not resecuritization positions and equal to 1.5 for resecuritization positions.

(c) *Mechanics of the SSFA.* K_G and W are used to calculate K_A , the augmented value of K_G , which reflects the observed credit quality of the underlying exposures. K_A is defined in paragraph (d) of this section. The values of parameters A and D, relative to K_A determine the specific risk-weighting factor assigned to a position as described in this paragraph (c) and paragraph (d) of this section. The specific risk-weighting factor assigned to a securitization position, or portion of a position, as appropriate, is the larger of the specific risk-weighting factor determined in accordance with this paragraph (c), paragraph (d) of this section, and a specific risk-weighting factor of 1.6 percent.

(1) When the detachment point, parameter D, for a securitization position is less than or equal to K_A , the position must be assigned a specific risk-weighting factor of 100 percent.

(2) When the attachment point, parameter A, for a securitization position is greater than or equal to K_A , the Board-regulated institution must calculate the specific risk-weighting factor in accordance with paragraph (d) of this section.

(3) When A is less than K_A and D is greater than K_A , the specific risk-weighting factor is a weighted-average of 1.00 and K_{SSFA} calculated under paragraphs (c)(3)(i) and (c)(3)(ii) of this section. For the purpose of this calculation:

(i) The weight assigned to 1.00 equals

$$\frac{K_A - A}{D - A}$$

(ii) The weight assigned to K_{SSFA} equals

$$\frac{D - K_A}{D - A}$$

. The specific risk-weighting factor is equal to:

$$SRWF = 100 \cdot \left[\left(\frac{K_A - A}{D - A} \right) \cdot 1.00 \right] + \left[\left(\frac{D - K_A}{D - A} \right) \cdot K_{SSFA} \right]$$

(d) *SSFA equation.*

(1) The Board-regulated institution must define the following parameters:

$$K_A = (1 - W) \cdot K_G + (0.5 \cdot W)$$

$$a = \frac{1}{p \cdot K_A}$$

$$u = D - K_A$$

$$l = \max(A - K_A, 0)$$

$e = 2.71828$, the base of the natural logarithms.

(2) Then the Board-regulated institution must calculate K_{SSFA} according to the following formula:

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

(3) The specific risk-weighting factor for the position (expressed as a percent) is equal to $K_{SSFA} \times 100$.

3-2312

SECTION 217.212—Market Risk Disclosures

(a) *Scope.* A Board-regulated institution must comply with this section unless it is a consolidated subsidiary of a bank holding company or a depository institution that is subject to these requirements or of a non-U.S. banking organization that is subject to comparable public disclosure requirements in its home jurisdiction. A Board-regulated institution must make timely public disclosures each calendar quarter. If a significant change occurs, such that the most recent reporting amounts are no longer reflective of the Board-regulated institution's capital adequacy and risk profile, then a brief discussion of this change and its likely impact must be provided as soon as practicable thereafter. Qualitative disclosures that typically do not change each quarter may be disclosed annually, provided any significant changes are disclosed in the interim. If a Board-regulated institution believes that disclosure of specific commercial or financial information would prejudice seriously its position by making public certain information that is either proprietary or confidential in nature,

the Board-regulated institution is not required to disclose these specific items, but must disclose more general information about the subject matter of the requirement, together with the fact that, and the reason why, the specific items of information have not been disclosed. The Board-regulated institution's management may provide all of the disclosures required by this section in one place on the Board-regulated institution's public website or may provide the disclosures in more than one public financial report or other regulatory reports, provided that the Board-regulated institution publicly provides a summary table specifically indicating the location(s) of all such disclosures.

(b) *Disclosure policy.* The Board-regulated institution must have a formal disclosure policy approved by the board of directors that addresses the Board-regulated institution's approach for determining its market risk disclosures. The policy must address the associated internal controls and disclosure controls and procedures. The board of directors and senior management must ensure that appropriate verification of the disclosures takes place and that effective internal controls and disclosure controls and procedures are maintained. One or more senior officers of the Board-regulated institution must attest that the disclosures meet the requirements of this subpart, and the board of directors and senior management are responsible for establishing and maintaining an effective internal control structure over financial reporting, including the disclosures required by this section.

(c) *Quantitative disclosures.*

(1) For each material portfolio of covered positions, the Board-regulated institution must provide timely public disclosures of the following information at least quarterly:

- (i) The high, low, and mean VaR-based measures over the reporting period and the VaR-based measure at period-end;
- (ii) The high, low, and mean stressed VaR-based measures over the reporting period and the stressed VaR-based measure at period-end;
- (iii) The high, low, and mean incremental risk capital requirements over the re-

porting period and the incremental risk capital requirement at period-end;

(iv) The high, low, and mean comprehensive risk capital requirements over the reporting period and the comprehensive risk capital requirement at period-end, with the period-end requirement broken down into appropriate risk classifications (for example, default risk, migration risk, correlation risk);

(v) Separate measures for interest rate risk, credit spread risk, equity price risk, foreign exchange risk, and commodity price risk used to calculate the VaR-based measure; and

(vi) A comparison of VaR-based estimates with actual gains or losses experienced by the Board-regulated institution, with an analysis of important outliers.

(2) In addition, the Board-regulated institution must disclose publicly the following information at least quarterly:

- (i) The aggregate amount of on-balance sheet and off-balance sheet securitization positions by exposure type; and
- (ii) The aggregate amount of correlation trading positions.

(d) *Qualitative disclosures.* For each material portfolio of covered positions, the Board-regulated institution must provide timely public disclosures of the following information at least annually after the end of the fourth calendar quarter, or more frequently in the event of material changes for each portfolio:

- (1) The composition of material portfolios of covered positions;
- (2) The Board-regulated institution's valuation policies, procedures, and methodologies for covered positions including, for securitization positions, the methods and key assumptions used for valuing such positions, any significant changes since the last reporting period, and the impact of such change;
- (3) The characteristics of the internal models used for purposes of this subpart. For the incremental risk capital requirement and the comprehensive risk capital requirement, this must include:

- (i) The approach used by the Board-

- regulated institution to determine liquidity horizons;
- (ii) The methodologies used to achieve a capital assessment that is consistent with the required soundness standard; and
 - (iii) The specific approaches used in the validation of these models;
- (4) A description of the approaches used for validating and evaluating the accuracy of internal models and modeling processes for purposes of this subpart;
- (5) For each market risk category (that is, interest rate risk, credit spread risk, equity price risk, foreign exchange risk, and commodity price risk), a description of the stress tests applied to the positions subject to the factor;
- (6) The results of the comparison of the Board-regulated institution's internal estimates for purposes of this subpart with actual outcomes during a sample period not used in model development;
- (7) The soundness standard on which the Board-regulated institution's internal capital adequacy assessment under this subpart is based, including a description of the methodologies used to achieve a capital adequacy assessment that is consistent with the soundness standard;
- (8) A description of the Board-regulated institution's processes for monitoring changes in the credit and market risk of securitization positions, including how those processes differ for resecuritization positions; and

- (9) A description of the Board-regulated institution's policy governing the use of credit risk mitigation to mitigate the risks of securitization and resecuritization positions.

SECTIONS 217.213–217.299—
[Reserved]

3-2400

SUBPART G—TRANSITION
PROVISIONS

SECTION 217.300—Transitions

(a) *Capital conservation and countercyclical capital buffer.*

(1) From January 1, 2014 through December 31, 2015, a Board-regulated institution is not subject to limits on distributions and discretionary bonus payments under section 217.11 of subpart B of this part notwithstanding the amount of its capital conservation buffer or any applicable countercyclical capital buffer amount.

(2) Notwithstanding section 217.11, beginning January 1, 2016 through December 31, 2018 a Board-regulated institution's maximum payout ratio shall be determined as set forth in Table 1 to section 217.300.

Table 1 to section 217.300

Transition period	Capital conservation buffer	Maximum payout ratio (as a percentage of eligible retained income)
Calendar year 2016	Greater than 0.625 percent plus 25 percent of any applicable countercyclical capital buffer amount and 25 percent of any applicable GSIB surcharge	No payout ratio limitation applies under this section
	Less than or equal to 0.625 percent plus 25 percent of any applicable countercyclical capital buffer amount and 25 percent of any applicable GSIB surcharge, <i>and</i> greater than 0.469 percent plus 17.25 percent of any applicable countercyclical capital buffer amount and 17.25 percent of any applicable GSIB surcharge	60 percent
	Less than or equal to 0.469 percent plus 17.25 percent of any applicable countercyclical capital buffer amount and 17.25 percent of any applicable GSIB surcharge, <i>and</i> greater than 0.313 percent plus 12.5 percent of any applicable countercyclical capital buffer amount and 12.5 percent of any applicable GSIB surcharge	40 percent
	Less than or equal to 0.313 percent plus 12.5 percent of any applicable countercyclical capital buffer amount and 12.5 percent of any applicable GSIB surcharge, <i>and</i> greater than 0.156 percent plus 6.25 percent of any applicable countercyclical capital buffer amount and 6.25 percent of any applicable GSIB surcharge	20 percent
	Less than or equal to 0.156 percent plus 6.25 percent of any applicable countercyclical capital buffer amount and 6.25 percent of any applicable GSIB surcharge	0 percent
	Greater than 1.25 percent plus 50 percent of any applicable countercyclical capital buffer amount and 50 percent of any applicable GSIB surcharge	No payout ratio limitation applies under this section
Calendar year 2017	Less than or equal to 1.25 percent plus 50 percent of any applicable countercyclical capital buffer amount and 50 percent of any applicable GSIB surcharge, <i>and</i> greater than 0.938 percent plus 37.5 percent of any applicable countercyclical capital buffer amount and 37.5 percent of any applicable GSIB surcharge	60 percent
	Less than or equal to 0.938 percent plus 37.5 percent of any applicable countercyclical capital buffer amount and 37.5 percent of any applicable GSIB surcharge, <i>and</i> greater than 0.625 percent plus 25 percent of any applicable countercyclical capital buffer amount and 25 percent of any applicable GSIB surcharge	40 percent
	Less than or equal to 0.625 percent plus 25 percent of any applicable countercyclical capital buffer amount and 25 percent of any applicable GSIB surcharge, <i>and</i> greater than 0.313 percent plus 12.5 percent of any applicable countercyclical capital buffer amount and 12.5 percent of any applicable GSIB surcharge	20 percent
	Less than or equal to 0.313 percent plus 12.5 percent of any applicable countercyclical capital buffer amount and 12.5 percent of any applicable GSIB surcharge	0 percent
	Greater than 1.25 percent plus 50 percent of any applicable countercyclical capital buffer amount and 50 percent of any applicable GSIB surcharge	No payout ratio limitation applies under this section

Table 1 to section 217.300—continued

Transition period	Capital conservation buffer	Maximum payout ratio (as a percentage of eligible retained income)
Calendar year 2018	Greater than 1.875 percent plus 75 percent of any applicable countercyclical capital buffer amount and 75 percent of any applicable GSIB surcharge	No payout ratio limitation applies under this section
	Less than or equal to 1.875 percent plus 75 percent of any applicable countercyclical capital buffer amount and 75 percent of any applicable GSIB surcharge, <i>and</i> greater than 1.406 percent plus 56.25 percent of any applicable countercyclical capital buffer amount and 56.25 percent of any applicable GSIB surcharge	60 percent
	Less than or equal to 1.406 percent plus 56.25 percent of any applicable countercyclical capital buffer amount and 56.25 percent of any applicable GSIB surcharge, <i>and</i> greater than 0.938 percent plus 37.5 percent of any applicable countercyclical capital buffer amount and 37.5 percent of any applicable GSIB surcharge	40 percent
	Less than or equal to 0.938 percent plus 37.5 percent of any applicable countercyclical capital buffer amount and 37.5 percent of any applicable GSIB surcharge, <i>and</i> greater than 0.469 percent plus 18.75 percent of any applicable countercyclical capital buffer amount and 18.75 percent of any applicable GSIB surcharge	20 percent
	Less than or equal to 0.469 percent plus 18.75 percent of any applicable countercyclical capital buffer amount and 18.75 percent of any applicable GSIB surcharge	0 percent

(b) [Reserved]

Table 2 to section 217.300

Transition period	Transition deductions under section 217.22(a)(3)-(6)		
	Transition deductions under section 217.22(a)(1) and (7)	Transition deductions under section 217.22(a)(3)-(6)	Transition deductions under section 217.22(a)(3)-(6)
	Percentage of the deductions from common equity tier 1 capital	Percentage of the deductions from common equity tier 1 capital	Percentage of the deductions from tier 1 capital
Calendar year 2014	100	20	80
Calendar year 2015	100	40	60
Calendar year 2016	100	60	40
Calendar year 2017	100	80	20
Calendar year 2018, and thereafter	100	100	0

Table 3 to section 217.300

Transition period	Transition deductions under section 217.22(a)(2)—Percentage of the deductions from common equity tier 1 capital
Calendar year 2014	20
Calendar year 2015	40
Calendar year 2016	60
Calendar year 2017	80
Calendar year 2018, and thereafter	100

Table 4 to section 217.300

Transition period	Transition adjustments under section 217.22(b)(2)	
	Percentage of the adjustment applied to common equity tier 1 capital	Percentage of the adjustment applied to tier 1 capital
Calendar year 2014	20	80
Calendar year 2015	40	60
Calendar year 2016	60	40
Calendar year 2017	80	20
Calendar year 2018, and thereafter	100	0

Table 5 to section 217.300

Transition period	Percentage of the transition AOCI adjustment amount to be applied to common equity tier 1 capital
Calendar year 2014	80
Calendar year 2015	60
Calendar year 2016	40
Calendar year 2017	20
Calendar year 2018, and thereafter	0

Table 6 to section 217.300

Transition period	Percentage of unrealized gains on available-for-sale preferred stock classified as an equity security under GAAP and available-for-sale equity exposures that may be included in tier 2 capital
Calendar year 2014	36
Calendar year 2015	27
Calendar year 2016	18
Calendar year 2017	9
Calendar year 2018, and thereafter	0

Table 7 to section 217.300

Transition period	Transitions for deductions under section 217.22(e) and (d)—Percentage of additional deductions from regulatory capital
Calendar year 2014	20
Calendar year 2015	40
Calendar year 2016	60
Calendar year 2017	80
Calendar year 2018, and thereafter	100

(c) *Non-qualifying capital instruments.*

(1) *Depository institution holding companies with total consolidated assets of more than \$15 billion as of December 31, 2009 that were not mutual holding companies prior to May 19, 2010.* The transition provisions in this paragraph (c)(1) apply to debt or equity instruments that do not meet the criteria for additional tier 1 or tier 2 capital instruments in section 217.20, but that were issued and included in tier 1 or tier 2 capital, respectively prior to May 19, 2010 (non-qualifying capital instruments), and that were issued by a depository institution holding company with total consolidated assets greater than or equal to \$15 billion as of December 31, 2009 that was not a mutual holding company prior to May 19, 2010 (2010 MHC) (depository institution holding company of \$15 billion or more).

(i) A depository institution holding company of \$15 billion or more may include in tier 1 and tier 2 capital non-qualifying capital instruments up to the applicable percentage set forth in Table 8 to section 217.300 of the aggregate outstanding principal amounts of non-qualifying tier 1 and tier 2 capital instruments, respectively, that are outstanding as of January 1, 2014, beginning January 1, 2014, for a depository institution holding company of \$15 billion or more that is an advanced approaches Board-regulated institution that is not a savings and loan holding company, and beginning January 1, 2015, for all other depository institution holding companies of \$15 billion or more.

(ii) A depository institution holding company of \$15 billion or more must apply the applicable percentages set forth in Table 8 to section 217.300 separately to

the aggregate amounts of its tier 1 and tier 2 non-qualifying capital instruments.

(iii) The amount of non-qualifying capital instruments that must be excluded from additional tier 1 capital in accordance with this section may be included in tier 2 capital without limitation, provided the instruments meet the criteria for tier 2 capital set forth in section 217.20(d).

(iv) Non-qualifying capital instruments that do not meet the criteria for tier 2 capital set forth in section 217.20(d) may be included in tier 2 capital as follows:

(A) A depository institution holding company of \$15 billion or more that is not an advanced approaches Board-regulated institution may include non-qualifying capital instruments that have been phased-out of tier 1 capital in tier 2 capital, and

(B) During calendar years 2014 and 2015, a depository institution holding company of \$15 billion or more that is an advanced approaches Board-regulated institution may include non-qualifying capital instruments in tier 2 capital that have been phased out of tier 1 capital in accordance with Table 8 to section 217.300. Beginning January 1, 2016, a depository institution holding company of \$15 billion or more that is an advanced approaches Board-regulated institution may include non-qualifying capital instruments in tier 2 capital that have been phased out of tier 1 capital in accordance with Table 8, up to the applicable percentages set forth in Table 9 to section 217.300.

(2) *Mergers and acquisitions.*

- (i) A depository institution holding company of \$15 billion or more that acquires after December 31, 2013 either a depository institution holding company with total consolidated assets of less than \$15 billion as of December 31, 2009 (depository institution holding company under \$15 billion) or a depository institution holding company that is a 2010 MHC, may include in regulatory capital the non-qualifying capital instruments issued by the acquired organization up to the applicable percentages set forth in Table 8 to section 217.300.
- (ii) If a depository institution holding company under \$15 billion acquires after December 31, 2013 a depository institution holding company under \$15 billion or a 2010 MHC, and the resulting organization has total consolidated assets of \$15 billion or more as reported on the resulting organization's FR Y-9C for the period in which the transaction occurred, the resulting organization may include in regulatory capital non-qualifying instruments of the resulting organization up to the applicable percentages set forth in Table 8 to section 217.300.
- (3) *Depository institution holding companies under \$15 billion and 2010 MHCs.*
- (i) Non-qualifying capital instruments issued by depository institution holding companies under \$15 billion and 2010 MHCs prior to May 19, 2010, may be included in additional tier 1 or tier 2 capital if the instrument was included in tier 1 or tier 2 capital, respectively, as of January 1, 2014.
- (ii) Non-qualifying capital instruments includable in tier 1 capital are subject to a limit of 25 percent of tier 1 capital elements, excluding any non-qualifying capital instruments and after applying all regulatory capital deductions and adjustments to tier 1 capital.
- (iii) Non-qualifying capital instruments that are not included in tier 1 as a result of the limitation in paragraph (c)(3)(ii) of this section are includable in tier 2 capital.
- (4) *Depository institutions.*
- (i) Beginning on January 1, 2014, a depository institution that is an advanced approaches Board-regulated institution, and beginning on January 1, 2015, all other depository institutions, may include in regulatory capital debt or equity instruments issued prior to September 12, 2010 that do not meet the criteria for additional tier 1 or tier 2 capital instruments in section 217.20 but that were included in tier 1 or tier 2 capital respectively as of September 12, 2010 (non-qualifying capital instruments issued prior to September 12, 2010) up to the percentage of the outstanding principal amount of such non-qualifying capital instruments as of January 1, 2014 in accordance with Table 9 to section 217.300.
- (ii) Table 9 to section 217.300 applies separately to tier 1 and tier 2 non-qualifying capital instruments.
- (iii) The amount of non-qualifying capital instruments that cannot be included in additional tier 1 capital under this section may be included in tier 2 capital without limitation, provided that the instruments meet the criteria for tier 2 capital instruments under section 217.20(d).
- (d) [Reserved]

Table 8 to section 217.300

Transition period (calendar year)	Percentage of non-qualifying capital instruments includable in additional tier 1 or tier 2 capital for a depository institution holding company of \$15 billion or more
Calendar year 2014	50
Calendar year 2015	25
Calendar year 2016, and thereafter	0

Table 9 to section 217.300

Transition period (calendar year)	Percentage of non-qualifying capital instruments includable in additional tier 1 or tier 2 capital
Calendar year 2014	80
Calendar year 2015	70
Calendar year 2016	60
Calendar year 2017	50
Calendar year 2018	40
Calendar year 2019	30
Calendar year 2020	20
Calendar year 2021	10
Calendar year 2022, and thereafter	0

Table 10 to section 217.300

Transition period	Percentage of the amount of surplus or non-qualifying minority interest that can be included in regulatory capital during the transition period
Calendar year 2014	80
Calendar year 2015	60
Calendar year 2016	40
Calendar year 2017	20
Calendar year 2018, and thereafter	0

(e) *Prompt corrective action.* For purposes of 12 CFR part 208, subpart D, a Board-regulated institution must calculate its capital measures and tangible equity ratio in accordance with the transition provisions in this section.

(f) Until July 21, 2015, this part will not apply to any bank holding company subsidiary of a foreign banking organization that is currently relying on Supervision and Regulation Letter SR-01-01 issued by the Board (as in effect on May 19, 2010).

(g) A Board-regulated institution that is not an advanced approaches Board-regulated institution may apply the treatment under sections 217.21 and 217.22(c)(2), (5), (6), and (d)(2) applicable to an advanced approaches Board-regulated institution during the calendar quarter beginning January 1, 2020. During the quarter beginning January 1, 2020, a Board-regulated institution that makes such an election must deduct 80 percent of the amount otherwise required to be deducted under section 217.22(d)(2) and must apply a 100 percent risk weight to assets not deducted under section 217.22(d)(2). In addition, during the

quarter beginning January 1, 2020, a Board-regulated institution that makes such an election must include in its regulatory capital 20 percent of any minority interest that exceeds the amount of minority interest includable in regulatory capital under section 217.21 as it applies to an advanced approaches Board-regulated institution. A Board-regulated institution that is not an advanced approaches Board-regulated institution must apply the treatment under sections 217.21 and 217.22 applicable to a Board-regulated institution that is not an advanced approaches Board-regulated institution beginning April 1, 2020, and thereafter.

(h) *SA-CCR.* An advanced approaches Board-regulated institution may use CEM rather than SA-CCR for purposes of sections 217.34(a) and 217.132(c) until January 1, 2022. A Board-regulated institution must provide prior notice to the Board if it decides to begin using SA-CCR before January 1, 2022. On January 1, 2022, and thereafter, an advanced approaches Board-regulated institution must use SA-CCR for purposes of sections 217.34(a), 217.132(c), and 217.135(d). Once an advanced approaches Board-regulated insti-

tution has begun to use SA-CCR, the advanced approaches Board-regulated institution may not change to use CEM.

(i) *Default fund contributions.* Prior to January 1, 2022, a Board-regulated institution that calculates the exposure amounts of its derivative contracts under the standardized approach for counterparty credit risk in section 217.132(c) may calculate the risk-weighted asset amount for a default fund contribution to a QCCP under either method 1 under section 217.35(d)(3)(i) or method 2 under section 217.35(d)(3)(ii), rather than under section 217.133(d).

3-2401

SECTION 217.301—Current Expected Credit Losses (CECL) Transition

(a) *CECL transition provision.*

(1) Except as provided in paragraph (d) of this section, a Board-regulated institution may elect to use a CECL transition provision pursuant to this section only if the Board-regulated institution records a reduction in retained earnings due to the adoption of CECL as of the beginning of the fiscal year in which the Board-regulated institution adopts CECL.

(2) Except as provided in paragraph (d) of this section, a Board-regulated institution that elects to use the CECL transition provision must elect to use the CECL transition provision in the first Call Report or FR Y-9C that includes CECL filed by the Board-regulated institution after it adopts CECL.

(3) A Board-regulated institution that does not elect to use the CECL transition provision as of the first Call Report or FR Y-9C that includes CECL filed as described in paragraph (a)(2) of this section may not elect to use the CECL transition provision in subsequent reporting periods.

(b) *Definitions.* For purposes of this section, the following definitions apply:

(1) *Transition period* means the three-year period beginning the first day of the fiscal year in which a Board-regulated institution adopts CECL and reflects CECL in its first Call Report or FR Y-9C filed after that date; or, for the 2020 CECL transition pro-

vision under paragraph (d) of this section, the five-year period beginning on the earlier of the date a Board-regulated institution was required to adopt CECL for accounting purposes under GAAP (as in effect January 1, 2020), or the first day of the fiscal year that begins during the 2020 calendar year in which the Board-regulated institution files regulatory reports that include CECL.

(2) *CECL transitional amount* means the difference net of any DTAs, in the amount of a Board-regulated institution's retained earnings as of the beginning of the fiscal year in which the Board-regulated institution adopts CECL from the amount of the Board-regulated institution's retained earnings as of the closing of the fiscal year-end immediately prior to the Board-regulated institution's adoption of CECL.

(3) *DTA transitional amount* means the difference in the amount of a Board-regulated institution's DTAs arising from temporary differences as of the beginning of the fiscal year in which the Board-regulated institution adopts CECL from the amount of the Board-regulated institution's DTAs arising from temporary differences as of the closing of the fiscal year-end immediately prior to the Board-regulated institution's adoption of CECL.

(4) *AACL transitional amount* means the difference in the amount of a Board-regulated institution's AACL as of the beginning of the fiscal year in which the Board-regulated institution adopts CECL and the amount of the Board-regulated institution's ALLL as of the closing of the fiscal year-end immediately prior to the Board-regulated institution's adoption of CECL.

(5) *Eligible credit reserves transitional amount* means the difference in the amount of a Board-regulated institution's eligible credit reserves as of the beginning of the fiscal year in which the Board-regulated institution adopts CECL from the amount of the Board-regulated institution's eligible credit reserves as of the closing of the fiscal year-end immediately prior to the Board-regulated institution's adoption of CECL.

(c) *Calculation of the three-year CECL transition provision.*

(1) For purposes of the election described in paragraph (a)(1) of this section and except as provided in paragraph (d) of this section, a Board-regulated institution must make the following adjustments in its calculation of regulatory capital ratios:

- (i) Increase retained earnings by 75 percent of its CECL transitional amount during the first year of the transition period, increase retained earnings by 50 percent of its CECL transitional amount during the second year of the transition period, and increase retained earnings by 25 percent of its CECL transitional amount during the third year of the transition period;
- (ii) Decrease amounts of DTAs arising from temporary differences by 75 percent of its DTA transitional amount during the first year of the transition period, decrease amounts of DTAs arising from temporary differences by 50 percent of its DTA transitional amount during the second year of the transition period, and decrease amounts of DTAs arising from temporary differences by 25 percent of its DTA transitional amount during the third year of the transition period;
- (iii) Decrease amounts of AACL by 75 percent of its AACL transitional amount during the first year of the transition period, decrease amounts of AACL by 50 percent of its AACL transitional amount during the second year of the transition period, and decrease amounts of AACL by 25 percent of its AACL transitional amount during the third year of the transition period; and
- (iv) Increase average total consolidated assets as reported on the Call Report or FR Y-9C for purposes of the leverage ratio by 75 percent of its CECL transitional amount during the first year of the transition period, increase average total consolidated assets as reported on the Call Report or FR Y-9C for purposes of the leverage ratio by 50 percent of its CECL transitional amount during the second year of the transition period, and increase average total consolidated assets as reported on the Call Report or FR

Y-9C for purposes of the leverage ratio by 25 percent of its CECL transitional amount during the third year of the transition period.

(2) For purposes of the election described in paragraph (a)(1) of this section, an advanced approaches or Category III Board-regulated institution must make the following additional adjustments to its calculation of its applicable regulatory capital ratios:

(i) Increase total leverage exposure for purposes of the supplementary leverage ratio by 75 percent of its CECL transitional amount during the first year of the transition period, increase total leverage exposure for purposes of the supplementary leverage ratio by 50 percent of its CECL transitional amount during the second year of the transition period, and increase total leverage exposure for purposes of the supplementary leverage ratio by 25 percent of its CECL transitional amount during the third year of the transition period; and

(ii) An advanced approaches Board-regulated institution that has completed the parallel run process and that has received notification from the Board pursuant to section 217.121(d) must decrease amounts of eligible credit reserves by 75 percent of its eligible credit reserves transitional amount during the first year of the transition period, decrease amounts of eligible credit reserves by 50 percent of its eligible credit reserves transitional amount during the second year of the transition provision, and decrease amounts of eligible credit reserves by 25 percent of its eligible credit reserves transitional amount during the third year of the transition period.

(d) *2020 CECL transition provision.* Notwithstanding paragraph (a) of this section, a Board-regulated institution that adopts CECL for accounting purposes under GAAP as of the first day of a fiscal year that begins during the 2020 calendar year may elect to use the transitional amounts and modified transitional amounts in paragraph (d)(1) of this section with the 2020 CECL transition provision calculation in paragraph (d)(2) of this section to

adjust its calculation of regulatory capital ratios during each quarter of the transition period in which a Board-regulated institution uses CECL for purposes of its Call Report or FR Y-9C. A Board-regulated institution may use the transition provision in this paragraph (d) if it has a positive modified CECL transitional amount during any quarter ending in 2020, and makes the election in the Call Report or FR Y-9C filed for the same quarter. A Board-regulated institution that does not calculate a positive modified CECL transitional amount in any quarter is not required to apply the adjustments in its calculation of regulatory capital ratios in paragraph (d)(2) of this section in that quarter.

(1) *Definitions.* For purposes of the 2020 CECL transition provision calculation in paragraph (d)(2) of this section, the following definitions apply:

(i) *Modified CECL transitional amount* means:

(A) During the first two years of the transition period, the difference between AACL as reported in the most recent Call Report or FR Y-9C, and the AACL as of the beginning of the fiscal year in which the Board-regulated institution adopts CECL, multiplied by 0.25, plus the CECL transitional amount; and

(B) During the last three years of the transition period, the difference between AACL as reported in the Call Report or Y-9C at the end of the second year of the transition period and the AACL as of the beginning of the fiscal year in which the Board-regulated institution adopts CECL, multiplied by 0.25, plus the CECL transitional amount.

(ii) *Modified AACL transitional amount* means:

(A) During the first two years of the transition period, the difference between AACL as reported in the most recent Call Report or FR Y-9C, and the AACL as of the beginning of the fiscal year in which the Board-regulated institution adopts CECL, multiplied by 0.25, plus the AACL transitional amount; and

(B) During the last three years of the transition period, the difference between AACL as reported in the Call Report or FR Y-9C at the end of the second year of the transition period and the AACL as of the beginning of the fiscal year in which the Board-regulated institution adopts CECL, multiplied by 0.25, plus the AACL transitional amount.

(2) *Calculation of 2020 CECL transition provision.*

(i) A Board-regulated institution that has elected the 2020 CECL transition provision described in this paragraph (d) may make the following adjustments in its calculation of regulatory capital ratios:

(A) Increase retained earnings by 100 percent of its modified CECL transitional amount during the first year of the transition period, increase retained earnings by 100 percent of its modified CECL transitional amount during the second year of the transition period, increase retained earnings by 75 percent of its modified CECL transitional amount during the third year of the transition period, increase retained earnings by 50 percent of its modified CECL transitional amount during the fourth year of the transition period, and increase retained earnings by 25 percent of its modified CECL transitional amount during the fifth year of the transition period;

(B) Decrease amounts of DTAs arising from temporary differences by 100 percent of its DTA transitional amount during the first year of the transition period, decrease amounts of DTAs arising from temporary differences by 100 percent of its DTA transitional amount during the second year of the transition period, decrease amounts of DTAs arising from temporary differences by 75 percent of its DTA transitional amount during the third year of the transition period, decrease amounts of DTAs arising from temporary differences by 50 percent of its DTA transitional amount during the fourth year of the transition period, and decrease

amounts of DTAs arising from temporary differences by 25 percent of its DTA transitional amount during the fifth year of the transition period;

(C) Decrease amounts of AACL by 100 percent of its modified AACL transitional amount during the first year of the transition period, decrease amounts of AACL by 100 percent of its modified AACL transitional amount during the second year of the transition period, decrease amounts of AACL by 75 percent of its modified AACL transitional amount during the third year of the transition period, decrease amounts of AACL by 50 percent of its AACL transitional amount during the fourth year of the transition period, and decrease amounts of AACL by 25 percent of its AACL transitional amount during the fifth year of the transition period; and

(D) Increase average total consolidated assets as reported on the Call Report or FR Y-9C for purposes of the leverage ratio by 100 percent of its modified CECL transitional amount during the first year of the transition period, increase average total consolidated assets as reported on the Call Report or FR Y-9C for purposes of the leverage ratio by 100 percent of its modified CECL transitional amount during the second year of the transition period, increase average total consolidated assets as reported on the Call Report or FR Y-9C for purposes of the leverage ratio by 75 percent of its modified CECL transitional amount during the third year of the transition period, increase average total consolidated assets as reported on the Call Report or FR Y-9C for purposes of the leverage ratio by 50 percent of its modified CECL transitional amount during the fourth year of the transition period, and increase average total consolidated assets as reported on the Call Report or FR Y-9C for purposes of the leverage ratio by 25 percent of its modified CECL transitional amount during the fifth year of the transition period.

(ii) An advanced approaches or Category III Board-regulated institution that has elected the 2020 CECL transition provision described in this paragraph (d) may make the following additional adjustments to its calculation of its applicable regulatory capital ratios:

(A) Increase total leverage exposure for purposes of the supplementary leverage ratio by 100 percent of its modified CECL transitional amount during the first year of the transition period, increase total leverage exposure for purposes of the supplementary leverage ratio by 100 percent of its modified CECL transitional amount during the second year of the transition period, increase total leverage exposure for purposes of the supplementary leverage ratio by 75 percent of its modified CECL transitional amount during the third year of the transition period, increase total leverage exposure for purposes of the supplementary leverage ratio by 50 percent of its modified CECL transitional amount during the fourth year of the transition period, and increase total leverage exposure for purposes of the supplementary leverage ratio by 25 percent of its modified CECL transitional amount during the fifth year of the transition period; and

(B) An advanced approaches Board-regulated institution that has completed the parallel run process and that has received notification from the Board pursuant to section 217.121(d) must decrease amounts of eligible credit reserves by 100 percent of its eligible credit reserves transitional amount during the first year of the transition period, decrease amounts of eligible credit reserves by 100 percent of its eligible credit reserves transitional amount during the second year of the transition period, decrease amounts of eligible credit reserves by 75 percent of its eligible credit reserves transitional amount during the third year of the transition period, decrease amounts of eligible credit reserves by 50 per

cent of its eligible credit reserves transitional amount during the fourth year of the transition period, and decrease amounts of eligible credit reserves by 25 percent of its eligible credit reserves transitional amount during the fifth year of the transition period.

(e) *Eligible credit reserves shortfall.* An advanced approaches Board-regulated institution that has completed the parallel run process and that has received notification from the Board pursuant to section 217.121(d), whose amount of expected credit loss exceeded its eligible credit reserves immediately prior to the adoption of CECL, and that has an increase in common equity tier 1 capital as of the beginning of the fiscal year in which it adopts CECL after including the first year portion of the CECL transitional amount (or modified CECL transitional amount) must decrease its CECL transitional amount used in paragraph (c) of this section (or modified CECL transitional amount used in paragraph (d) of this section) by the full amount of its DTA transitional amount.

(f) *Business combinations.* Notwithstanding any other requirement in this section, for purposes of this paragraph (f), in the event of a business combination involving a Board-regulated institution where one or both Board-regulated institutions have elected the treatment described in this section:

- (1) If the acquirer Board-regulated institution (as determined under GAAP) elected the treatment described in this section, the acquirer Board-regulated institution must continue to use the transitional amounts (unaffected by the business combination) that it calculated as of the date that it adopted CECL through the end of its transition period.
- (2) If the acquired company (as determined under GAAP) elected the treatment described in this section, any transitional amount of the acquired company does not transfer to the resulting Board-regulated institution.

3-2402

SECTION 217.302—Exposures Related to the Money Market Mutual Fund Liquidity Facility

Notwithstanding any other section of this part, a Board-regulated institution may exclude exposures acquired pursuant to a non-recourse loan that is provided as part of the Money Market Mutual Fund Liquidity Facility, announced by the Board on March 18, 2020, from total leverage exposure, average total consolidated assets, advanced approaches total risk-weighted assets, and standardized total risk-weighted assets, as applicable. For the purpose of this provision, a Board-regulated institution's liability under the facility must be reduced by the purchase price of the assets acquired with funds advanced from the facility.

3-2403

SECTION 217.303—Temporary Exclusions from Total Leverage Exposure

(a) *In general.* Subject to paragraphs (b) through (g) of this section and notwithstanding any other requirement in this part, when calculating on-balance sheet assets as of each day of a reporting quarter for purposes of determining the Board-regulated institution's total leverage exposure under section 217.10(c), a Board-regulated institution that is a depository institution holding company or a U.S. intermediate holding company must, and a Board-regulated institution that is a state member bank may, exclude the balance sheet carrying value of the following items:

- (1) U.S. Treasury securities; and
- (2) Funds on deposit at a Federal Reserve Bank.

(b) *Opt-in period.* Before applying the relief provided in paragraph (a) of this section, a state member bank must first notify the Board before July 1, 2020.

(c) *Calculation of relief.* When calculating on-balance sheet assets as of each day of a reporting quarter, the relief provided in paragraph (a) of this section applies from the beginning of the reporting quarter in which

the state member bank filed an opt-in notice through the termination date specified in paragraph (d) of this section.

(d) *Termination of exclusions.* This section shall cease to be effective after the reporting period that ends March 31, 2021.

(e) *Custodial banking organizations.* A custodial banking organization must reduce the amount in section 217.10(c)(2)(x)(A)(I) (to no less than zero) by any amount excluded under paragraph (a)(2) of this section.

(f) *Disclosure.* Notwithstanding Table 13 to section 217.173, a Board-regulated institution that is required to make the disclosures pursuant to section 217.173 must exclude the items excluded pursuant to paragraph (a) of this section from Table 13 to section 217.173.

(g) *Board approval for distributions.* During the calendar quarter beginning on July 1, 2020, and until March 31, 2021, no state member bank that has opted in to the relief provided under paragraph (a) of this section may make a distribution, or create an obligation to make such a distribution, without prior Board approval. When reviewing a request under this paragraph (g), the Board will consider all relevant factors, including whether the distribution would be contrary to the safety and soundness of the state member bank; the nature, purpose, and extent of the request; and the particular circumstances giving rise to the request.

3-2404

SECTION 217.304—Temporary Changes to the Community Bank Leverage Ratio Framework

(a)(1) A Board-regulated institution that is not an advanced approaches Board-regulated institution and that meets all the criteria to be a qualifying community banking organization under section 217.12(a)(2) but for section 217.12(a)(2)(i) is a qualifying community banking organization if it has a leverage ratio equal to or greater than 8 percent.

(2) Notwithstanding section 217.12(a)(1), a qualifying community banking organization that has made an election to use the community bank leverage ratio framework un-

der section 217.12(a)(3) shall be considered to have met the minimum capital requirements under section 217.10, the capital ratio requirements for the well capitalized capital category under section 208.43(b)(1) of this chapter, if applicable, and any other capital or leverage requirements to which the qualifying community banking organization is subject, if it has a leverage ratio equal to or greater than 8 percent.

(b) Notwithstanding section 217.12(c)(6) and subject to section 217.12(c)(5), a Board-regulated institution that has a leverage ratio of 7 percent or greater has the grace period described in section 217.12(c)(1) through (4). A Board-regulated institution that has a leverage ratio of less than 7 percent does not have a grace period and must comply with the minimum capital requirements under section 217.10(a)(1) and must report the required capital measures under section 217.10(a)(1) for the quarter in which it reports a leverage ratio of less than 7 percent.

(c) Pursuant to section 4012 of the Coronavirus Aid, Relief, and Economic Security Act, the requirements provided under paragraphs (a) and (b) of this section are effective during the period beginning on April 23, 2020 and ending on the sooner of:

(1) The termination date of the national emergency concerning the novel coronavirus disease outbreak declared by the President on March 13, 2020, under the National Emergencies Act (50 U.S.C. 1601 *et seq.*); or

(2) December 31, 2020.

(d) Upon the termination of the requirements in paragraphs (a) and (b) of this section as provided in paragraph (c) of this section, a Board-regulated institution is subject to the following:

(1) Through December 31, 2020:

(i) A Board-regulated institution that is not an advanced approaches Board-regulated institution and that meets all the criteria to be a qualifying community banking organization under section 217.12(a)(2) but for section 217.12(a)(2)(i) is a qualifying banking or-

ganization if it has a leverage ratio greater than 8 percent.

(ii) Notwithstanding section 217.12(a)(1), a qualifying community banking organization that has made an election to use the community bank leverage ratio framework under section 217.12(a)(3) shall be considered to have met the minimum capital requirements under section 217.10, the capital ratio requirements for the well capitalized capital category under section 208.43(b)(1) of this chapter, if applicable, and any other capital or leverage requirements to which the qualifying community banking organization is subject, if it has a leverage ratio greater than 8 percent.

(iii) Notwithstanding section 217.12(c)(6) and subject to section 217.12(c)(5), a Board-regulated institution that has a leverage ratio of greater than 7 percent has the grace period described in section 217.12(c)(1) through (4). A Board-regulated institution that has a leverage ratio of 7 percent or less does not have a grace period and must comply with the minimum capital requirements under section 217.10(a)(1) and must report the required capital measures under section 217.10(a)(1) for the quarter in which it reports a leverage ratio of 7 percent or less.

(2) From January 1, 2021, through December 31, 2021:

(i) A Board-regulated institution that is not an advanced approaches Board-regulated institution and that meets all the criteria to be a qualifying community banking organization under section 217.12(a)(2) but for section 217.12(a)(2)(i) is a qualifying banking organization if it has a leverage ratio greater than 8.5 percent.

(ii) Notwithstanding section 217.12(a)(1), a qualifying community banking organization that has made an election to use the community bank leverage ratio framework under section 217.12(a)(3) shall be considered to have met the minimum capital requirements under section 217.10, the capital ratio requirements for the well capitalized capital category un-

der section 208.43(b)(1) of this chapter, if applicable, and any other capital or leverage requirements to which the qualifying community banking organization is subject, if it has a leverage ratio greater than 8.5 percent.

(iii) Notwithstanding section 217.12(c)(6) and subject to section 217.12(c)(5), a Board-regulated institution that has a leverage ratio of greater than 7.5 percent has the grace period described in section 217.12(c)(1) through (4). A Board-regulated institution that has a leverage ratio of 7.5 percent or less does not have a grace period and must comply with the minimum capital requirements under section 217.10(a)(1) and must report the required capital measures under section 217.10(a)(1) for the quarter in which it reports a leverage ratio of 7.5 percent or less.

3-2405

SECTION 217.305—Exposures Related to the Paycheck Protection Program Lending Facility

Notwithstanding any other section of this part, a Board-regulated institution may exclude exposures pledged as collateral for a non-recourse loan that is provided as part of the Paycheck Protection Program Lending Facility, announced by the Board on April 7, 2020, from total leverage exposure, average total consolidated assets, advanced approaches total risk-weighted assets, and standardized total risk-weighted assets, as applicable. For the purpose of this section, a Board-regulated institution's liability under the facility must be reduced by the principal amount of the loans pledged as collateral for funds advanced under the facility.

3-2406

SECTION 217.306—Building Block Approach (BBA) Capital Conservation Buffer Transition

(a) Notwithstanding any provision of this part and subject to paragraph (b) of this section, an insurance bank holding company, or insurance savings and loan holding company, that, on January 1, 2023, was not subject to this part is not subject to any restrictions on distribu-

tions or discretionary bonus payments under sections 217.11 and 217.604.

(b) This section ceases to be effective after March 31, 2026.

3-2500

SUBPART H—RISK-BASED CAPITAL SURCHARGE FOR GLOBAL SYSTEMICALLY IMPORTANT BANK HOLDING COMPANIES

SECTION 217.400—Purpose and Applicability

(a) *Purpose.* This subpart implements provisions of section 165 of the Dodd-Frank Act (12 U.S.C. 5365), by establishing a risk-based capital surcharge for global systemically important bank holding companies.

(b) *Applicability.*

(1) *General.* This subpart applies to a bank holding company that:

- (i) Is an advanced approaches Board-regulated institution or a Category III Board-regulated institution;
- (ii) Is not a consolidated subsidiary of a bank holding company; and
- (iii) Is not a consolidated subsidiary of a foreign banking organization.

(2) *Effective date of calculation and surcharge requirements.*

- (i) A bank holding company identified in section 217.400(b)(1) is subject to section 217.402 of this part and must determine whether it qualifies as a global systemically important BHC by December 31 of the year immediately following the year in which the bank holding company becomes an advanced approaches Board-regulated institution or a Category III Board-regulated institution; and
- (ii) A bank holding company that becomes a global systemically important BHC pursuant to section 217.402 must calculate its GSIB surcharge pursuant to section 217.403 by December 31 of the year in which the bank holding company is identified as a global systemically important BHC and must use that GSIB surcharge for purposes of determining its maximum payout ratio under Table 1 to

section 217.11 beginning on January 1 of the year that is immediately following the full calendar year after it is identified as a global systemically important BHC.

(3) *Transition provisions for the calculation and surcharge requirements.*

(i) *GSIB surcharge requirements for bank holding companies with more than \$700 billion in total assets or \$10 trillion in assets under custody.* A bank holding company that is an advanced approaches Board-regulated institution with more than \$700 billion in total assets as reported on the FR Y-9C as of December 31, 2014, or more than \$10 trillion in assets under custody as reported on the FR Y-15 as of December 31, 2014, must calculate its GSIB surcharge by December 31, 2015, and use that GSIB surcharge to determine its maximum payout ratio under Table 1 to section 217.11 beginning on January 1, 2016; provided that for the GSIB surcharges required to be calculated by December 31, 2015 and by December 31, 2016, the bank holding company must calculate its short-term wholesale funding score using the average of its weighted short-term wholesale funding amounts (defined in section 217.406(b)), calculated for July 31, 2015, August 24, 2015, and September 30, 2015.

(ii) *Calculation and GSIB surcharge requirements for other advanced approaches Board-regulated institutions.* A bank holding company that was an advanced approaches Board-regulated institution as of December 31, 2014, and is not described in paragraph (b)(3)(i) of this section must:

(A) Determine whether it qualifies as a global systemically important BHC pursuant to section 217.402 by December 31, 2015; and

(B) To the extent it qualifies as a global systemically important BHC by December 31, 2015, calculate its GSIB surcharge by December 31, 2016. The GSIB surcharge calculated by December 31, 2016, shall equal the method 1 surcharge (defined in section 217.403) of the bank holding company.

(c) *Reservation of authority.*

(1) The Board may apply this subpart to any Board-regulated institution, in whole or in part, by order of the Board based on the institution's capital structure, size, level of complexity, risk profile, scope of operations, or financial condition.

(2) The Board may adjust the amount of the GSIB surcharge applicable to a global systemically important BHC, or extend or accelerate any compliance date of this subpart, if the Board determines that the adjustment, extension, or acceleration is appropriate in light of the capital structure, size, complexity, risk profile, and scope of operations of the global systemically important BHC. In increasing the size of the GSIB surcharge for a global systemically important BHC, the Board shall follow the notice and response procedures in 12 CFR part 263, subpart E [at 8-088.1 *et seq.*].

3-2501**SECTION 217.401—Definitions**

As used in this subpart:

(a) *Aggregate global indicator amount* means, for each systemic indicator, the aggregate measure of that indicator, which is equal to the most recent annual dollar figure published by the Board that represents the sum of systemic indicator values of:

- (1) The 75 largest global banking organizations, as measured by the Basel Committee on Banking Supervision; and
- (2) Any other banking organization that the Basel Committee on Banking Supervision includes in its sample total for that year.

(b) *Assets under custody* means assets held as a custodian on behalf of customers, as reported by the bank holding company on the FR Y-15.

(c) *Average risk-weighted assets* means the four-quarter average of the measure of total risk-weighted assets associated with the lower of the bank holding company's common equity tier 1 risk-based capital ratios, as reported on the bank holding company's FR Y-9C for each quarter of the previous calendar year.

(d) *Brokered deposit* has the meaning set forth in 12 CFR 249.3.

(e) *Consolidated subsidiary* has the meaning set forth in 12 CFR 249.3.

(f) *Covered asset exchange* means a transaction in which a bank holding company has provided assets of a given liquidity category to a counterparty in exchange for assets of a higher liquidity category, and the bank holding company and the counterparty agreed to return such assets to each other at a future date. Categories of assets, in descending order of liquidity, are level 1 liquid assets, level 2A liquid assets, level 2B liquid assets, and assets that are not HQLA. Covered asset exchanges do not include secured funding transactions.

(g) *Financial sector entity* has the meaning set forth in 12 CFR 249.3.

(h) *GAAP* means generally accepted accounting principles as used in the United States.

(i) *High-quality liquid asset (HQLA)* has the meaning set forth in 12 CFR 249.3.

(j) *Cross-jurisdictional claims* means foreign claims on an ultimate risk basis, as reported by the bank holding company on the FR Y-15.

(k) *Cross-jurisdictional liabilities* means total cross-jurisdictional liabilities, as reported by the bank holding company on the FR Y-15.

(l) *Intra-financial system assets* means total intra-financial system assets, as reported by the bank holding company on the FR Y-15.

(m) *Intra-financial system liabilities* means total intra-financial system liabilities, as reported by the bank holding company on the FR Y-15.

(n) *Level 1 liquid asset* is an asset that qualifies as a level 1 liquid asset pursuant to 12 CFR 249.20(a).

(o) *Level 2A liquid asset* is an asset that qualifies as a level 2A liquid asset pursuant to 12 CFR 249.20(b).

(p) *Level 2B liquid asset* is an asset that qualifies as a level 2B liquid asset pursuant to 12 CFR 249.20(c).

(q) *Level 3 assets* means assets valued using Level 3 measurement inputs, as reported by the bank holding company on the FR Y-15.

(r) *Notional amount of over-the-counter (OTC) derivatives* means the total notional amount of OTC derivatives, as reported by the bank holding company on the FR Y-15.

(s) *Operational deposit* has the meaning set forth in 12 CFR 249.3.

(t) *Payments activity* means payments activity, as reported by the bank holding company on the FR Y-15.

(u) *Retail customer or counterparty* has the meaning set forth in 12 CFR 249.3.

(v) *Secured funding transaction* has the meaning set forth in 12 CFR 249.3.

(w) *Securities outstanding* means total securities outstanding, as reported by the bank holding company on the FR Y-15.

(x) *Short position* means a transaction in which a bank holding company has borrowed or otherwise obtained a security from a counterparty and sold that security, and the bank holding company must return the security to the initial counterparty in the future.

(y) *Systemic indicator* includes the following indicators included on the FR Y-15:

- (1) Total exposures;
- (2) Intra-financial system assets;
- (3) Intra-financial system liabilities;
- (4) Securities outstanding;
- (5) Payments activity;
- (6) Assets under custody;
- (7) Underwritten transactions in debt and equity markets;
- (8) Notional amount of over-the-counter (OTC) derivatives;
- (9) Trading and available-for-sale (AFS) securities;
- (10) Level 3 assets;
- (11) Cross-jurisdictional claims; or
- (12) Cross-jurisdictional liabilities.

(z) *Total exposures* means total exposures as reported by the bank holding company on the FR Y-15.

(aa) *Trading and AFS securities* means total adjusted trading and available-for-sale securi-

ties as reported by the bank holding company on the FR Y-15.

(bb) *Underwritten transactions in debt and equity markets* means total underwriting activity as reported by the bank holding company on the FR Y-15.

(cc) *Unsecured wholesale funding* has the meaning set forth in 12 CFR 249.3.

(dd) *Wholesale customer or counterparty* has the meaning set forth in 12 CFR 249.3.

3-2502

SECTION 217.402—Identification as a Global Systemically Important BHC

A bank holding company is a global systemically important BHC if its method 1 score, as calculated under section 217.404, equals or exceeds 130 basis points. Subject to section 217.400(b)(2), a bank holding company must calculate its method 1 score on an annual basis by December 31 of each year.

3-2503

SECTION 217.403—GSIB Surcharge

(a) *General.* Subject to section 217.400(b)(2), a company identified as a global systemically important BHC pursuant to section 217.402 must calculate its GSIB surcharge on an annual basis by December 31 of each year. For any given year, subject to paragraph (d) of this section, the GSIB surcharge is equal to the greater of:

- (1) The method 1 surcharge calculated in accordance with paragraph (b) of this section; and
- (2) The method 2 surcharge calculated in accordance with paragraph (c) of this section.

(b) *Method 1 surcharge.*

- (1) *General.* The method 1 surcharge of a global systemically important BHC is the amount set forth in Table 1 of this section that corresponds to the global systemically important BHC's method 1 score, calculated pursuant to section 217.404.

Table 1 to section 217.403—Method 1 surcharge

Method 1 score	Method 1 surcharge
Below 130	0.0 percent
130-229	1.0 percent
230-329	1.5 percent
330-429	2.0 percent
430-529	2.5 percent
530-629	3.5 percent

(2) *Higher method 1 surcharges.* To the extent that the method 1 score of a global systemically important BHC equals or exceeds 630 basis points, the method 1 surcharge equals the sum of:

- (i) 4.5 percent; and
- (ii) An additional 1.0 percent for each 100 basis points that the global systemically important BHC's score exceeds 630 basis points.

(c) *Method 2 surcharge.*

(1) *General.* The method 2 surcharge of a global systemically important BHC is the amount set forth in Table 2 of this section that corresponds to the global systemically important BHC's method 2 score, calculated pursuant to section 217.405.

Table 2 to section 217.403—Method 2 surcharge

Method 2 score	Method 2 surcharge
Below 130	0.0 percent
130-229	1.0 percent
230-329	1.5 percent
330-429	2.0 percent
430-529	2.5 percent
530-629	3.0 percent
630-729	3.5 percent
730-829	4.0 percent
830-929	4.5 percent
930-1029	5.0 percent
1030-1129	5.5 percent

(2) *Higher method 2 surcharges.* To the extent that the method 2 score of a global systemically important BHC equals or exceeds 1130 basis points, the method 2 surcharge equals the sum of:

- (i) 6.5 percent; and
- (ii) An additional 0.5 percent for each 100 basis points that the global systemi-

cally important BHC's score exceeds 1130 basis points.

(d) *Effective date of an adjusted GSIB surcharge.*

(1) *Increase in GSIB surcharge.* An increase in the GSIB surcharge of a global systemically important BHC will take effect (i.e., be incorporated into the maximum payout ratio under Table 1 to section 217.11) on January 1 of the year that is one full calendar year after the increased GSIB surcharge was calculated.

(2) *Decrease in GSIB surcharge.* A decrease in the GSIB surcharge of a global systemically important BHC will take effect (i.e., be incorporated into the maximum payout ratio under Table 1 to section 217.11) on January 1 of the year immediately following the calendar year in which the decreased GSIB surcharge was calculated.

3-2504

SECTION 217.404—Method 1 Score

(a) *General.* A bank holding company's method 1 score is the sum of its systemic indicator scores for the twelve systemic indicators set forth Table 1 of this section, as determined under paragraph (b) of this section.

(b) *Systemic indicator score.*

(1) Except as provided in paragraph (b)(2) of this section, the systemic indicator score in basis points for a given systemic indicator is equal to:

(i) The ratio of:

- (A) The amount of that systemic indicator, as reported by the bank holding company as of December 31 of the previous calendar year; to
- (B) The aggregate global indicator amount for that systemic indicator published by the Board in the fourth quarter of that year;

(ii) Multiplied by 10,000; and

(iii) Multiplied by the indicator weight corresponding to the systemic indicator as set forth in Table 1 of this section.

(2) *Maximum substitutability score.* The

sum of the systemic indicator scores for the indicators in the substitutability category (assets under custody, payments systems ac-

tivity, and underwriting activity) will not exceed 100 basis points.

Table 1 to section 217.404—Systemic indicator weights

Category	Systemic indicator	Indicator weight
Size	Total exposures	20 percent
Interconnectedness	Intra-financial system assets	6.67 percent
	Intra-financial system liabilities	6.67 percent
	Securities outstanding	6.67 percent
Substitutability	Payments activity	6.67 percent
	Assets under custody	6.67 percent
	Underwritten transactions in debt and equity markets	6.67 percent
Complexity	Notional amount of over-the-counter (OTC) derivatives	6.67 percent
	Trading and available-for-sale (AFS) securities	6.67 percent
	Level 3 assets	6.67 percent
Cross-jurisdictional activity	Cross-jurisdictional claims	10 percent
	Cross-jurisdictional liabilities	10 percent

3-2505

SECTION 217.405—Method 2 Score

(a) *General.* A global systemically important BHC's method 2 score is equal to:

- (1) The sum of:
 - (i) The global systemically important BHC's systemic indicator scores for the nine systemic indicators set forth Table 1 of this section, as determined under paragraph (b) of this section; and
 - (ii) The global systemically important BHC's short-term wholesale funding

score, calculated pursuant to section 217.406.

(b) *Systemic indicator score.* A global systemically important BHC's score for a systemic indicator is equal to:

- (1) The amount of the systemic indicator, as reported by the bank holding company as of December 31 of the previous calendar year, expressed in billions of dollars;
- (2) Multiplied by the coefficient corresponding to the systemic indicator set forth in Table 1 of this section.

Table 1 to section 217.405—Coefficients for systemic indicators

Category	Systemic indicator	Coefficient value (%)
Size	Total exposures	4.423
Interconnectedness	Intra-financial system assets	12.007
	Intra-financial system liabilities	12.490
	Securities outstanding	9.056
Complexity	Notional amount of over-the-counter (OTC) derivatives	0.155
	Trading and available-for-sale (AFS) securities	30.169
	Level 3 assets	161.177
Cross-jurisdictional activity	Cross-jurisdictional claims	9.277
	Cross-jurisdictional liabilities	9.926

3-2506**SECTION 217.406—Short-Term Wholesale Funding Score**

(a) *General.* Except as provided in section 217.400(b)(3)(ii), a global systemically important BHC's short-term wholesale funding score is equal to:

- (1) The average of the global systemically important BHC's weighted short-term wholesale funding amount (defined in paragraph (b) of this section);
- (2) Divided by the global systemically important BHC's average risk-weighted assets; and
- (3) Multiplied by a fixed factor of 350.

(b) *Weighted short-term wholesale funding amount.*

(1) To calculate its weighted short-term wholesale funding amount, a global systemically important BHC must calculate the amount of its short-term wholesale funding on a consolidated basis for each business day of the previous calendar year and weight the components of short-term wholesale funding in accordance with Table 1 of this section.

(2) Short-term wholesale funding includes the following components, each as defined in paragraph (c) of this section:

- (i) All funds that the bank holding com-

pany must pay under each secured funding transaction, other than an operational deposit, with a remaining maturity of 1 year or less;

(ii) All funds that the bank holding company must pay under all unsecured wholesale funding, other than an operational deposit, with a remaining maturity of 1 year or less;

(iii) The fair value of an asset as determined under GAAP that a bank holding company must return under a covered asset exchange with a remaining maturity of 1 year or less;

(iv) The fair value of an asset as determined under GAAP that the bank holding company must return under a short position to the extent that the borrowed asset does not qualify as a Level 1 liquid asset or a Level 2A liquid asset; and

(v) All brokered deposits held at the bank holding company provided by a retail customer or counterparty.

(3) For purposes of calculating the short-term wholesale funding amount and the components thereof, a bank holding company must assume that each asset or transaction described in paragraph (b)(2) of this section matures in accordance with the criteria set forth in 12 CFR 249.31.

Table 1 to section 217.406—Short-term wholesale funding components and weights

Component of short-term wholesale funding	Remaining maturity of 30 days or less or no maturity	Remaining maturity of 31 to 90 days	Remaining maturity of 91 to 180 days	Remaining maturity of 181 to 365 days
<i>Category 1:</i> (1) Secured funding transaction secured by a level 1 liquid asset; (2) Unsecured wholesale funding where the customer or counterparty is not a financial sector entity or a consolidated subsidiary thereof; (3) Brokered deposits provided by a retail customer or counterparty; and (4) Short positions where the borrowed asset does not qualify as either a level 1 liquid asset or level 2A liquid asset.	25 percent	10 percent	0 percent	0 percent
<i>Category 2:</i> (1) Secured funding transaction secured by a level 2A liquid asset; and (2) Covered asset exchanges involving the future exchange of a Level 1 liquid asset for a Level 2A liquid asset.	50 percent	25 percent	10 percent	0 percent
<i>Category 3:</i> (1) Secured funding transaction secured by a level 2B liquid asset; (2) Covered asset exchanges (other than those described in Category 2); and (3) Unsecured wholesale funding (other than unsecured wholesale funding described in Category 1).	75 percent	50 percent	25 percent	10 percent
<i>Category 4:</i> Any other component of short-term wholesale funding.	100 percent	75 percent	50 percent	25 percent

3-2506.5**Appendix to Subpart H—Calibrating the GSIB Surcharge*****Abstract**

This white paper discusses how to calibrate a capital surcharge that tracks the systemic footprint of a global systemically important bank holding company (GSIB). There is no widely accepted calibration methodology for determining such a surcharge. The white paper focuses on the “expected impact” framework,

* This appendix to subpart H is not codified in the Code of Federal Regulations.

which is based on each GSIB’s expected impact on the financial system, understood as the harm it would cause to the financial system were it to fail multiplied by the probability that it will fail. Because a GSIB’s failure would cause more harm than the failure of a non-GSIB, a GSIB should hold enough capital to lower its probability of failure so that its expected impact is approximately equal to that of a non-GSIB.

Applying the expected impact framework requires several elements. First, it requires a method for measuring the relative harm that a given banking firm’s failure would cause to the financial system—that is, its systemic

footprint. This white paper uses the two methods as set forth in the GSIB surcharge rule to quantify a firm's systemic impact. Those methods look to attributes of a firm that are drivers of its systemic importance, such as size, interconnectedness, and cross-border activity. Both methodologies use the most recent data available, and firms' scores will change over time as their systemic footprints change. Second, the expected impact framework requires a means of estimating the probability that a firm with a given level of capital will fail. This white paper estimates that relationship using historical data on the probability that a large U.S. banking firm will experience losses of various sizes. Third, the expected impact framework requires the choice of a "reference" bank holding company: A large, non-GSIB banking firm whose failure would not pose an outsized risk to the financial system. This white paper discusses several plausible choices of reference BHC.

With these elements, it is possible to estimate a capital surcharge that would reduce a GSIB's expected impact to that of a non-GSIB reference BHC. For each choice of reference BHC, the white paper provides the ranges of reasonable surcharges for each U.S. GSIB.

Introduction

The Dodd-Frank Wall Street Reform and Consumer Protection Act¹ mandates that the Board of Governors of the Federal Reserve System adopt, among other prudential measures, enhanced capital standards to mitigate the risk posed to financial stability by systemically important financial institutions (SIFIs). The Board has already implemented a number of measures designed to strengthen firms' capital positions in a manner consistent with the Dodd-Frank Act's requirement that such measures increase in stringency based on the systemic importance of the firm.

As part of this process, the Board has proposed a set of capital surcharges to be applied to the eight U.S. bank holding companies (BHCs) of the greatest systemic importance, which have been denominated global systemically important bank holding companies (GSIBs). Setting such an enhanced capital

standard entails (1) measuring the risk that a given GSIB's failure poses to financial stability (that is, the GSIB's systemic footprint) and (2) estimating how much additional capital is needed to mitigate the systemic risk posed by a firm with a given systemic footprint.

This white paper explains the calibration of the capital surcharges, based on the measures of each GSIB's systemic footprint derived from the two methods described in the GSIB surcharge final rule and discussed in detail in the preamble to the rule. Because there is no single widely accepted framework for calibrating a GSIB surcharge, the Board considered several potential approaches. This paper focuses on the "expected impact" framework, which is the most appropriate approach for helping to scale the level of a capital surcharge. This paper explains the expected impact framework in detail. It provides surcharge calibrations resulting from that framework under a range of plausible assumptions, incorporating the uncertainty that is inherent in the study of rare events such as systemic banking failures. This paper also discusses, at a high level, two alternative calibration frameworks, and it explains why neither seemed as useful as a framework for the calibration of the GSIB surcharge.

Background

The failures and near-failures of SIFIs were key drivers of the 2007-08 financial crisis and the resulting recession. They were also key drivers of the public-sector response to the crisis, in which the United States government sought to prevent SIFI failures through extraordinary measures such as the Troubled Asset Relief Program. The experience of the crisis made clear that the failure of a SIFI during a period of stress can do great damage to financial stability, that SIFIs themselves lack sufficient incentives to take precautions against their own failures, that reliance on extraordinary government interventions going forward would invite moral hazard and lead to competitive distortions, and that the pre-crisis regulatory focus on microprudential risks to individual financial firms needed to be broadened to include threats to the overall stability of the financial system.

In keeping with these lessons, post-crisis

¹ Public Law 111-203, 124 Stat. 1376 (July 21, 2010).

regulatory reform has placed great weight on “macroprudential” regulation, which seeks to address threats to financial stability. Section 165 of the Dodd-Frank Act pursues this goal by empowering the Board to establish enhanced regulatory standards for “large, interconnected financial institutions” that “are more stringent than the standards . . . applicable to [financial institutions] that do not present similar risks to the financial stability of the United States” and “increase in stringency” in proportion to the systemic importance of the financial institution in question.² Section 165(b)(1)(A)(i) of the act points to risk-based capital requirements as a required type of enhanced regulatory standard for SIFIs.

Rationales for a GSIB Surcharge

The Dodd-Frank Act’s mandate that the Board adopt enhanced capital standards to mitigate the risk posed to financial stability by certain large financial institutions provides the principal statutory impetus for enhanced capital requirements for SIFIs. Because the failure of a SIFI could undermine financial stability and thus cause far greater negative externalities than could the failure of a financial institution that is not systemically important, a probability of default that would be acceptable for a non-systemic firm may be unacceptably high for a SIFI. Reducing the probability that a SIFI will default reduces the risk to financial stability. The most straightforward means of lowering a financial firm’s probability of default is to require it to hold a higher level of capital relative to its risk-weighted assets than non-SIFIs are required to hold, thereby enabling it to absorb greater losses without becoming insolvent.

There are also two secondary rationales for enhanced capital standards for SIFIs. First, higher capital requirements create incentives for SIFIs to shrink their systemic footprint, which further reduces the risks these firms pose to financial stability. Second, higher capital requirements may offset any funding advantage that SIFIs have on account of being perceived as “too big to fail,” which reduces the distortion in market competition caused by

the perception and the potential that counterparties may inappropriately shift more risk to SIFIs, thereby increasing the risk those firms pose to the financial system. Increased capital makes GSIBs more resilient in times of economic stress, and, by increasing the capital cushion available to the firm, may afford the firm and supervisors more time to address weaknesses at the firm that could reverberate through the financial system were the firm to fail.

The Expected Impact Framework

By definition, a GSIB’s failure would cause greater harm to financial stability than the failure of a banking organization that is not a GSIB.³ Thus, if all banking organizations are subject to the same risk-based capital requirements and have similar probabilities of default, GSIBs will impose far greater systemic risks than non-GSIBs will. The expected impact framework addresses this discrepancy by subjecting GSIBs to capital surcharges that are large enough that the expected systemic loss from the failure of a given GSIB better approximates the expected systemic loss from the failure of a BHC that is large but is not a GSIB. (We will call this BHC the “reference BHC.”)

The expected loss from a given firm’s failure can be computed as the systemic losses that would occur if that firm failed, discounted by the probability of its failure. Using the acronyms LGD (systemic loss given default), PD (probability of default), and EL (expected loss), this idea can be expressed as follows: $EL = LGD * PD$

The goal of a GSIB surcharge is to equalize the expected loss from a GSIB’s failure to the expected loss from the failure of a non-GSIB reference BHC: $EL_{GSIB} = EL_r$

By definition, a GSIB’s LGD is higher than that of a non-GSIB. So to equalize EL be-

² Section 165(a)(1).

³ Cf. Dodd-Frank Act section 165(a)(1), which instructs the Board to apply more stringent prudential standards to certain large financial firms “[i]n order to prevent or mitigate risks to the financial stability of the United States that could arise from the material financial distress or failure . . . of large, interconnected financial institutions.” As illustrated by the financial crisis that led Congress to enact the Dodd-Frank Act, financial instability can lead to a wide range of social harms, including the declines in employment and GDP growth that are associated with an economic recession.

tween GSIBs and non-GSIBs, we must require each GSIB to lower its PD, which we can do by requiring it to hold more capital.

This implies that a GSIB must increase its capital level to the extent necessary to reach a PD that is as many times lower than the PD of the reference BHC as its LGD is higher than the LGD of the reference BHC. (For example, suppose that a particular GSIB's failure would cause twice as much loss as the failure of the reference BHC. In that case, to equalize EL between the two firms, we must require the GSIB to hold enough additional capital that its PD is half that of the reference BHC.) That determination requires the following components, which we will consider in turn:

1. A method for creating "LGD scores" that quantify the GSIBs' LGDs
2. An LGD score for the reference BHC
3. A function relating a firm's capital ratio to its PD

Quantifying GSIB LGDs

The final rule employs two methods to measure GSIB LGD:

- Method 1 is based on the internationally accepted GSIB surcharge framework, which produces a score derived from a firm's attributes in five categories: Size, interconnectedness, complexity, cross-jurisdictional activity, and substitutability.
- Method 2 replaces method 1's substitutability category with a measure of a firm's reliance on short-term wholesale funding.

The preambles to the GSIB surcharge notice of proposed rulemaking and final rule explain why these categories serve as proxies for the systemic importance of a banking organization (and thus the systemic harm that its failure would cause). They also explain how the categories are weighted to produce scores under method 1 and method 2. Table 1 conveys the Board's estimates of the current scores for the eight U.S. BHCs with the highest scores. These scores are estimated from the most recent available data on firm-specific indicators of systemic importance. The actual scores that will apply when the final rule takes effect may be different and will depend on the future evolution of the firm-specific indicator values.

Table 1—Top eight scores under each method

Firm	Method 1 score	Method 2 score
JPMorgan Chase	473	857
Citigroup	409	714
Bank of America	311	559
Goldman Sachs	248	585
Morgan Stanley	224	545
Wells Fargo	197	352
Bank of New York Mellon	149	213
State Street	146	275

This paper assumes that the relationships between the scores produced by these methods and the firms' systemic LGDs are linear. In other words, it assumes that if firm A's score is twice as high as firm B's score, then the systemic harms that would flow from firm A's failure would be twice as great as those that would flow from firm B's failure.

In fact, there is reason to believe that firm A's failure would do more than twice as much damage as firm B's. (In other words, there is reason to believe that the function relating the scores to systemic LGD increases at an in-

creasing rate and is therefore nonlinear.) The reason is that at least some of the components of the two methods appear to increase the systemic harms that would result from a default at an increasing rate, while none appears to increase the resulting systemic harm at a decreasing rate. For example, because the negative price impact associated with the fire-sale liquidation of certain asset portfolios increases with the size of the portfolio, systemic LGD appears to grow at an increasing rate with the size, complexity, and short-term wholesale funding metrics used in the meth-

ods. Thus, this paper’s assumption of a linear relationship simplifies the analysis while likely resulting in surcharges lower than those that would result if the relationship between scores and systemic LGD were assumed to be non-linear.

The Reference BHC’s Systemic LGD Score

The reference BHC is a real or hypothetical BHC whose LGD will be used in our calculations. The expected impact framework requires that the reference BHC be a non-GSIB, but it leaves room for discretion as to the reference BHC’s identity and LGD score.

Potential Approaches

The reference BHC score can be viewed as simply the LGD score which, given the PD associated with the generally applicable capital requirements, produces the highest EL that is consistent with the purposes and mandate of the Dodd-Frank Act. The effect of setting the reference BHC score to that LGD score would be to hold all GSIBs to that EL level. The purpose of the Dodd-Frank Act is “to prevent or mitigate risks to the financial stability of the United States that could arise from the material financial distress or failure, or ongoing activities, of large, interconnected financial institutions.”⁴ The following options appear to be conceptually plausible ways of identifying the reference BHC for purposes of establishing a capital requirement for GSIBs that lowers the expected loss from the failure of a GSIB to the level associated with the failure of a non-GSIB.

Option 1: A BHC with \$50 billion in assets. Section 165(a)(1) of the Dodd-Frank Act calls for the Board to “establish prudential standards for . . . bank holding companies with total consolidated assets equal to or greater than \$50,000,000,000 that (A) are more stringent than the standards . . . applicable to . . . bank holding companies that do not present similar risks to the financial stability of the United States; and (B) increase in stringency.” Section 165 is the principal statutory basis for the GSIB surcharge, and its \$50 billion figure provides a line below which it may be argued that Congress did not believe that BHCs pres-

⁴ Section 165(a)(1).

ent sufficient “risks to the financial stability of the United States” to warrant mandatory enhanced prudential standards. It would therefore be reasonable to require GSIBs to hold enough capital to reduce their expected systemic loss to an amount equal to that of a \$50 billion BHC that complies with the generally applicable capital rules. Although \$50 billion BHCs could have a range of LGD scores based upon their other attributes, reasonable score estimates for a BHC of that size are 3 under method 1 and 37 under method 2.⁵

Option 2: A BHC with \$250 billion in assets. The Board’s implementation of the advanced approaches capital framework imposes enhanced requirements on banking organizations with at least \$250 billion in consolidated assets. This level distinguishes the largest and most internationally active U.S. banking organizations, which are subject to other enhanced capital standards, including the countercyclical capital buffer and the supplementary leverage ratio.⁶ The \$250 billion threshold therefore provides another viable line for distinguishing between the large, complex, internationally active banking organizations that pose a substantial threat to financial stability and those that do not pose such a substantial threat. Although \$250 billion BHCs could have a range of LGD scores based upon their other attributes, reasonable score estimates for a BHC of that size are 23 under method 1 and 60 under method 2.⁷

⁵ These estimates were produced by plotting the estimated scores of six U.S. BHCs with total assets between \$50 billion and \$100 billion against their total assets, running a linear regression, and finding the score implied by the regression for a \$50 billion firm. These firms’ scores were estimated using data from the sources described in the general note to table 1, except that figures for the short-term wholesale funding component of method 2 were estimated using FR Y-9C data from the first quarter of 2015 and Federal Reserve quantitative impact study (QIS) data as of the fourth quarter of 2014. Scores for firms with total assets below \$50 billion were not estimated (and therefore were not included in the regression analysis) because the Federal Reserve does not collect as much data from those firms.

⁶ Advanced approaches banking organizations also include firms with on-balance sheet foreign exposures of \$10 billion or more.

⁷ These estimates were produced by applying the approach described in footnote 5 to 10 U.S. BHCs with total assets between \$100 billion and \$400 billion. Bank of New York Mellon and State Street, which have total assets within that range, were excluded from the sample because they are GSIBs and the expected impact framework as-

Option 3: The U.S. non-GSIB with the highest LGD score. Another plausible reference BHC is the actual U.S. non-GSIB BHC that comes closest to being a GSIB—in other words, the U.S. non-GSIB with the highest LGD score. Under method 1, the highest score for a U.S. non-GSIB is 51 (the second-highest is 39). Under method 2, the highest score for a U.S. non-GSIB is estimated to be 85 (the second- and third-highest scores are both estimated to be 75).⁸

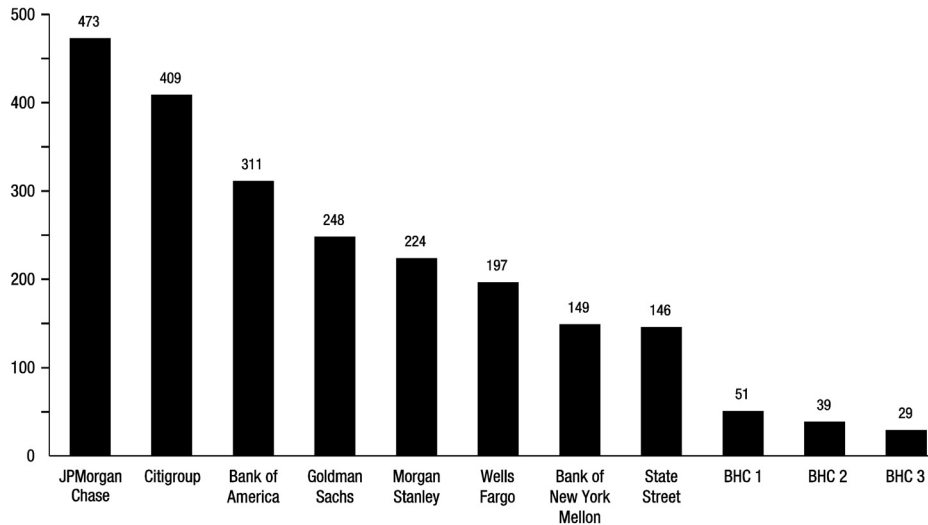
Option 4: A hypothetical BHC at the cutoff line between GSIBs and non-GSIBs. Given that BHCs are divided into GSIBs and non-GSIBs based on their systemic footprint and that LGD scores provide our metric for quantifying firms' systemic footprints, there must be some LGD score under each method that marks the “cut-off line” between GSIBs and non-GSIBs. The reference BHC's score should be no higher than this cut-off line, since the goal of the expected impact framework is to lower each GSIB's EL so that it equals the EL of a non-GSIB. Under this option, the reference BHC's score should also be no lower

than the cut-off line, since if it were lower, then a non-GSIB firm could exist that had a higher LGD and therefore (because it would not be subject to a GSIB surcharge) a higher EL than GSIBs are permitted to have. Under this reasoning, the reference BHC should have an LGD score that is exactly on the cut-off line between GSIBs and non-GSIBs. That is, it should be just on the cusp of being a GSIB.

What LGD score marks the cut-off line between GSIB and non-GSIB? With respect to method 1, figure 1 shows that there is a large drop-off between the eighth-highest score (146) and the ninth-highest score (51). Drawing the cut-off line within this target range is reasonable because firms with scores at or below 51 are much closer in size and complexity to financial firms that have been resolved in an orderly fashion than they are to the largest financial firms, which have scores between three and nine times as high and are significantly larger and more complex. We will choose a cut-off line at 130, which is at the high end of the target range. This choice is appropriate because it aligns with international standards and facilitates comparability among jurisdictions. It also establishes minimum capital surcharges that are consistent internationally.

⁸These estimates were produced using data from the sources described in the general note to table 1, except that figures for the short-term wholesale funding component of method 2 were estimated using FR Y-9C data from the first quarter of 2015 and Federal Reserve quantitative impact study (QIS) data as of the fourth quarter of 2014.

Figure 1—Estimated method 1 scores

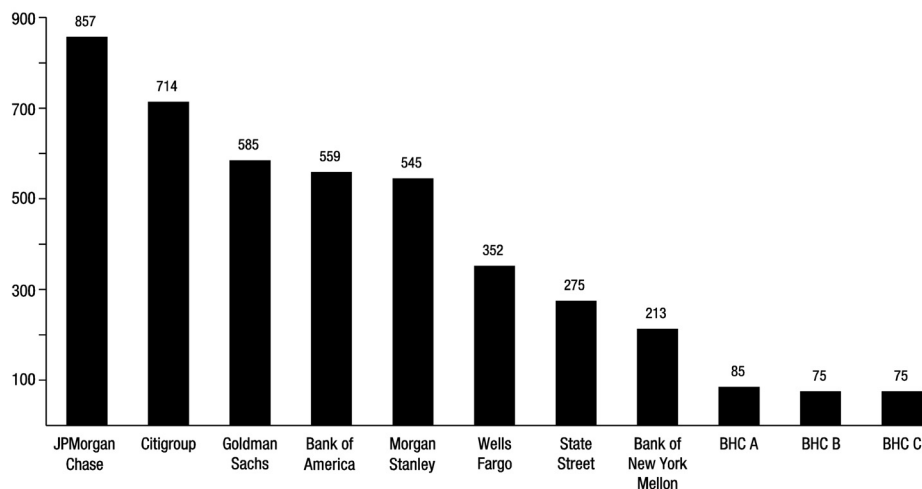


A similar approach can be used under method 2. Figure 2 depicts the estimated method 2 scores of the eleven U.S. BHCs with the highest estimated scores. A large drop-off in the distribution of scores with a significant difference in character of firms occurs between firms with scores above 200 and firms with scores below 100.

The range between Bank of New York Mellon and the next-highest-scoring firm is the most rational place to draw the line between GSIBs and non-GSIBs: Bank of New York Mellon's score is roughly 251 percent of the score of the next highest-scoring firm, which is labeled BHC A. (There is also a large gap between Morgan Stanley's score and Wells Fargo's, but the former is only about 154 percent of the latter.) This approach also generates the same list of eight U.S. GSIBs as is produced by method 1. In selecting a spe-

cific line within this range, we considered the statutory mandate to protect U.S. financial stability, which argues for a method of calculating surcharges that addresses the importance of mitigating the failure of U.S. GSIBs, which are among the most systemic in the world. This would suggest a cut-off line at the lower end of the target range. The lower threshold is appropriate in light of the fact that method 2 uses a measure of short-term wholesale funding in place of substitutability. Specifically, short-term wholesale funding is believed to have particularly strong contagion effects that could more easily lead to major systemic events, both through the freezing of credit markets and through asset fire sales. These systemic impacts support the choice of a threshold at the lower end of the range for method 2.

Figure 2—Estimated method 2 scores



Although the failure of a firm with the systemic footprint of BHC A poses a smaller risk to financial stability than does the failure of one of the eight GSIBs, it is nonetheless possible that the failure of a very large banking organization like BHC A, BHC B, or BHC C could have a negative effect on financial stability, particularly during a period of industry-wide stress such as occurred during the 2007-08 financial crisis. This provides additional support for our decision to draw the line between GSIBs and non-GSIBs at 100 points, at the lower end of the range between Bank of New York Mellon and BHC A.

Note that we have set our method 2 reference BHC score near the bottom of the target range and our method 1 reference BHC score near the top of the target range. Due to the choice of reference BHC in method 2, method 2 is likely to result in higher surcharges than method 1. Calculating surcharges under method 1 in part recognizes the international standards applied globally to GSIBs. Using a globally consistent approach for establishing a baseline surcharge has benefits for the stability of the entire financial system, which is globally interconnected. At the same time, using an approach that results in higher surcharges for most GSIBs is consistent with the statutory mandate to protect financial stability

in the United States and with the risks presented by short-term wholesale funding.

Capital and Probability of Default

To implement the expected impact approach, we also need a function that relates capital ratio increases to reductions in probability of default. First, we use historical data drawn from FR Y-9C regulatory reports from the second quarter of 1987 through the fourth quarter of 2014 to plot the probability distribution of returns on risk-weighted assets (RORWA) for the 50 largest BHCs (determined as of each quarter), on a four-quarter rolling basis.⁹ RORWA is defined as after-tax net income divided by risk-weighted assets. Return on risk-weighted assets provides a better measure of risk than return on total assets would, because the risk weightings have been calibrated to ensure that two portfolios with the same risk-weighted assets value contain roughly the same amount of risk, whereas two portfolios with total assets of the same value

⁹ Because Basel I risk-weighted assets data are only available from 1996 onward, risk-weighted assets data for earlier years are estimated by back-fitting the post-1996 ratio between risk-weighted assets and total assets onto pre-1996 total assets data. See Andrew Kuritzkes and Til Schuermann (2008), "What We Know, Don't Know, and Can't Know about Bank Risk: A View from the Trenches," University of Pennsylvania, Financial Institutions Center paper #06-05, <http://fic.wharton.upenn.edu/fic/papers/06/0605.pdf>.

can contain very different amounts of risk depending on the asset classes in question.

We select this date range and set of firms to provide a large sample size while focusing on data from the relatively recent past and from very large firms, which are more germane to our purposes. Data from the past three decades may be an imperfect predictor of future trends, as there are factors that suggest that default probabilities in the future may be either lower or higher than would be predicted on the basis of the historical data.

On the one hand, these data do not reflect many of the regulatory reforms implemented in the wake of the 2007-08 financial crisis that are likely to reduce the probability of very large losses and therefore the probability of default associated with a given capital level. For example, the Basel 2.5 and Basel III capital reforms are intended to increase the risk-sensitivity of the risk weightings used to measure risk-weighted assets, which suggests that the risk of losses associated with each dollar of risk-weighted assets under Basel III will be lower than the historical, pre-Basel III trend. Similarly, post-crisis liquidity initiatives (the liquidity coverage ratio and the net stable funding ratio) should reduce the default probabilities of large banking firms and the associated risk of fire sales. Together, these reforms may lessen a GSIB's probability of default and potentially imply a lower GSIB surcharge.

On the other hand, however, extraordinary government interventions during the time period of the dataset (particularly in response to the 2007-08 financial crisis) undoubtedly prevented or reduced large losses that many of the largest BHCs would otherwise have suffered. Because one core purpose of post-crisis reform is to avoid the need for such extraordinary interventions in the future, the GSIB surcharge should be calibrated using data that include the severe losses that would have materialized in the absence of such intervention;

because the interventions in fact occurred, using historical RORWA data may lead us to underestimate the probability of default associated with a given capital level. In short, there are reasons to believe that the historical data underestimate the future trend, and there are reasons to believe that those data overestimate the future trend. Although the extent of the over- and underestimations cannot be rigorously quantified, a reasonable assumption is that they roughly cancel each other out.¹⁰

Figure 3 displays the estimated quantiles of ROWRA from 0.1 to 5.0. The sample quantiles are represented by black dots. The dashed lines above and below the estimated quantiles represent a 99 percent confidence interval for each estimated quantile. As shown in the figure, the uncertainty around more extreme quantiles is substantially larger than that around less extreme quantiles. This is because actual events relating to more extreme quantiles occur much less frequently and are, as a result, subject to considerably more uncertainty. The solid line that passes through the black dots is an estimated regression function that relates the estimated value of the quantile to the natural logarithm of the associated probability. The specification of the regression function is provided in the figure which reports both the estimated coefficients of the regression function and the standard errors, in parentheses, associated with the estimated coefficients.

¹⁰ The concept of risk aversion provides additional support for this assumption. While the failure of a GSIB in any given year is unlikely, the costs from such a failure to financial stability could be severe. By contrast, any costs from higher capital surcharges will be distributed more evenly among different states of the world. Presumably society is risk-averse and, in a close case, would prefer the latter set of costs to the former. While this paper does not attempt to incorporate risk aversion into its quantitative analysis, that concept does provide additional support for the decision not to discount the historical probability of large losses in light of post-crisis regulatory reforms.

Figure 3—Returns on risk-weighted assets (RORWA)

(Bottom five percentiles, 50 largest BHCs in each quarter, 2Q87 through 4Q14)

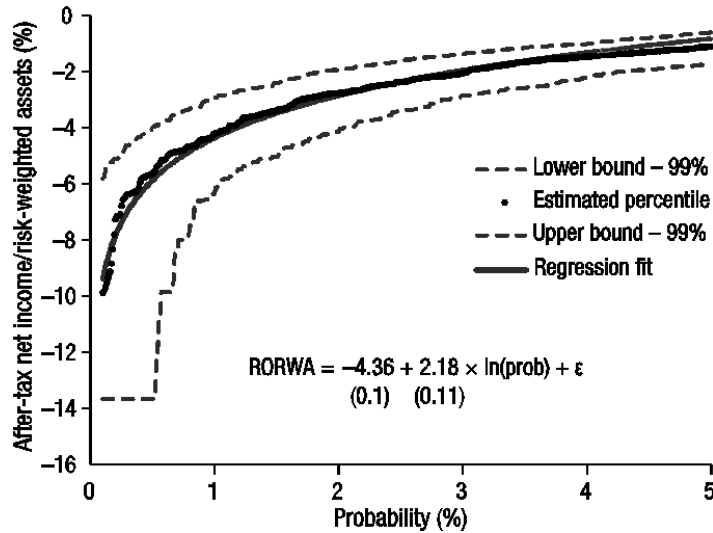


Figure 3 shows that RORWA is negative (that is, the firm experiences a loss) more than 5 percent of the time, with most losses amounting to less than 4 percent of risk-weighted assets. The formula for the logarithmic regression on this RORWA probability distribution (with RORWA represented by y and the percentile associated with that RORWA by x) is: $y = 2.18 * \ln(x) - 4.36$

The inverse of this function, which we will label $p(RORWA)$, gives the probability that a particular realization of RORWA, \tilde{R} will be less than or equal to a specified level over a given year. That function is:

$$p(\tilde{R} \leq RORWA) = p(RORWA) = e^{\frac{RORWA+4.36}{2.18}}$$

Next, assume that a BHC becomes non-viable and consequently defaults if and only if its capital ratio k (measured in terms of common equity tier 1 capital, or CET1) falls to some failure point f . (Note that k is a variable and f is a constant.) We assume that RORWA and k are independent, which is appropriate because the return on an asset should not depend to a significant extent on the identity of the entity holding the asset or on that entity's capital ratio. We can now estimate the probability that a BHC with capital level k will

suffer sufficiently severe losses (that is, a negative RORWA of sufficiently great magnitude) to bring its capital ratio down to the failure point f . We are looking for the probability that k will fall to f , that is, the probability that $k + RORWA = f$. Solving for RORWA, we get $RORWA = f - k$, which we can then plug into the function above to find the probability of default as a function of the capital ratio k :¹¹

$$p(k) = e^{\frac{(f-k)+4.36}{2.18}} = e^{\frac{(f+4.36)-k}{2.18}}$$

Application

We can now create a function that takes as its input a GSIB's LGD score and produces a capital surcharge for that GSIB. In the course of doing so, we will find that the resulting surcharges are invariant to both the failure point f and the generally applicable capital level that the GSIB surcharge is held on top of, which means that we do not need to make

¹¹ This paper treats dollars of risk-weighted assets as equivalent regardless of whether they are measured under the risk weightings of Basel I or of Basel III. This treatment makes sense because the two systems produce roughly comparable results and there does not appear to be any objectively correct conversion factor for converting between them.

any assumption about the value of these two quantities. Recall that the goal of the expected impact framework is to make the following equation true:

$$EL_{GSIB} = EL_r$$

Let k_r be the generally applicable capital level held by the reference BHC, and let k_{GSIB} be the GSIB surcharge that a given GSIB is required to hold on top of k_r . Thus, the refer-

ence BHC's probability of default will be $p(k_r)$ and each GSIB's probability of default will be $p(k_r + k_{GSIB})$, with the value of k_{GSIB} varying from firm to firm. Because $EL = LGD * PD$, the equation above can be expressed as:

$$LGD_{GSIB} * p(k_r + k_{GSIB}) = LGD_r * p(k_r)$$

This can be rewritten as:

$$\frac{p(k_r + k_{GSIB})}{p(k_r)} = \frac{LGD_r}{LGD_{GSIB}}$$

Plugging in our function $p(k)$, we obtain:

$$\frac{e^{\frac{(f+4.36)-(k_r+k_{GSIB})}{2.18}}}{e^{\frac{(f+4.36)-k_r}{2.18}}} = \frac{LGD_r}{LGD_{GSIB}}$$

The left side of this equation can be simplified as follows:

$$\frac{e^{\frac{(f+4.36)-(k_r+k_{GSIB})}{2.18}}}{e^{\frac{(f+4.36)-k_r}{2.18}}} = e^{\frac{f+4.36-k_r-k_{GSIB}-f-4.36+k_r}{2.18}} = e^{-\frac{k_{GSIB}}{2.18}}$$

As promised, the failure point f and the baseline capital level k_r prove to be irrelevant. This is a consequence of the assumption that the quantiles of the RORWA distribution are linearly related to the logarithm of the quantile. Thus, we have:

$$e^{-\frac{k_{GSIB}}{2.18}} = \frac{LGD_r}{LGD_{GSIB}}$$

We can now solve for k_{GSIB} :

$$k_{GSIB} = -2.18 * \ln\left(\frac{LGD_r}{LGD_{GSIB}}\right)$$

The appropriate surcharge for a given GSIB depends only on that GSIB's LGD score and the chosen reference BHC's LGD score. Indeed, the surcharge does not even depend on the particular values of those two scores, but only on the ratio between them. Thus, doubling, halving, or otherwise multiplying both scores by the same constant will not affect the resulting surcharges. And since each of our reference BHC options was determined in relation to the LGD scores of actual firms, any multiplication applied to the calculation of the firms' LGD scores will also carry over to the resulting reference BHC scores.

Note that the specific GSIB surcharge depends on the slope coefficient that determines how the quantiles of the RORWA distribution change as the probability changes. The empiri-

cal analysis presented in figure 3 suggests a value for the slope coefficient of roughly 2.18; however, there is uncertainty regarding the true population value of this coefficient. There are two important sources of uncertainty. First, the estimated value of 2.18 is a statistical estimate that is subject to sampling uncertainty. This sampling uncertainty is characterized in terms of the standard error of the coefficient estimate, which is 0.11 (as reflected in parentheses beneath the point estimate in figure 3). Under standard assumptions, the estimated value of the slope coefficient is approximately normally distributed with a mean of 2.18 and a standard deviation of 0.11. A 99 percent confidence interval for the slope coefficient ranges from approximately 1.9 to 2.4.

Second, there is additional uncertainty around the slope coefficient that arises from uncertainty as to whether the data sample used to construct the estimated slope coefficient is indicative of the RORWA distribution that will obtain in the future. As discussed above, there are reasons to believe that the future RORWA distribution will differ to some extent from the historical distribution. Accordingly, the 99 percent confidence interval for the slope coefficient that is presented above is a lower bound to the true degree of uncertainty that should be attached to the slope coefficient.

We can now use the GSIB surcharge for-

mula and 99 percent confidence interval presented above to compute the ranges of capital surcharges that would obtain for each of the reference BHC options discussed above. Table 2 presents method 1 surcharge ranges and table 3 presents method 2 surcharge ranges. The low estimate in each cell was computed using the surcharge formula above with the value of the slope coefficient at the low end of the 99 percent confidence interval (1.9); the high end was computed using the value of the slope coefficient at the high end of that interval (2.4).

Table 2—Method 1 surcharge ranges for each reference BHC (%)

Firm	Method 1 score	\$50 billion reference BHC	\$250 billion reference BHC	Non-GSIB with highest LGD	Reference BHC LGD = 130
JPMorgan Chase	473	9.6, 12.4	5.7, 7.4	4.2, 5.5	2.5, 3.2
Citigroup	409	9.3, 12.1	5.5, 7.1	4.0, 5.1	2.2, 2.8
Bank of America	311	8.8, 11.4	4.9, 6.4	3.4, 4.4	1.7, 2.1
Goldman Sachs	248	8.4, 10.9	4.5, 5.8	3.0, 3.9	1.2, 1.6
Morgan Stanley	224	8.2, 10.6	4.3, 5.6	2.8, 3.6	1.0, 1.3
Wells Fargo	197	8.0, 10.3	4.1, 5.3	2.6, 3.3	0.8, 1.0
Bank of New York Mellon	149	7.4, 9.6	3.6, 4.6	2.0, 2.6	0.3, 0.3
State Street	146	7.4, 9.6	3.5, 4.5	2.0, 2.6	0.2, 0.3
Reference score		3	23	51	130

Table 3—Method 2 surcharge ranges for each reference BHC (%)

Firm	Method 2 score	\$50 billion reference BHC	\$250 billion reference BHC	Non-GSIB with highest LGD	Reference BHC LGD = 100
JPMorgan Chase	857	6.0, 7.7	5.1, 6.5	4.4, 5.7	4.1, 5.3
Citigroup	714	5.6, 7.3	4.7, 6.1	4.0, 5.2	3.7, 4.8
Goldman Sachs	585	5.2, 6.8	4.3, 5.6	3.7, 4.7	3.4, 4.3
Bank of America	559	5.2, 6.7	4.2, 5.5	3.6, 4.6	3.3, 4.2
Morgan Stanley	545	5.1, 6.6	4.2, 5.4	3.5, 4.6	3.2, 4.2
Wells Fargo	352	4.3, 5.5	3.4, 4.4	2.7, 3.5	2.4, 3.1
State Street	275	3.8, 4.9	2.9, 3.7	2.2, 2.9	1.9, 2.5
Bank of New York Mellon	213	3.3, 4.3	2.4, 3.1	1.7, 2.3	1.4, 1.9
Reference score		37	60	85	100

Surcharge Bands

The analysis above suggests a range of capital surcharges for a given LGD score. To obtain a simple and easy-to-implement surcharge rule, we will assign surcharges to discrete “bands” of scores so that the surcharge for a given

score falls in the lower end of the range suggested by the results shown in tables 2 and 3. The bands will be chosen so that the surcharges for each band rise in increments of one half of a percentage point. This sizing will ensure that modest changes in a firm’s systemic indicators will generally not cause a

change in its surcharge, while at the same time maintaining a reasonable level of sensitivity to changes in a firm's systemic footprint. Because small changes in a firm's score will generally not cause a change to the firm's surcharge, using surcharge bands will facilitate capital planning by firms subject to the rule.

We will omit the surcharge band associated with a 0.5 percent surcharge. This tailoring for the least-systemic band of scores above the reference BHC score is rational in light of the fixed costs of imposing a firm-specific capital surcharge; these costs are likely not worth incurring where only a small surcharge would be imposed. (The internationally accepted GSIB surcharge framework similarly lacks a 0.5 percent surcharge band.) Moreover, a minimum surcharge of 1.0 percent for all GSIBs accounts for the inability to know precisely where the cut-off line between a GSIB and a non-GSIB will be at the time when a failure occurs, and the surcharge's purpose of enhancing the resilience of all GSIBs.

We will use 100-point fixed-width bands, with a 1.0 percent surcharge band at 130–229 points, a 1.5 percent surcharge band at 230–329 points, and so on. These surcharge bands fall in the lower end of the range suggested by the results shown in tables 1 and 2.

The analysis above suggests that the surcharge should depend on the logarithm of the LGD score. The logarithmic function could justify bands that are smaller for lower LGD scores and larger for higher LGD scores. For the following reasons, however, fixed-width bands are more appropriate than expanding-width bands.

First, fixed-width surcharge bands facilitate capital planning for less-systemic firms, which would otherwise be subject to a larger number of narrower bands. Such small bands could result in frequent and in some cases unforeseen changes in those firms' surcharges, which could unnecessarily complicate capital planning and is contrary to the objective of ensuring that relatively small changes in a firm's score generally will not alter the firm's surcharge.

Second, fixed-width surcharge bands are appropriate in light of several concerns about the RORWA dataset and the relationship between systemic indicators and systemic footprint that

are particularly relevant to the most systemically important financial institutions. Larger surcharge bands for the most systemically important firms would allow these firms to expand their systemic footprint materially within the band without augmenting their capital buffers. That state of affairs would be particularly troubling in light of limitations on the data used in the statistical analysis above.

In particular, while the historical RORWA dataset used to derive the function relating a firm's LGD score to its surcharge contains many observations for relatively small losses, it contains far fewer observations of large losses of the magnitude necessary to cause the failure of a firm that has a very large systemic footprint and is therefore already subject to a surcharge of (for example) 4.0 percent. This paucity of observations means that our estimation of the probability of such losses is substantially more uncertain than is the case with smaller losses. This is reflected in the magnitude of the standard error range associated with our regression analysis, which is large and rapidly expanding for high LGD scores. Given this uncertainty, as well as the Board's Dodd-Frank Act mandate to impose prudential standards that mitigate risks to financial stability, we should impose a higher threshold of certainty on the sufficiency of capital requirements for the most systemically important financial institutions.

Two further shortcomings of the RORWA dataset make the case for rejecting ever-expanding bands even stronger. First, the frequency of extremely large losses would likely have been higher in the absence of extraordinary government actions taken to protect financial stability, especially during the 2007-08 financial crisis. As discussed above, the GSIB surcharge should be set on the assumption that extraordinary interventions will not recur in the future (in order to ensure that they will not be necessary in the future), which means that firms need to hold more capital to absorb losses in the tail of the distribution than the historical data would suggest. Second, the historical data are subject to survivorship bias, in that a given BHC is only included in the sample until it fails (or is acquired). If a firm fails in a given quarter, then its experience in that quarter is not included in the dataset, and

any losses realized during that quarter (including losses realized only upon failure) are therefore left out of the dataset, leading to an underestimate of the probability of such large losses.

Additionally, as discussed above, our assumption of a linear relationship between a firm's LGD score and the risk that its failure would pose to financial stability likely understates the surcharge that would be appropriate for the most systemically important firms. As noted above, there is reason to believe that the damage to the economy increases more rapidly as a firm grows in size, complexity, reliance on short-term wholesale funding, and perhaps other GSIB metrics.

Finally, fixed-width bands are preferable to expanding-width bands because they are simpler and therefore more transparent to regulated entities and to the public.

Alternatives to the Expected Impact Framework

Federal Reserve staff considered various alternatives to the expected impact framework for calibrating a GSIB surcharge. All available methodologies are highly sensitive to a range of assumptions.

Economy-Wide Cost-Benefit Analysis

One alternative to the expected impact framework is to assess all social costs and benefits of capital surcharges for GSIBs and then set each firm's requirement at the point where marginal social costs equal marginal social benefits. The principal social benefit of a GSIB surcharge is a reduction in the likelihood and severity of financial crises and crisis-induced recessions. Assuming that capital is a relatively expensive source of funding, the potential costs of higher GSIB capital requirements come from reduced credit intermediation by GSIBs (though this would be offset to some extent by increased intermediation by smaller banking organizations and other entities), a potential loss of any GSIB scale efficiencies, and a potential shift of credit intermediation to the less-regulated shadow banking sector. The GSIB surcharges that

would result from this analysis would be sensitive to assumptions about each of these factors.

One study produced by the Basel Committee on Banking Supervision (with contributions from Federal Reserve staff) finds that net social benefits would be maximized if generally applicable common equity requirements were set to 13 percent of risk-weighted assets, which could imply that a GSIB surcharge of up to 6 percent would be socially beneficial.¹² The surcharges produced by the expected impact framework are generally consistent with that range.

That said, cost-benefit analysis was not chosen as the primary calibration framework for the GSIB surcharge for two reasons. First, it is not directly related to the mandate provided by the Dodd-Frank Act, which instructs the Board to mitigate risks to the financial stability of the United States. Second, using cost-benefit analysis to directly calibrate firm-specific surcharges would require more precision in estimating the factors discussed above in the context of surcharges for individual firms than is now attainable.

Offsetting the Too-Big-To-Fail Subsidy

It is generally agreed that GSIBs enjoyed a "too-big-to-fail" funding advantage prior to the crisis and ensuing regulation, and some studies find that such a funding advantage persists. Any such advantage derives from the belief of some creditors that the government might act to prevent a GSIB from defaulting on its debts. This belief leads creditors to assign a lower credit risk to GSIBs than would be appropriate in the absence of this government "subsidy," with the result that GSIBs can borrow at lower rates. This creates an incentive for GSIBs to take on even more leverage and make themselves even more systemic (in order to increase the value of the subsidy), and it gives GSIBs an unfair advantage over less systemic competitors.

¹² See Basel Committee on Banking Supervision (2010), *An Assessment of the Long-Term Economic Impact of Stronger Capital and Liquidity Requirements* (Basel, Switzerland: Bank for International Settlements, August), p. 29, www.bis.org/publ/bcbs173.pdf. The study finds that a capital ratio of 13 percent maximizes net benefits on the assumption that a financial crisis can be expected to have moderate permanent effects on the economy.

In theory, a GSIB surcharge could be calibrated to offset the too-big-to-fail subsidy and thereby cancel out these undesirable effects. The surcharge could do so in two ways. First, as with an insurance policy, the value of a potential government intervention is proportional to the probability that the intervention will actually occur. A larger buffer of capital lowers a GSIB's probability of default and thereby makes potential government intervention less likely. Put differently, a too-big-to-fail subsidy leads creditors to lower the credit risk premium they charge to GSIBs; by lowering credit risk, increased capital levels would lower the value of any discount in the credit risk premium. Second, banking organizations view capital as a relatively costly source of funding. If it is, then a firm with elevated capital requirements also has a concomitantly higher cost of funding than a firm with just the generally applicable capital requirements. And this increased cost of funding could, if calibrated correctly, offset any cost-of-funding advantage derived from the too-big-to-fail subsidy.

A surcharge calibration intended to offset any too-big-to-fail subsidy would be highly sensitive to assumptions about the size of the subsidy and about the respective costs of equity and debt as funding sources at various capital levels. These quantities cannot currently be estimated with sufficient precision to arrive at capital surcharges for individual firms. Thus, the expected impact approach is preferable as a primary framework for setting GSIB surcharges.

3–2601

SUBPART I—APPLICATION OF CAPITAL RULES

SECTION 217.501—The Board's Regulatory Capital Framework for Depository Institution Holding Companies Organized as Non-Stock Companies

(a) *Applicability.*

(1) This section applies to all depository institution holding companies that are organized as legal entities other than stock cor-

porations and that are subject to this part (Regulation Q, 12 CFR part 217).¹

(2) Notwithstanding sections 217.2 and 217.10, a bank holding company or covered savings and loan holding company that is organized as a legal entity other than a stock corporation and has issued capital instruments that do not qualify as common equity tier 1 capital under section 217.20 by virtue of the requirements set forth in this section may treat those capital instruments as common equity tier 1 capital until July 1, 2016.

(b) *Common equity tier 1 capital criteria applied to capital instruments issued by non-stock companies.*

(1) Subpart C of this part provides criteria for capital instruments to qualify as common equity tier 1 capital. This section describes how certain criteria apply to capital instruments issued by bank holding companies and covered savings and loan holding companies that are organized as legal entities other than stock corporations, such as limited liability companies (LLCs) and partnerships.

(2) Holding companies are organized using a variety of legal structures, including corporate forms, LLCs, partnerships, and similar structures.² In the Board's experience, some depository institution holding companies that are organized in non-stock form issue multiple classes of capital instruments that allocate profit and loss from a distribution differently among classes, which may affect the ability of those classes to qualify as common equity tier 1 capital.³

(3) Common equity tier 1 capital is defined in section 217.20(b). To qualify as common equity tier 1 capital, capital instruments must satisfy a number of criteria. This section provides examples of the application of

¹ See 12 CFR 217.1(c)(1) through (3). 12 CFR 217.1(c)(1) through (3).

² A stock corporation's common stock should satisfy the CET1 criteria so long as the common stock does not have unusual features, such as a limited duration.

³ Notably, voting powers or other means of exercising control are not relevant for purposes of satisfying the CET1 eligibility criteria. Thus, the fact that a particular partner or member controls a holding company, for instance, due to serving as general partner or managing member, is not material to qualification of particular interests as CET1.

certain common equity tier 1 capital criteria that relate to the economic interests in the company represented by particular capital instruments.

(c) *Examples.* The following examples show how the criteria for common equity tier 1 capital apply to particular partnership or LLC structures.⁴

(1) *LLC with one class of membership interests.*

(i) An LLC issues one class of membership interests that provides that all holders of the interests bear losses and receive dividends proportionate to their levels of ownership.

(ii) Provided that the other criteria in section 217.20(b) are met, the membership interests would qualify as common equity tier 1 capital.

(2) *Partnership with limited and general partners.*

(i) A partnership has two classes of interests: General partnership interests and limited partnership interests. The general partners and the limited partners bear losses and receive distributions allocated proportionately to their capital contributions. In addition, the general partner has unlimited liability for the debts of the partnership.

(ii) Provided that the other criteria in section 217.20(b) are met, the general and limited partnership interests would qualify as common equity tier 1 capital. The fact of unlimited liability of the general partner is not relevant in the context of the eligibility criteria of common equity tier 1 capital instruments, provided that the general partner and limited partners share losses equally to the extent of the assets of the partnership, and the general partner is liable after the assets of the partnership are exhausted. In this regard, the general partner's unlimited liability is similar to a guarantee provided by the general partner, rather than a feature of the general partnership interest.

⁴ Although the examples refer to specific types of legal entities for purposes of illustration, the substance of the Regulation Q criteria reflected in the examples applies to all types of legal entities.

(3) *Senior and junior classes of capital instruments.*

(i) An LLC issues two types of membership interests, Class A and Class B. Holders of Class A and Class B interests participate equally in operating distributions and have equal voting rights. However, in liquidation, holders of Class B interests must receive the entire amount of their contributed capital in order for any distributions to be made to holders of Class A interests.

(ii) Class B interests have a preference over Class A interests in liquidation and, therefore, would not qualify as common equity tier 1 capital as the Class B interests are not the most subordinated claim (criterion (i)) and do not share losses proportionately (criterion (viii)) (section 217.20(b)(1)(i) and (viii), respectively).

(A) If all other criteria are satisfied, Class A interests would qualify as common equity tier 1 capital.

(B) Class B interests may qualify as additional tier 1 capital, or tier 2 capital, if the Class B interests meet the applicable criteria (section 217.20(c) and (d)).

(4) *LLC with two classes of membership interests.*

(i) An LLC issues two types of membership interests, Class A and Class B. To the extent that the LLC makes a distribution, holders of Class A and Class B interests share proportionately in any losses and receive proportionate shares of contributed capital. To the extent that a capital distribution includes an allocation of profits, holders of Class A and Class B interests share proportionately up to the point where all holders receive a specific annual rate of return on capital contributions, and, if the distribution exceeds that point, holders of Class B interests receive double their proportional share and holders of Class A interests receive the remainder of the distribution.

(ii) Class A and Class B interests would both qualify as common equity tier 1 capital, provided that under all circumstances they share losses proportionately, as measured with respect to each distri-

bution, and that they satisfy the common equity tier 1 capital criteria. The holders of Class A and Class B interests may receive different allocations of profits with respect to a distribution, provided that the distribution is made simultaneously to all members of Class A and Class B interests. Despite the potential for disproportionate profits, Class A and Class B interests have the same level of seniority with regard to potential losses and therefore they both satisfy all the criteria in section 217.20(b), including criterion (ii) (section 217.20(b)(1)(ii)).

(5) *Alternative LLC with two classes of membership interests.*

(i) An LLC issues two types of membership interests, Class A and Class B. In the event that the LLC makes a distribution, holders of Class A interests bear a disproportionately low level of any losses, such that the Class B interests bear a disproportionately high level of losses at the distribution. In contrast to the example in paragraph (c)(4) of this section, the different participation rights apply to distributions in situations where losses are allocated, including losses at liquidation.

(ii) Because holders of the Class A interests do not bear a proportional interest in the losses (criterion (ii) (section 217.20(b)(1)(ii))), the Class A interests would not qualify as common equity tier 1 capital.

(A) Companies with such structures may revise their capital structures in order to provide for a sufficiently large class of capital instruments that proportionally bear first losses in liquidation (that is, the Class B interests in this example).

(B) Alternatively, companies with such structures could revise their capital structure to ensure that all classes of capital instruments that are intended to qualify as common equity tier 1 capital share equally in losses in liquidation consistent with criteria (i), (ii), (vii), and (viii) in section 217.20(b)(1)(i), (ii), (vii), respectively, even if each class of capital instruments has differ-

ent rights to allocations of profits, as in paragraph (c)(4) of this section.

(6) *Mandatory distributions.*

(i) A partnership agreement contains provisions that require distributions to holders of one or more classes of capital instruments on the occurrence of particular events, such as upon specific dates or following a significant sale of assets, but not including any final distributions in liquidation.

(ii) Any class of capital instruments that provides holders with rights to mandatory distributions would not qualify as common equity tier 1 capital because a holding company must have full discretion at all times to refrain from paying any dividends and making any other distributions on the instrument without triggering an event of default, a requirement to make a payment-in-kind, or an imposition of any other restriction on the holding company (criterion (vi) in section 217.20(b)(1)(vi)). Companies must ensure that they have a sufficient amount of capital instruments that do not have such rights and that meet the other criteria of common equity tier 1 capital, in order to meet the requirements of Regulation Q.

(7) *Features that reallocate prior distributions.*

(i) An LLC issues two types of membership interests, Class A and Class B. The terms of the LLC's membership interests provide that, under certain circumstances, holders of Class A interests must return a portion of earlier distributions, which are then distributed to holders of Class B interests (sometimes called a "clawback").

(ii) If the reallocation of prior distributions described in paragraph (c)(7)(i) of this section could result in holders of the Class B interests bearing fewer losses on an aggregate basis than Class A interests, the Class B interests would not qualify as common equity tier 1 capital. However, where the membership interests provide for disproportionate allocation of profits, such as described in the example in paragraph (c)(4) of this section, and the reallocation of prior distributions would be

limited to reversing the disproportionate portions of prior distributions, both the Class A and Class B interests could qualify as common equity tier 1 capital provided that they met all the other criteria in section 217.20(b).

3-2602

SECTION 217.502—Application of the Board’s Regulatory Capital Framework to Employee Stock Ownership Plans that are Depository Institution Holding Companies and Certain Trusts that are Savings and Loan Holding Companies

(a) *Employee stock ownership plans.* Notwithstanding section 217.1(c), a bank holding company or covered savings and loan holding company that is an employee stock ownership plan is exempt from this part until the Board adopts regulations that directly relate to the application of capital regulations to employee stock ownership plans.

(b) *Personal or family trusts.* Notwithstanding section 217.1(c), a covered savings and loan holding company is exempt from this part if it is a personal or family trust and not a business trust until the Board adopts regulations that apply capital regulations to such a covered savings and loan holding company.

3-2701

SUBPART J—RISK-BASED CAPITAL REQUIREMENTS FOR BOARD-REGULATED INSTITUTIONS SIGNIFICANTLY ENGAGED IN INSURANCE ACTIVITIES

SECTION 217.601—Purpose, Applicability, and Reservations of Authority

(a) *Purpose.* This subpart establishes a framework for assessing overall risk-based capital for Board-regulated institutions that are significantly engaged in insurance activities. The framework in this subpart is used to measure available capital resources and capital requirements across a Board-regulated institution and its subsidiaries that are subject to diverse capital frameworks, aggregate available capital resources and capital requirements and calculate

a ratio that reflects the overall capital adequacy of the Board-regulated institution.

(b) *Applicability.* This subpart applies to every Board-regulated institution that is:

- (1) A top-tier depository institution holding company that is an insurance underwriting company; or
- (2) A top-tier depository institution holding company, that, as of June 30 of the previous calendar year, held 25 percent or more of its total consolidated assets in insurance underwriting companies (other than assets associated with insurance underwriting for credit risk). For purposes of this paragraph (b)(2), the Board-regulated institution must calculate its total consolidated assets in accordance with GAAP, or if the Board-regulated institution does not calculate its total consolidated assets under GAAP for any regulatory purpose (including compliance with applicable securities laws), the company may estimate its total consolidated assets, subject to review and adjustment by the Board; or
- (3) Depository institution holding company in a supervised insurance organization; or
- (4) An institution that is otherwise made subject to this subpart by the Board.

(c) *Exclusion of certain depository institution holding companies.* Notwithstanding paragraph (b) of this section, this subpart does not apply to a top-tier depository institution holding company that—

- (1) Exclusively files financial statements in accordance with Statutory Accounting Principles (SAP);
- (2) Is not subject to a state insurance capital requirement; and
- (3) Has no subsidiary depository institution holding company that—
 - (i) Is subject to a capital requirement; or
 - (ii) Does not exclusively file financial statements in accordance with SAP.

(d) *Reservation of authority.*

- (1) *Regulatory capital resources.*
 - (i) If the Board determines that a particular company capital element has characteristics or terms that diminish its ability to absorb losses, or otherwise present safety and soundness concerns, the Board

may require the supervised insurance organization to exclude all or a portion of such element from building block available capital for a depository institution holding company in the supervised insurance organization.

(ii) Notwithstanding any provision of section 217.608, the Board may find that a capital resource may be included in the building block available capital of a depository institution holding company on a permanent or temporary basis consistent with the loss absorption capacity of the capital resource and in accordance with section 217.608(g).

(2) *Required capital amounts.* If the Board determines that the building block capital requirement for any depository institution holding company is not commensurate with the risks of the depository institution holding company, the Board may adjust the building block capital requirement and building block available capital for the supervised insurance organization.

(3) *Structural requirements.* In order to achieve the appropriate application of this subpart, the Board may require a supervised insurance organization to take any of the following actions with respect to the application of this subpart, if the Board determines that such action would better reflect the risk profile of an inventory company or the supervised insurance organization:

(i) Identify components under this subpart differently than as done by the supervised insurance organization. This could include a different identification of a top-tier depository institution holding company, an inventory company, a material financial entity, or a building block parent, then that made by the supervised insurance organization; or

(ii) Set a building block parent's allocation share of a downstream building block parent equal to 100 percent.

(4) *Other reservation of authority.* With respect to any treatment required under this subpart, the Board may require a different treatment, provided that such alternative treatment is commensurate with the supervised insurance organization's risk and consistent with safety and soundness.

(e) *Notice and response procedures.* In making any determinations under paragraph (d) of this section, the Board will apply notice and response procedures in the same manner as the notice and response procedures in section 263.202 of this chapter.

3-2702

SECTION 217.602—Definitions

(a) Terms that are set forth in section 217.2 and used in this subpart have the definitions assigned thereto in section 217.2.

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

Allocation share means the portion of a downstream building block's available capital or building block capital requirement that a building block parent must aggregate in calculating its own building block available capital or building block capital requirement, as applicable, and calculated in accordance with section 217.605(d).

Assignment means the process of associating an inventory company with one or more building block parents for purposes of inclusion in the building block parents' building blocks.

BBA ratio is defined in section 217.603.

Building block means a building block parent and all downstream companies and subsidiaries assigned to the building block parent.

Building block available capital has the meaning set out in section 217.608.

Building block capital requirement has the meaning set out in section 217.607.

Building block parent means the lead company of a building block whose indicated capital framework must be applied to all members of a building block for purposes of determining building block available capital and the building block capital requirement.

Capital-regulated company means a company that is—

- (i) A depository institution, foreign bank, or company engaged in the business of insurance in a supervised insurance organization; and

- (ii) Directly subject to a regulatory capital framework.

Common capital framework means NAIC RBC.

Company available capital means, for a company, the amount of its capital elements, net of any adjustments and deductions, as determined in accordance with the company's indicated capital framework.

Company capital element means any part, item, component, balance sheet account, instrument, or other element qualifying as regulatory capital under a company's indicated capital framework prior to any adjustments and deductions under that framework.

Company capital requirement means:

- (i) For a company whose indicated capital framework is NAIC RBC, the Authorized Control Level risk-based capital requirement as set forth in NAIC RBC;
- (ii) For a company whose indicated capital framework is a U.S. Federal banking capital rule, the total risk-weighted assets; and
- (iii) For any other company, a risk-sensitive measure of required capital used to determine the jurisdictional intervention point applicable to that company.

Downstream building block parent means a building block parent that is a downstream company of another building block parent.

Downstream company means a company whose company capital element is directly or indirectly owned, in whole or in part, by another company in the supervised insurance organization.

Downstreamed capital means direct ownership of a downstream company's company capital element that is accretive to a downstream building block parent's building block available capital. When calculating building block available capital, the amount of the downstreamed capital is calculated as the amount, excluding any impact on taxes, of the company available capital of the building block parent of the upstream building block, if the owner were to deduct the downstreamed capital.

Financial entity means:

- (i) A bank holding company; a savings and loan holding; a U.S. intermediate holding company established or designated for purposes of compliance with part 252 of this chapter;
- (ii) A depository institution as defined in section 3(c) of the Federal Deposit Insurance Act (12 U.S.C. 1813(c)); an organization that is organized under the laws of a foreign country and that engages directly in the business of banking outside the United States; a Federal credit union or state credit union; a national association, state member bank, or state nonmember bank that is not a depository institution; an institution that functions solely in a trust or fiduciary capacity; an industrial loan company, an industrial bank, or other similar institution;
- (iii) An entity that is state-licensed or registered as:
 - (A) A credit or lending entity, including a finance company; money lender; installment lender; consumer lender or lending company; mortgage lender, broker, or bank; motor vehicle title pledge lender; payday or deferred deposit lender; premium finance company; commercial finance or lending company; or commercial mortgage company; except entities registered or licensed solely on account of financing the entity's direct sales of goods or services to customers; or
 - (B) A money services business, including a check casher; money transmitter; currency dealer or exchange; or money order or traveler's check issuer;
- (iv) Any person registered with the Commodity Futures Trading Commission as a swap dealer or major swap participant pursuant to the Commodity Exchange Act (7 U.S.C. 1 *et seq.*), or an entity that is registered with the U.S. Securities and Exchange Commission as a security-based swap dealer or a major security-based swap participant pursuant to the Securities Exchange Act of 1934 (15 U.S.C. 78a *et seq.*);
- (v) A securities holding company as defined in section 618 of the Dodd-Frank Act (12 U.S.C. 1850a); a broker or dealer as defined in sections 3(a)(4) and 3(a)(5) of the Securities Exchange Act of 1934 (15

U.S.C. 78c(a)(4)–(5)); an investment company registered with the U.S. Securities and Exchange Commission under the Investment Company Act of 1940 (15 U.S.C. 80a–1 *et seq.*); or a company that has elected to be regulated as a business development company pursuant to section 54(a) of the Investment Company Act of 1940 (15 U.S.C. 80a–53(a));

(vi) A private fund as defined in section 202(a) of the Investment Advisers Act of 1940 (15 U.S.C. 80b–2(a)); an entity that would be an investment company under section 3 of the Investment Company Act of 1940 (15 U.S.C. 80a–3) but for section 3(c)(5)(C) of that Act; or an entity that is deemed not to be an investment company under section 3 of the Investment Company Act of 1940 pursuant to 17 CFR 270.3a–7 (Investment Company Act Rule 3a–7 of the U.S. Securities and Exchange Commission);

(vii) A commodity pool, a commodity pool operator, or a commodity trading advisor as defined, respectively, in sections 1a(10), 1a(11), and 1a(12) of the Commodity Exchange Act (7 U.S.C. 1a(10), 1a(11), and 1a(12)); a floor broker, a floor trader, or introducing broker as defined, respectively, in sections 1a(22), 1a(23) and 1a(31) of the Commodity Exchange Act (7 U.S.C. 1a(22), 1a(23), and 1a(31)); or a futures commission merchant as defined in section 1a(28) of the Commodity Exchange Act (7 U.S.C. 1a(28));

(viii) An entity that is organized as an insurance company, primarily engaged in underwriting insurance or reinsuring risks underwritten by insurance companies;

(ix) Any designated financial market utility, as defined in section 803 of the Dodd-Frank Act (12 U.S.C. 5462); and

(x) An entity that would be a financial entity described in paragraphs (i) through (ix) of this definition, if it were organized under the laws of the United States or any State thereof.

Indicated capital framework is defined in section 217.605, provided that for purposes of section 217.605(b)(2), the NAIC RBC frameworks for life insurance and fraternal insurers, property and casualty (P&C) insurance, and

health insurance companies are different indicated capital frameworks.

Inventory company means a company identified pursuant to section 217.605(b)(1).

Material means, for a company in the supervised insurance organization:

(i) Where the top-tier depository institution holding company's total exposure to the company exceeds 5 percent of the maximum of—

(A) Top-tier depository institution holding company's company available capital; and

(B) The largest company available capital of all capital regulated companies reported in the supervised insurance organization's inventory; or

(ii) The company is otherwise significant when assessing the building block available capital or building block capital requirement of the top-tier depository institution holding company based on factors including risk exposure, activities, organizational structure, complexity, affiliate guarantees or recourse rights, and size.

(iii) For purposes of this definition, total exposure includes:

(A) The absolute value of the top-tier depository institution holding company's direct or indirect interest in the company capital elements of the company;

(B) The maximum possible loss from a guarantee (explicit or implicit) the top-tier depository institution holding company or any other company in the supervised insurance organization provides for the benefit of the company; and

(C) Maximum potential counterparty credit risk to the top-tier depository institution holding company or any other company in the supervised insurance organization arising from any derivative or similar instrument, reinsurance or similar arrangement, or other contractual agreement.

Material financial entity means a financial entity that, together with its subsidiaries, but excluding any subsidiary capital-regulated company (or subsidiary thereof), is material,

provided that an inventory company is not eligible to be a material financial entity if:

- (i) The supervised insurance organization has elected pursuant to section 217.605(c) not to treat the company as a material financial entity; or
- (ii) The inventory company is a financial subsidiary, as defined in section 121 of the Gramm-Leach-Bliley Act.

Member means, with respect to a building block, the building block parent or any of its downstream companies or subsidiaries that have been assigned to a building block.

NAIC means the National Association of Insurance Commissioners.

NAIC RBC means the most recent version of the Risk-Based Capital (RBC) for Insurers Model Act, together with the RBC instructions, as adopted in a substantially similar manner by an NAIC member and published in the NAIC's Model Regulation Service.

Permitted accounting practice means an accounting practice, specifically requested by a state-regulated insurer, that departs from SAP and state prescribed accounting practices and has been approved by the state-regulated insurer's domiciliary state regulatory authority.

Prescribed accounting practice means an accounting practice that is incorporated directly or by reference to state laws, regulations, and general administrative rules applicable to all insurance companies domiciled in a particular state.

Principles based reserving (PBR) means the valuation standard adopted for certain life insurance reserves by the NAIC effective as of January 1, 2020.

Recalculated building block capital requirement means, for a downstream building block parent and an upstream building block parent, the downstream building block parent's building block capital requirement recalculated assuming that the downstream building block parent had no upstream investment in the upstream building block parent.

Regulatory capital framework means, with respect to a company, the applicable legal re-

quirements, excluding this subpart, specifying the minimum amount of total regulatory capital the company must hold to avoid restrictions on distributions and discretionary bonus payments, regulatory intervention on the basis of capital adequacy levels for the company, or equivalent standards; provided that the NAIC RBC frameworks for life and fraternal insurance, P&C insurance, and health insurance companies are different regulatory capital frameworks.

SAP means Statutory Accounting Principles as promulgated by the NAIC and adopted by a jurisdiction for purposes of financial reporting by insurance companies.

Scaling means the translation of building block available capital and building block capital requirement from one indicated capital framework to another by application of section 217.606.

Scalar compatible means a capital framework:

- (i) For which the Board has determined scalars; or
- (ii) That is an insurance capital regulatory framework, and exhibits each of the following three attributes:
 - (A) The framework is clearly defined and broadly applicable;
 - (B) The framework has an identifiable regulatory intervention point that can be used to calibrate a scalar; and
 - (C) The framework provides a risk-sensitive measure of required capital reflecting material risks to a company's financial strength.

Submission date means the date as of which form FR Q-1 is filed with the Board.

Supervised insurance organization means:

- (i) In the case of a depository institution holding company, the set of companies consisting of:
 - (A) A top-tier depository institution holding company that is an insurance underwriting company, together with its inventory companies; or
 - (B) A top-tier depository institution holding company, together with its inventory companies, that, as of June 30 of the previous calendar year, held 25 percent

or more of its total consolidated assets in insurance underwriting companies (other than assets associated with insurance underwriting for credit risk). For purposes of this paragraph (i)(B), the supervised firm must calculate its total consolidated assets in accordance with GAAP, or if the firm does not calculate its total consolidated assets under GAAP for any regulatory purpose (including compliance with applicable securities laws), the company may estimate its total consolidated assets, subject to review and adjustment by the Board; or

- (ii) An institution that is otherwise subject to this subpart, as determined by the Board, together with its inventory companies.

Tier 2 capital instruments has the meaning set out in section 217.608(a).

Top-tier depository institution holding company means a depository institution holding company that is not controlled by another depository institution holding company.

Upstream building block parent means an upstream company that is a building block parent.

Upstream company means a company within a supervised insurance organization that directly or indirectly controls a downstream company, or directly or indirectly owns part or all of a downstream company's company capital elements.

Upstream investment means any direct or indirect investment by a downstream building block parent in an upstream building block parent. When calculating adjusted downstream building block available capital, the amount of the upstream investment is calculated as the impact, excluding any impact on taxes, on the downstream building block parent's building block available capital if the owner were to deduct the investment.

U.S. federal banking capital rules mean this part, other than this subpart, and the regulatory capital rules promulgated by the Federal Deposit Insurance Corporation at chapter III of this title and the Office of the Comptroller of the Currency at chapter I of this title.

3-2703

SECTION 217.603—BBA Ratio and Minimum Requirements

(a) *In general.* A supervised insurance organization must determine its BBA ratio, subject to the minimum requirement set out in this section and buffer set out in section 217.604, for each depository institution holding company within its enterprise by:

- (1) Establishing an inventory that includes the supervised insurance organization and every company that meets the requirements of section 217.605(b)(1);
- (2) Identifying all building block parents as required under section 217.605(b)(3);
- (3) Determining the available capital and capital requirement for each building block parent in accordance with its indicated capital framework;
- (4) Determining the building block available capital and building block capital requirement for each building block, reflecting adjustments and scaling as set out in this subpart;
- (5) Rolling up building block available capital and building block capital requirement amounts across all building blocks in the supervised insurance organization's enterprise to determine the same for any depository institution holding companies in the enterprise; and
- (6) Determining the ratio of building block available capital to building block capital requirement for each depository institution holding company in the supervised insurance organization.

(b) *Determination of BBA ratio.* For a depository institution holding company in a supervised insurance organization, the BBA ratio is the ratio of the company's building block available capital to the company's building block capital requirement, each scaled to the common capital framework in accordance with section 217.606.

(c) *Minimum capital requirement.* A depository institution holding company in a supervised insurance organization must maintain a BBA ratio of at least 250 percent.

(d) *Capital adequacy.*

- (1) Notwithstanding the minimum require-

ment in this subpart, a depository institution holding company in a supervised insurance organization must maintain capital commensurate with the level and nature of all risks to which it is exposed. The supervisory evaluation of the depository institution holding company's capital adequacy is based on an individual assessment of numerous factors, including the character and condition of the company's assets and its existing and prospective liabilities and other corporate responsibilities.

(2) A depository institution holding company in a supervised insurance organization must have a process for assessing its overall capital adequacy in relation to its risk profile and a comprehensive strategy for maintaining an appropriate level of capital.

3-2704

SECTION 217.604—Capital Conservation Buffer

(a) *Capital conservation buffer.*

(1) *Composition of the capital conservation buffer.* The capital conservation buffer is composed solely of building block available capital excluding tier 2 capital instruments and additional tier 1 capital instruments.

(2) *Definitions.* For purposes of this section, the following definitions apply:

(i) *Distribution* means:

(A) A reduction of tier 1 capital through the repurchase of a tier 1 capital instrument or by other means, except when a Board-regulated institution, within the same quarter when the repurchase is announced, fully replaces a tier 1 capital instrument it has repurchased by issuing another capital instrument that meets the eligibility criteria for:

(1) A common equity tier 1 capital instrument if the instrument being repurchased was part of the Board-regulated institution's common equity tier 1 capital; or

(2) A common equity tier 1 or additional tier 1 capital instrument if the instrument being repurchased was part of the Board-regulated institution's tier 1 capital;

(B) A reduction of tier 2 capital

through the repurchase, or redemption prior to maturity, of a tier 2 capital instrument or by other means, except when a Board-regulated institution, within the same quarter when the repurchase or redemption is announced, fully replaces a tier 2 capital instrument it has repurchased by issuing another capital instrument that meets the eligibility criteria for a tier 1 or tier 2 capital instrument;

(C) A dividend declaration or payment on any tier 1 capital instrument;

(D) A dividend declaration or interest payment on any tier 2 capital instrument if the Board-regulated institution has full discretion to permanently or temporarily suspend such payments without triggering an event of default;

(E) A discretionary dividend payment on participating insurance policies; or

(F) Any similar transaction that the Board determines to be in substance a distribution of capital.

(ii) *Eligible retained income* means, for a depository institution holding company in a supervised insurance organization, the annual change in the company's building block available capital, calculated as of the last day of the current and immediately preceding calendar years based on the supervised insurance organization's most recent form FR Q-1, net of any distributions and accretion to building block available capital from capital instruments issued in the current or immediately preceding calendar year, excluding issuances corresponding with retirement of capital instruments under paragraph (a)(2)(i)(A) of this section.

(iii) *Maximum payout amount* means, for the current calendar year, is equal to the Board-regulated institution's eligible retained income, multiplied by its maximum payout ratio.

(iv) *Maximum payout ratio* means the percentage of eligible retained income that a Board-regulated institution can pay out in the form of distributions and discretionary bonus payments during the current calendar year. The maximum payout ratio is determined by the Board-

regulated institution’s capital conservation buffer, calculated as of the last day of the previous calendar year, as set forth in table 1 to this section.

(3) *Calculation of capital conservation buffer.* The capital conservation buffer for a depository institution holding company in a supervised insurance organization is the greater of its BBA ratio, calculated as of the last day of the previous calendar year based on the supervised insurance organization’s most recent form FR Q-1, minus the minimum capital requirement under section 217.603(c), and zero.

(4) *Limits on distributions and discretionary bonus payments.*

(i) A top-tier depository institution holding company in a supervised insurance organization shall not make distributions or discretionary bonus payments or create an obligation to make such distributions or payments during the current calendar year that, in the aggregate, exceed its maximum payout amount.

(ii) A top-tier depository institution holding company in a supervised insurance organization and that has a capital conservation buffer that is greater than 150 percent is not subject to a maximum payout amount under this section.

(iii) Except as provided in paragraph (a)(4)(iv) of this section, a top-tier depository institution holding company in a supervised insurance organization may not make distributions or discretionary bonus payments during the current calendar year if the Board-regulated institution’s:

(A) Eligible retained income is negative; and

(B) Capital conservation buffer was less than 150 percent as of the end of the previous calendar year.

(iv) Notwithstanding the limitations in paragraphs (a)(4)(i) through (iii) of this section, the Board may permit a top-tier depository institution holding company in a supervised insurance organization to make a distribution or discretionary bonus payment upon a request of the depository institution holding company, if the Board determines that the distribution

or discretionary bonus payment would not be contrary to the purposes of this section, or to the safety and soundness of the depository institution holding company. In making such a determination, the Board will consider the nature and extent of the request and the particular circumstances giving rise to the request.

(b) [Reserved]

Capital conservation buffer	Maximum payout ratio(as a percentage of eligible retained income)
Greater than 150 percent	No payout ratio limitation applies
Less than or equal to 150 percent, <i>and</i> greater than 113 percent	60 percent
Less than or equal to 113 percent, <i>and</i> greater than 75 percent	40 percent
Less than or equal to 75 percent, <i>and</i> greater than 38 percent	20 percent
Less than or equal to 38 percent	0 percent

3-2705

SECTION 217.605—Determination of Building Blocks

(a) *In general.* A supervised insurance organization must identify each building block parent and its allocation share of any downstream building block parent, as applicable.

(b) *Operation.* To identify building block parents and determine allocation shares, a supervised insurance organization must take the following steps in the following order:

(1) *Inventory of companies.* A supervised insurance organization must identify as inventory companies:

(i) All companies that are—

(A) Required to be reported on the FR Y-6;

(B) Required to be reported on the FR Y-10; or

(C) Classified as affiliates in accordance with NAIC Statement of Statutory Accounting Principles (SSAP) No. 25 and Schedule Y;

(ii) Any company, special purpose entity, variable interest entity, or similar entity that:

(A) Enters into one or more reinsurance or derivative transactions with inventory companies identified pursuant to paragraph (b)(1)(i) of this section;

(B) Is material;

(C) Is engaged in activities such that one or more inventory companies identified pursuant to paragraph (b)(1)(i) of this section are expected to absorb more than 50 percent of its expected losses; and

(D) Is not otherwise identified as an inventory company; and

(iii) Any other company that the Board determines must be identified as an inventory company.

(2) *Determination of indicated capital framework.*

(i) A supervised insurance organization must:

(A) Determine the indicated capital framework for each inventory company; and

(B) Identify inventory companies that are subject to a regulatory capital framework.

(ii) The indicated capital framework for an inventory company is:

(A) If the inventory company is not engaged in insurance or reinsurance underwriting, the U.S. Federal banking capital rules, in particular:

(1) If the inventory company is not a depository institution, subparts A through F of this part; and

(2) If the inventory company is a depository institution, the regulatory capital framework applied to the depository institution by the appropriate primary Federal regulator—that is, subparts A through F of this part (Board), part 3 of this title (Office of the Comptroller of the Currency), or part 324 of this title (Federal Deposit Insurance Corporation), as applicable;

(B) If the inventory company is engaged in insurance or reinsurance underwriting and subject to a regulatory

capital framework that is scalar compatible, the regulatory capital framework; and

(C) If the inventory company is engaged in insurance or reinsurance underwriting and not subject to a regulatory capital framework that is scalar compatible, then NAIC RBC for life and fraternal insurers, health insurers, or property & casualty insurers based on the company's primary source of premium revenue.

(3) *Identification of building block parents.*

A supervised insurance organization must identify all building block parents according to the following procedure:

(i) (A) Identify all top-tier depository institution holding companies in the supervised insurance organization.

(B) Any top-tier depository institution holding company is a building block parent.

(ii) (A) Identify any inventory company that is a depository institution holding company.

(B) An inventory company identified in paragraph (b)(3)(ii)(A) of this section is a building block parent.

(iii) Identify all inventory companies that are capital-regulated companies (that is, inventory companies that are subject to a regulatory capital framework) or material financial entities.

(iv) (A) Of the inventory companies identified in paragraph (b)(3)(iii) of this section, identify any inventory company that:

(1) Is assigned an indicated capital framework that is different from the indicated capital framework of any next upstream inventory company identified in paragraphs (b)(3)(i) through (iii) of this section or does not have a next upstream inventory company; and

(i) In a simple structure, an inventory company would compare its indicated capital framework to the indicated capital framework of its parent company. However, if the parent company does not meet the criteria to be identified as a

building block parent, the inventory company must compare its capital framework to the next upstream company that is eligible to be identified as a building block parent. For purposes of this paragraph (b)(3)(iv), a company is “next upstream” to a downstream company if it controls or owns, in whole or in part, a company capital element of the downstream company either directly, or indirectly other than through a company identified in paragraphs (b)(3)(ii) and (iii) of this section.

(ii) [Reserved]

(2) Is assigned an indicated capital framework for which the Board has determined a scalar or, if the company in aggregate with all other companies subject to the same indicated capital framework are material, a provisional scalar;

(B) Of the inventory companies identified in paragraph (b)(3)(iii) of this section, identify any inventory company that:

(1) Is assigned an indicated capital framework that is the same as the indicated capital framework of each next upstream inventory company identified in paragraphs (b)(3)(i) through (iii) of this section;

(2) Is assigned an indicated capital framework for which the Board has determined a scalar or, if the company in aggregate with all other companies subject to the same indicated capital framework is material, a provisional scalar; and

(3) Is owned, in whole or part, by an inventory company that is subject to the same regulatory capital framework, and the owner:

(i) Applies a charge on the inventory company’s equity value in calculating its company capital requirement; or

(ii) Deducts all or a portion of its investment in the inventory company in calculating its company available capital.

(C) An inventory company identified in paragraph (b)(3)(iv)(A) through (B) of this section is a building block parent.

(v) Include any inventory company identified in paragraph (b)(1)(ii) of this section as a building block parent.

(vi) (A) Identify any inventory company—

(1) For which more than one building block parent, as identified pursuant to paragraphs (b)(3)(i) through (v) of this section, owns a company capital element either directly or indirectly other than through another such building block parent; and

(2) (i) Is consolidated under any such building block parent’s indicated capital framework; or

(ii) Owns downstreamed capital.

(B) An inventory company identified in paragraph (b)(3)(vi)(A) of this section is a building block parent.

(4) *Building blocks.*

(i) Except as provided in paragraph (b)(4)(ii) of this section, a supervised insurance organization must assign an inventory company to the building block of any building block parent that owns a company capital element of the inventory company, or of which the inventory company is a subsidiary, directly or indirectly through any company other than a building block parent, unless the inventory company is a building block parent.

(A) For purposes of this section, subsidiary includes a company that is required to be reported on the FR Y-6, FR Y-10, or NAIC’s Schedule Y, as applicable.

(B) [Reserved]

(ii) A supervised insurance organization is not required to assign to a building block any inventory company that is not a downstream company or subsidiary of a top-tier depository institution holding company.

(5) *Financial statements.* The supervised insurance organization must:

(i) For any inventory company whose indicated capital framework is NAIC RBC,

prepare financial statements in accordance with SAP; and

(ii) For any building block parent whose indicated capital framework is subparts A through F of this part:

(A) Apply the same elections and treatment of exposures as are applied to the subsidiary depository institution;

(B) Apply subparts A through F of this part, to the members of the building block of which the building block parent is a member, on a consolidated basis, to the same extent as if the building block parent were a Board-regulated institution; and

(C) Where the building block parent is not the top-tier depository institution holding company, not deduct investments in capital of unconsolidated financial institutions, nor exclude these investments from the calculation of risk-weighted assets.

(6) *Allocation share.* A supervised insurance organization must, for each building block parent, identify any downstream building block parent owned directly or indirectly through any company other than a building block parent, and determine the building block parent's allocation share of these downstream building block parents pursuant to paragraph (d) of this section.

(c) *Material financial entity election.*

(1) A supervised insurance organization may elect not to treat an inventory company meeting the criteria in paragraph (c)(2) of this section as a material financial entity. An election under this paragraph (c)(1) must be included with the first financial statements submitted to the Board after the company is included in the supervised insurance organization's inventory.

(2) The election in paragraph (c)(1) of this section is available to an inventory company if:

(i) The company engages in transactions consisting solely of either—

(A) Transactions for the purpose of transferring risk from one or more affiliates within the supervised insurance organization to one or more third parties; or

(B) Transactions to invest assets contributed to the company by one or more affiliates within the supervised insurance organization, where the company is established for purposes of limiting tax obligation or legal liability; and

(ii) The supervised insurance organization is able to calculate the adjustment required in section 217.607(b)(4).

(d) *Allocation share.*

(1) Except as provided in paragraph (d)(2) of this section, a building block parent's allocation share of a downstream building block parent is calculated as the percentage of equity ownership of a downstream building block parent, including associated paid-in capital, held by an upstream building block parent directly or indirectly through a member of the upstream building block parent's building block.

(2) The top-tier depository institution holding company's allocation share of a building block parent that has no outstanding common equity or that is identified under paragraph (b)(3)(v) of this section is 100 percent. Any other building block parent's allocation share of such building block parent is zero.

3-2706

SECTION 217.606—Scaling Parameters

(a) *Scaling specified by the Board.*

(1) *Scaling between the U.S. Federal banking capital rules and NAIC RBC.*

(i) *Scaling capital requirement.* When calculating the building block capital requirement for a building block parent in accordance with section 217.607, where the indicated capital framework is NAIC RBC or the U.S. Federal banking capital rules, and where the indicated capital framework of the appropriate downstream building block parent is NAIC RBC or the U.S. Federal banking capital rules, the capital requirement scaling modifier is provided by table 1 to this paragraph (a)(1)(i).

	Upstream building block parent's indicated capital framework:	
	NAIC RBC "	U.S. federal banking capital rules
Downstream building block parent's indicated capital framework:		
U.S. federal banking capital rules	0.0106	1
NAIC RBC	1	94.3

(ii) *Scaling available capital.* When calculating the building block available capital for a building block parent in accordance with section 217.608, where the indicated capital framework is NAIC RBC or the U.S. Federal banking capital rules, and where the indicated capital

framework of the appropriate downstream building block parent is NAIC RBC or the U.S. Federal banking capital rules, the available capital scaling modifier is provided by table 2 to this paragraph (a)(1)(ii).

	Upstream building block parent's indicated capital framework:	
	NAIC RBC	U.S. federal banking capital rules
Downstream building block parent's indicated capital framework:		
U.S. federal banking capital rules	Recalculated building block capital requirement * 0.063	0
NAIC RBC	0	Recalculated building block capital requirement * 5.9
Capital framework:		
NAIC RBC	0	Recalculated building block capital requirement * 5.9

(2) *Scaling to determine BBA ratio.* For purposes of determining the BBA ratio under section 217.603(b)—

(i) A depository institution holding company for which the indicated capital framework is the U.S. Federal banking capital rules scales its building block available capital and building block capital requirement the common capital framework by using the methods described in paragraphs (a)(1) of this section. For purposes of scaling under this paragraph (a)(2)(i), the downstream building block parent's indicated capital framework is the U.S. Federal banking capital rules and the upstream building block parent's indicated capital framework is NAIC RBC; and

(ii) A depository institution holding com-

pany for which the indicated capital framework is NAIC RBC does not scale its building block available capital or building block capital requirement.

(b) *Scaling not specified by the Board but framework is scalar compatible.* Where a scaling modifier to be used in section 217.607 or section 217.608 is not specified in paragraph (a) of this section, and the building block parent's indicated capital framework (i.e., jurisdictional capital framework) is scalar compatible, a building block parent determines the scaling modifier as follows:

(1) *Definitions.* For purposes of this section, the following definitions apply:

(i) *Jurisdictional intervention point.* The jurisdictional intervention point is the capital level, under the laws of the jurisdiction for its domestic insurers, at which

the supervisory authority in the jurisdiction may intervene as to a company subject its capital framework by imposing restrictions on distributions and discretionary bonus payments by the company or, if no such intervention may occur in a jurisdiction, then the capital level at which the supervisory authority would first have the authority to take action against a company based on its capital level.

(ii) *Jurisdiction adjustment.* The jurisdictional adjustment is the risk adjustment set forth in table 3 to this paragraph (b)(1)(ii), based on the country risk classification set by the Organization for Economic Cooperation and Development (OECD) for the jurisdiction. This adjustment is applied to the jurisdictional intervention point.

OECD CRC	Jurisdictional adjustment (percent)
0-1, including jurisdictions with no OECD country risk classification	0
2	20
3	50
4-6	100
7	150

(2) *Scaling capital requirement.* When calculating the building block capital requirement for a building block parent in accordance with section 217.607, where the indicated capital framework of the appropriate downstream building block parent is a scalar-compatible framework for which the Board has not specified a capital requirement scaling modifier, the capital requirement scaling modifier is calculated according to the following formula:

Where:

$$\frac{(1 + Adjustment_{scaling\ from}) * Requirement_{scaling\ from}}{Requirement_{scaling\ to}}$$

Adjustment_{scaling from} is equal to the jurisdictional adjustment of the downstream building block parent;

Requirement_{scaling from} is equal to the jurisdictional intervention point of the downstream building block parent; and

Requirement_{scaling to} is equal to the jurisdictional intervention point of the upstream building block parent.

(3) *Scaling available capital.* When calculating the building block available capital for a building block parent in accordance with section 217.608, where the indicated capital framework of the appropriate downstream building block parent is a scalar-compatible framework for which the Board has not specified an available capital scaling modifier, the available capital scaling modifier is equal to zero.

sum of the items in paragraphs (a)(1) and (2) of this section:

(1) The company capital requirement of the building block parent; that is:

(i) Recalculated under the assumption that members of the building block parent's building block had no investment in any downstream building block parent; and is:

(ii) Adjusted pursuant to paragraph (b) of this section;

(2) For each downstream building block parent, the adjusted downstream building block capital requirement (*BBCR_{ADJ}*), which is calculated according to the following formula:

$$BBCR_{ADJ} = BBCR_{DS} \cdot CRSM \cdot AS$$

Where:

BBCR_{DS} is equal to the building block capital requirement of the downstream

3-2707

SECTION 217.607—Capital Requirements under the Building Block Approach

(a) *Determination of building block capital requirement.* For each building block parent, building block capital requirement means the

building block parent recalculated under the assumption that the downstream building block parent had no upstream investment in the building block parent;

CRSM is equal to the appropriate capital requirement scaling modifier under section 217.606; and

AS is equal to the building block parent's allocation share of the downstream building block parent.

(b) *Adjustments in determining the building block capital requirement.* A supervised insurance organization must adjust the company capital requirement for any building block parent as follows:

(1) *Internal credit risk charges.* A supervised insurance organization must deduct from the building block parent's company capital requirement any difference between:

(i) The building block parent's company capital requirement; and

(ii) The building block parent's company capital requirement recalculated excluding capital requirements related to potential for the possibility of default of any company in the supervised insurance organization.

(2) Permitted accounting practices and prescribed accounting practices.¹ A supervised insurance organization must adjust the building block parent's company capital requirement by any difference between:

(i) The building block parent's company capital requirement, after making any adjustment in accordance with paragraph (b)(1) of this section; and

(ii) The building block parent's company capital requirement, after making any adjustment in accordance with paragraph (b)(1) of this section, recalculated under the assumption that neither the building block parent, nor any company that is a member of that building block parent's building block, had prepared its financial

statements with the application of any permitted accounting practice, prescribed accounting practice, or other practice, including legal, regulatory, or accounting procedures or standards, that departs from a solvency framework as promulgated for application in a jurisdiction.

(3) *Risks of certain intermediary entities.*

Where a supervised insurance organization has made an election with respect to a company not to treat that company as a material financial entity pursuant to section 217.605(c), the supervised insurance organization must add to the company capital requirement of any building block parent, whose building block contains a member, with which the company engages in one or more transactions, and for which the company engages in one or more transactions described in section 217.605(c)(2) with a third party, any difference between:

(i) The building block parent's company capital requirement; and

(ii) The building block parent's company capital requirement recalculated taking into account the risks of the company, excluding internal credit risks described in paragraph (b)(1) of this section, allocated to the building block parent, reflecting the transaction(s) that the company engages in with any member of the building block parent's building block. Note, the total allocation of the risks of the intermediary entity to building block parents must capture all material risks and avoid double counting.

(4) *Investments in own capital instruments.*

(i) *In general.* A supervised insurance organization must deduct from the building block parent's company capital requirement any difference between:

(A) The building block parent's company capital requirement; and

(B) The building block parent's company capital requirement recalculated after assuming that neither the building block parent, nor any company that is a member of the building block parent's building block, held any investment in the building block parent's own capital instrument(s), including any net long position determined in ac-

¹ The adjustment can be either positive or negative depending on the permitted or prescribed practices. In most cases, the reversal of the permitted or prescribed practice would result in an increase in the building block parent's company required capital. In rare cases, a permitted or prescribed practice could increase the insurers required capital. In this instance, this adjustment would reduce the building block parent's company required capital.

cordance with paragraph (b)(5)(ii) of this section.

(ii) *Net long position.* For purposes of calculating an investment in a building block parent's own capital instrument under this section, the net long position is determined in accordance with section 217.22(h), provided that a separate account asset or associated guarantee is not regarded as an indirect exposure unless the net long position of the fund underlying the separate account asset (determined in accordance with section 217.22(h) without regard to this paragraph (b)(4)(ii)) equals or exceeds 5 percent of the value of the fund.

(5) *Risks relating to title insurance.* A supervised insurance organization must add to the building block parent's company capital requirement the amount of the building block parent's reserves for claims pertaining to title insurance, multiplied by 300 percent.

3-2708

SECTION 217.608—Available Capital Resources under the Building Block Approach

(a) *Qualifying capital instruments.*

(1) *General criteria.* A qualifying capital instrument with respect to a building block parent is a capital instrument that meets the following criteria:

- (i) The instrument is issued and paid-in;
- (ii) The instrument is subordinated to depositors and general creditors of the building block parent;
- (iii) The instrument is not secured, not covered by a guarantee of the building block parent or of an affiliate of the building block parent, and not subject to any other arrangement that legally or economically enhances the seniority of the instrument in relation to more senior claims;
- (iv) The instrument has a minimum original maturity of at least five years.¹

At the beginning of each of the last five

years of the life of the instrument, the amount that is eligible to be included in building block available capital is reduced by 20 percent of the original amount of the instrument (net of redemptions), and is excluded from building block available capital when the remaining maturity is less than one year. In addition, the instrument must not have any terms or features that require, or create significant incentives for, the building block parent to redeem the instrument prior to maturity; and

(v) The instrument, by its terms, may be called by the building block parent only after a minimum of five years following issuance, except that the terms of the instrument may allow it to be called sooner upon the occurrence of an event that would preclude the instrument from being included in the building block parent's company available capital or building block available capital, a tax event, or if the issuing entity is required to register as an investment company pursuant to the Investment Company Act of 1940 (15 U.S.C. 80a-1 *et seq.*). In addition:

(A) The top-tier depository institution holding company must receive the prior approval of the Board to exercise a call option on the instrument.

(B) The building block parent does not create at issuance, through action or communication, an expectation the call option will be exercised.

(C) Prior to exercising the call option, or immediately thereafter, the top-tier depository institution holding company must either: replace any amount called with an equivalent amount of an instrument that meets the criteria for qualifying capital instruments under this section; or demonstrate to the satisfaction of the Board that following redemption, the top-tier depository institution holding company would continue to hold an amount of capital that is commensurate with its risk.²

(vi) Redemption of the instrument prior

¹ A building block parent may replace qualifying capital instruments concurrent with the redemption of existing qualifying capital instruments.

² A building block parent may replace qualifying capital instruments concurrent with the redemption of existing qualifying capital instruments.

to maturity or repurchase requires the prior approval of the Board.

(vii) The instrument meets the criteria in section 217.20(d)(1)(vi) through (ix) and (xi), except that each instance of “Board-regulated institution” is replaced with “building block parent” and, in section 217.20(d)(1)(ix), “tier 2 capital instruments” is replaced with “qualifying capital instruments.”

(2) Additional tier 1 capital instruments.³ Additional tier 1 capital instruments of a top-tier depository institution holding company are instruments issued by any inventory company that are qualifying capital instruments under paragraph (a)(1) of this section and meet all of the following criteria:

- (i) The instrument is subordinated to depositors, general creditors, and subordinated debt holders of the building block parent in a receivership, insolvency, liquidation, or similar proceeding;
- (ii) The instrument is not secured, not covered by a guarantee of the building block parent or of an affiliate of the building block parent, and not subject to any other arrangement that legally or economically enhances the seniority of the instrument;
- (iii) The instrument has no maturity date and does not contain a dividend step-up or any other term or feature that creates an incentive to redeem; and
- (iv) If callable by its terms, the instrument may be called only after a minimum of five years following issuance, except that the terms of the instrument may allow it to be called earlier than five years upon the occurrence of a regulatory event that precludes the instrument from being included in the building block parent’s company available capital or building block available capital, a tax event, or if the issuing entity is required to register as an investment company pursuant to the Investment Company Act of 1940 (15 U.S.C. 80a-1 *et seq.*). In addition:

(A) The top-tier depository institution holding company must receive the prior approval of the Board to exercise a call option on the instrument.

(B) The building block parent does not create at issuance, through action or communication, an expectation that the call option will be exercised.

(C) Prior to exercising the call option, or immediately thereafter, the top-tier depository institution holding company must either: replace any amount called with an equivalent amount of an instrument that meets the criteria for additional tier 1 capital instruments or common equity tier 1 instruments under this section; or demonstrate to the satisfaction of the Board that following redemption, the top-tier depository institution holding company would continue to hold an amount of capital that is commensurate with its risk.⁴

(v) Redemption or repurchase of the instrument requires prior approval of the Board.

(vi) The paid-in amount would be classified as equity under GAAP.

(vii) The instrument meets the criteria in section 217.20(c)(1)(vii) through (ix) and (xi) through (xiv), except that each instance of “Board-regulated institution” is replaced with “building block parent.”

(3) Common equity tier 1 capital instruments.⁵ Common equity tier 1 capital instruments of a top-tier depository institution holding company are instruments issued by any inventory company that are qualifying capital instruments under paragraph (a)(1) of this section and that meet all of the following criteria:

- (i) The holders of the instrument bear losses, as they occur, equally, proportionately, and simultaneously with the holders of all other qualifying capital instruments (other than additional tier 1 capital instruments or tier 2 capital instruments) be-

³ For purposes of this paragraph (a)(2), the supervised insurance organization evaluates the criteria in paragraph (a)(1) of this section with regard to the building block in which the issuing inventory company is a member.

⁴ A building block parent may replace qualifying capital instruments concurrent with the redemption of existing

⁵ For purposes of this paragraph (a)(3), the supervised insurance organization evaluates the criteria in paragraph (a)(1) of this section with regard to the building block in which the issuing inventory company is a member.

fore any losses are borne by holders of claims on the building block parent any with greater priority in a receivership, insolvency, liquidation, or similar proceeding.

(ii) The paid-in amount would be classified as equity under GAAP.

(iii) The instrument meets the criteria in section 217.20(b)(1)(i) through (vii) and (x) through (xiii).

(4) *Tier 2 capital instruments.* Tier 2 capital instruments of a top-tier depository institution holding company are instruments issued by any inventory company that are qualifying capital instruments under paragraph (a)(1) of this section and are not additional tier 1 capital instruments or common equity tier 1 capital instruments.

(b) *Determination of building block available capital.*

(1) *In general.* For each building block parent, building block available capital means the sum of the items described in paragraphs (b)(1)(i) and (ii) of this section:

(i) The company available capital of the building block parent:

(A) Less the amount of downstreamed capital owned by any member of the building block parent's building block; and

(B) Adjusted pursuant to paragraph (c) of this section.

(ii) For each downstream building block parent, the adjusted downstream building block available capital ($BBAC_{ADJ}$), which is calculated according to the following formula:

$$BBAC_{ADJ} = (BBAC_{DS} - UpInv + ACSM) \cdot AS$$

Where:

$BBAC_{DS}$ is equal to the building block available capital of the downstream building block parent;

$UpInv$ is equal to the amount of any upstream investment held by that downstream building block parent in the building block parent;

$ACSM$ is equal to the appropriate available capital scaling modifier under section 217.606; and

AS is equal to the building block parent's

allocation share of the downstream building block parent.

(2) *Combining tiers of capital.* If there is more than one tier of company available capital under a building block parent's indicated capital framework, the amounts of company available capital from all tiers are combined in calculating building block available capital in accordance with paragraph (b) of this section.

(c) *Adjustments in determining building block available capital.* For purposes of the calculations required in paragraph (b) of this section, a supervised insurance organization must adjust the company available capital for any building block parent as follows:

(1) *Nonqualifying capital instruments.* A supervised insurance organization must deduct from the building block parent's company available capital any accretion arising from any instrument issued by any company that is a member of the building block parent's building block, where the instrument is not a qualifying capital instrument.

(2) *Insurance underwriting RBC.* When applying the U.S. Federal banking capital rules as the indicated capital framework for a building block parent, a supervised insurance organization must add back into the building block parent's company available capital any amounts deducted pursuant to section 3.22(b)(3) of this title, section 217.22(b)(3), or section 324.22(b)(3) of this title, as applicable.

(3) *Permitted accounting practices and prescribed accounting practices.* A supervised insurance organization must adjust the building block parent's company available capital by any difference between:

(i) The building block parent's company available capital; and

(ii) The building block parent's company available capital recalculated under the assumption that neither the building block parent, nor any company that is a member of that building block parent's building block, had prepared its financial statements with the application of any permitted accounting practice, prescribed accounting practice, or other practice, including legal, regulatory, or accounting

procedures or standards, that departs from a solvency framework as promulgated for application in a jurisdiction.

(4) *Adjusting certain life insurance reserves.* A supervised insurance organization must adjust the building block parent's company available capital by any difference between:

(i) The building block parent's company available capital; and

(ii) The building block parent's company available capital recalculated based on using a 40 percent factor applied to all term life insurance accounted for using an approach based on the Valuation of Life Insurance Policies Model Regulation and a 90 percent factor applied to all secondary-guaranteed universal life insurance products accounted for using Actuarial Guideline XXXVIII—The Application of the Valuation of Life Insurance Policies Model Regulation.

(5) *Deduction of investments in own capital instruments.*

(i) *In general.* A supervised insurance organization must deduct from the building block parent's company available capital any investment by the building block parent in its own capital instrument(s), or any investment by any member of the building block parent's building block in capital instruments of the building block parent, including any net long position determined in accordance with paragraph (c)(5)(ii) of this section, to the extent that such investment(s) would otherwise be accretive to the building block parent's building block available capital.

(ii) *Net long position.* For purposes of calculating an investment in a building block parent's own capital instrument under this section, the net long position is determined in accordance with section 217.22(h), provided that a separate account asset or associated guarantee is not regarded as an indirect exposure unless the net long position of the fund underlying the separate account asset (determined in accordance with section 217.22(h) without regard to this paragraph (c)(5)(ii)) equals or exceeds 5 percent of the value of the fund.

(6) *Reciprocal cross holdings in the capital of financial institutions.* A supervised insurance organization must deduct from the building block parent's company available capital any investment(s) by the building block parent in the capital of unaffiliated financial institutions that it holds reciprocally, where such reciprocal cross holdings result from a formal or informal arrangement to swap, exchange, or otherwise intend to hold each other's capital instruments, to the extent that such investment(s) would otherwise be accretive to the building block parent's building block available capital.

(d) *Limits on certain elements in building block available capital of top-tier depository institution holding companies.*

(1) *Investment in capital of unconsolidated financial institutions.*

(i) A top-tier depository institution holding company must deduct from its building block available capital any accreted capital from an investment in the capital of an unconsolidated financial institution that is not an inventory company, that exceeds twenty-five percent of the amount of its building block available capital, prior to application of this adjustment, excluding tier 2 capital instruments. For purposes of this paragraph (d)(1), the amount of an investment in the capital of an unconsolidated financial institution is calculated in accordance with section 217.22(h), except that a separate account asset or associated guarantee is not an indirect exposure.

(ii) The deductions described in this paragraph (d)(1) are net of associated deferred tax liabilities in accordance with section 217.22(e).

(2) *Adjustments to accretions from tier 2 capital instruments.* A top-tier depository institution holding company must adjust accretions from tier 2 capital instruments in accordance with this paragraph (d)(2).

(i) A top-tier depository institution holding company must deduct any accretions from tier 2 capital instruments that, in the aggregate, exceed the greater of:

(A) 150 percent of the amount of its building block capital requirement; and

(B) The amount of instruments subject to paragraph (e) or (f) of this section that are outstanding as of the submission date; and

(ii) A top-tier depository institution holding company must increase accretions from tier 2 capital instruments by any amount deducted from accretions from additional tier 1 capital instruments by operation of paragraph (d)(3) of this section.

(3) *Limitation on additional tier 1 capital instruments.* A top-tier depository institution holding company must deduct any accretions from additional tier 1 capital instruments that, in the aggregate, exceed the greater of:

(i) 100 percent of the amount of its building block capital requirement; and

(ii) The amount of instruments subject to paragraph (f) of this section that are outstanding as of the submission date.

(e) *Treatment of outstanding surplus notes.* A surplus note issued by any company in a supervised insurance organization is deemed to meet the criteria in paragraphs (a)(1)(iii) and (vi) of this section if:

(1) The instrument was issued prior to the later of—

(i) November 1, 2019; and

(ii) The earliest date on which any depository institution holding company in the group became a depository institution holding company;

(2) The surplus note is a company capital element for the issuing company;

(3) The surplus note is not owned by an affiliate of the issuer; and

(4) The surplus note is outstanding as of the submission date.

(f) *Treatment of certain callable instruments.* Notwithstanding the criteria under paragraph (a)(1) of this section, an instrument with terms that provide that the instrument may be called earlier than five years upon the occurrence of a rating event does not violate the criterion in paragraph (a)(1)(v) of this section, provided that the instrument was a company capital element issued prior to January 1, 2014, and

that such instrument satisfies all other criteria under paragraph (a)(1) of this section.

(g) *Board approval of a capital instrument.*

(1) A supervised insurance organization must receive Board prior approval to include in its building block available capital for any building block an instrument (as listed in this section), issued by any company in the supervised insurance organization, unless the instrument:

(i) Was a capital element for the issuer prior to May 19, 2010, in accordance with the indicated capital framework that was effective as of that date and the underlying instrument meets the criteria to be a qualifying capital instrument (as defined in paragraph (a) of this section); or

(ii) Is equivalent, in terms of capital quality and ability to absorb losses with respect to all material terms, to a company capital element that the Board determined may be included in regulatory capital pursuant to paragraph (g)(2) of this section, or may be included in the regulatory capital of a Board-regulated institution pursuant to section 217.20(e)(3).

(2) After determining that an instrument may be included in a supervised insurance organization's regulatory capital under this subpart, the Board will make its decision publicly available, including a brief description of the material terms of the instrument and the rationale for the determination.

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APPENDIX A—The Federal Reserve Board's Framework for Implementing the Countercyclical Capital Buffer

1. Background

(a) In 2013, the Board of Governors of the Federal Reserve System (Board) issued a final regulatory capital rule (Regulation Q) in coordination with the Office of the Comptroller of the Currency (OCC) and the Federal Deposit Insurance Corporation (FDIC) that strengthened risk-based and leverage capital requirements applicable to insured depository institu-

tions and depository institution holding companies (banking organizations).¹ Among those changes was the introduction of a countercyclical capital buffer (CCyB) for large, internationally active banking organizations.²

(b) The CCyB is a supplemental, macroprudential policy tool that the Board can increase during periods of rising vulnerabilities in the financial system and reduce when vulnerabilities recede. It is designed to increase the resilience of large banking organizations when there is an elevated risk of above-normal losses. Increasing the resilience of large banking organizations will, in turn, improve the resilience of the broader financial system. Above-normal losses often follow periods of rapid asset price appreciation or credit growth that are not well supported by underlying economic fundamentals. The circumstances in which the Board would most likely begin to increase the CCyB above zero percent to augment minimum capital requirements and other capital buffers would be when systemic vulnerabilities are meaningfully above normal. By requiring large banking organizations to hold additional capital during those periods of excess and removing the requirement to hold additional capital when the vulnerabilities have diminished, the CCyB also is expected to moderate fluctuations in the supply of credit over time. Moderating the supply of credit may mitigate or prevent the conditions that contribute to above-normal losses, such as elevated asset prices and excessive leverage, and prevent or mitigate reductions in lending to creditworthy borrowers that can amplify an economic downturn. In

¹ See 12 CFR part 217; “Federal Reserve Board Approves Final Rule to Help Ensure Banks Maintain Strong Capital Positions” (July 2, 2013), available at www.federalreserve.gov; “Agencies Adopt Supplementary Leverage Ratio Notice of Proposed Rulemaking” (July 9, 2013), available at www.occ.gov; and “FDIC Board Approves Basel III Interim Final Rule and Supplementary Leverage Ratio Notice of Proposed Rulemaking” (July 9, 2013), available at www.fdic.gov.

² 12 CFR 217.11(b). The CCyB applies only to banking organizations subject to the advanced approaches capital rules, which generally apply to those banking organizations with greater than \$250 billion in assets or more than \$10 billion in on-balance-sheet foreign exposures. See 12 CFR 217.100(b). An advanced approaches institution is subject to the CCyB regardless of whether it has completed the parallel run process and received notification from its primary Federal supervisor. See 12 CFR 217.121(d).

this way, implementation of the CCyB also responds to the Dodd-Frank Act’s requirement that the Board seek to make its capital requirements countercyclical.³

(c) Regulation Q established the initial CCyB amount with respect to private sector credit exposures located in the United States (U.S.-based credit exposures) at zero percent and provided that the maximum potential amount of the CCyB for credit exposures in the United States was 2.5 percent of risk-weighted assets.⁴ The Board expects to make decisions about the appropriate level of the CCyB for U.S.-based credit exposures jointly with the OCC and FDIC, and expects that the CCyB amount for U.S.-based credit exposures will be the same for covered depository institution holding companies and insured depository institutions. The CCyB is designed to take into account the macrofinancial environment in which banking organizations function and the degree to which that environment impacts the resilience of advanced approaches institutions. Therefore, the appropriate level of the CCyB for U.S.-based credit exposures is not closely linked to the characteristics of an individual institution. Rather, the impact of the CCyB on any single institution will depend on the particular composition of the private-sector credit exposures of the institution across national jurisdictions.

2. Overview and Scope of the Policy Statement

This Policy Statement describes the framework that the Board will follow in setting the amount of the CCyB for U.S.-based credit exposures. The framework consists of a set of principles for translating assessments of financial system vulnerabilities that are regularly undertaken by the Board into the appropriate level of the CCyB. Those assessments are informed by a broad array of quantitative indicators of financial and economic performance and a set of empirical models. In addition, the framework includes an assessment of whether the CCyB is the most appro-

³ 12 U.S.C. 1844(b), 1464a(g)(1), and 3907(a)(1) (codifying sections 616(a), (b), and (c) of the Dodd-Frank Act).

⁴ The CCyB is subject to a phase-in arrangement between 2016 and 2019. See 12 CFR 217.300(a)(2).

priate policy instrument (among available policy instruments) to address the highlighted financial system vulnerabilities.

3. The Objectives of the CCyB

(a) The objectives of the CCyB are to strengthen banking organizations' resilience against the build-up of systemic vulnerabilities and reduce fluctuations in the supply of credit. The CCyB supplements the minimum capital requirements and the capital conservation buffer, which themselves are designed to provide substantial resilience to unexpected losses created by normal fluctuations in economic and financial conditions. The capital surcharge on global systemically important banking organizations adds an additional layer of defense for the largest and most systemically important institutions, whose financial distress can have outsized effects on the rest of the financial system and the real economy.⁵ However, periods of financial excesses, for example as reflected in episodes of rapid asset price appreciation or credit growth not well supported by underlying economic fundamentals, are often followed by above-normal losses that leave banking organizations and other financial institutions undercapitalized. Therefore, the Board would most likely begin to increase the CCyB above zero in those circumstances when systemic vulnerabilities become meaningfully above normal and progressively raise the CCyB level if vulnerabilities become more severe.

(b) The CCyB is expected to help provide additional resilience for advanced approaches institutions, and by extension the broader financial system, against elevated vulnerabilities primarily in two ways. First, advanced approaches institutions will likely hold more capital to avoid limitations on capital distributions and discretionary bonus payments resulting from implementation of the CCyB. Strengthening their capital positions when financial conditions are accommodative would increase the capacity of advanced approaches institutions to absorb outsized losses during a

⁵ See, "Federal Reserve Board Approves Final Rule Requiring the Largest, Most Systemically Important U.S. Bank Holding Companies to Further Strengthen Their Capital

future significant economic downturn or period of financial instability, thus making them more resilient.

(c) The second and related goal of the CCyB is to promote a more sustainable supply of credit over the economic cycle. During a credit cycle downturn, better-capitalized institutions have been shown to be more likely than weaker institutions to have continued access to funding. Better-capitalized institutions also are less likely to take actions that lead to broader financial-sector distress and its associated macroeconomic costs, such as large-scale sales of assets at prices below their fundamental value and sharp contractions in credit supply.⁶ Therefore, it is likely that as a result of the CCyB having been put into place during the preceding period of rapid credit creation, advanced approaches institutions would be better positioned to continue their important intermediary functions during a subsequent economic contraction. A timely and credible reduction in the CCyB requirement during a period of high credit losses could reinforce those beneficial effects of a higher base level of capital, because it would permit advanced approaches institutions either to realize loan losses promptly and remove them from their balance sheets or to expand their balance sheets, for example by continuing to lend to creditworthy borrowers.

(d) During a period of cyclically increasing vulnerabilities, advanced approaches institutions might react to an increase in the CCyB by raising lending standards, otherwise reducing their risk exposure, augmenting their capital, or some combination of those actions. They may choose to raise capital by taking actions that would increase net income, reducing capital distributions such as share repurchases or dividends, or issuing new equity. In this regard, an increase in the CCyB would not prevent advanced approaches institutions from maintaining their important role as credit

⁶ For additional background on the relationship between financial distress and economic outcomes, see Carmen Reinhart and Kenneth Rogoff (2009), *This Time is Different*. Princeton University Press; Oscar Jordà, Moritz Schularick, and Alan M. Taylor (2011), "Financial Crises, Credit Booms, and External Imbalances: 140 Years of Lessons," *IMF Economic Review*, Palgrave Macmillan, vol. 59(2), pp. 340-378; and Bank for International Settlements

intermediaries, but would reduce the likelihood that banking organizations with insufficient capital would foster unsustainable credit growth or engage in imprudent risk taking. The specific combination of adjustments and the relative size of each adjustment will depend in part on the initial capital positions of advanced approaches institutions, the cost of debt and equity financing, and the earnings opportunities presented by the economic situation at the time.⁷

4. The Framework for Setting the U.S. CCyB

(a) The Board regularly monitors and assesses threats to financial stability by synthesizing information from a comprehensive set of financial-sector and macroeconomic indicators, supervisory information, surveys, and other interactions with market participants.⁸ In forming its view about the appropriate size of the U.S. CCyB, the Board will consider a number of financial system vulnerabilities, including but not limited to, asset valuation pressures and risk appetite, leverage in the nonfinancial sector, leverage in the financial sector, and maturity and liquidity transformation in the financial sector. The decision will reflect the implications of the assessment of overall financial system vulnerabilities as well as any concerns related to one or more classes of vulnerabilities. The specific combination of vulnerabilities is important because an adverse shock to one class of vulnerabilities could be more likely than another to exacerbate existing pressures in other parts of the economy or financial system.

(b) The Board intends to monitor a wide range of financial and macroeconomic quantitative indicators including, but not limited to,

⁷ For estimates of the size of certain adjustments, see Samuel G. Hanson, Anil K. Kashyap, and Jeremy C. Stein (2011), “A Macroprudential Approach to Financial Regulation,” *Journal of Economic Perspectives*, vol. 25(1), pp. 3-28; and Skander J. Van den Heuvel (2008), “The Welfare Cost of Bank Capital Requirements,” *Journal of Monetary Economics* 55, pp. 298-320.

⁸ Tobias Adrian, Daniel Covitz, and Nellie Liang (2014), “Financial Stability Monitoring,” *Finance and Economics Discussion Series* 2013-021. Washington: Board of Governors of the Federal Reserve System, www.federalreserve.gov/pubs/feds/2013/201321/201321pap.pdf.

measures of relative credit and liquidity expansion or contraction, a variety of asset prices, funding spreads, credit condition surveys, indices based on credit default swap spreads, option implied volatilities, and measures of systemic risk.⁹ In addition, empirical models that translate a manageable set of quantitative indicators of financial and economic performance into potential settings for the CCyB, when used as part of a comprehensive judgmental assessment of all available information, can be a useful input to the Board’s deliberations. Such models may include, but are not limited to, those that rely on small sets of indicators—such as the nonfinancial credit-to-GDP ratio, its growth rate, and combinations of the credit-to-GDP ratio with trends in the prices of residential and commercial real estate—which some academic research has shown to be useful in identifying periods of financial excess followed by a period of crisis on a cross-country basis.¹⁰ Such models may also include those that consider larger sets of indicators, which have the advantage of representing conditions in all key sectors of the economy, especially those specific to risk-taking, performance, and the financial condition of large banks.¹¹

(c) However, no single indicator or fixed set of indicators can adequately capture all the vulnerabilities in the U.S. economy and financial system. Moreover, adjustments in the CCyB that were tightly linked to a specific model or set of models could be imprecise due to the relatively short period that some indicators are

⁹ See 12 CFR 217.11(b)(2)(iv).

¹⁰ See, e.g., Jordà, Óscar, Moritz Schularick, and Alan Taylor (2013), “When Credit Bites Back: Leverage, Business Cycles and Crises,” *Journal of Money, Credit, and Banking*, vol. 45(2), pp. 3-28; Drehmann, Mathias, Claudio Borio, and Kostas Tsatsaronis (2012), “Characterizing the Financial Cycle: Don’t Lose Sight of the Medium Term!” BIS Working Papers 380, Bank for International Settlements; Jordà, Óscar, Moritz Schularick, and Alan Taylor (2015), “Leveraged Bubbles,” *Center for Economic Policy Research Discussion Paper* No. DP10781; and BCBS (2010), “Guidance for National Authorities Operating the Countercyclical Capital Buffer.”

¹¹ See, e.g., Aikman, David, Michael T. Kiley, Seung Jung Lee, Michael G. Palumbo, and Missaka N. Warusawitharana (2015), “Mapping Heat in the U.S. Financial System,” *Finance and Economics Discussion Series* 2015-059. Washington: Board of Governors of the Federal Reserve System, dx.doi.org/10.17016/FEDS.2015.059 (providing an example of the range of indicators used and type of analysis possible).

available, the limited number of past crises against which the models can be calibrated, and limited experience with the CCyB as a macroprudential tool. As a result, the types of indicators and models considered in assessments of the appropriate level of the CCyB are likely to change over time based on advances in research and the experience of the Board with this new macroprudential tool.

(d) The Board will determine the appropriate level of the CCyB for U.S.-based credit exposures based on its analysis of the above factors. Generally, a zero percent U.S. CCyB amount would reflect an assessment that U.S. economic and financial conditions are broadly consistent with a financial system in which levels of system-wide vulnerabilities are within or near their normal range of values. The Board could increase the CCyB as vulnerabilities build. A 2.5 percent CCyB amount for U.S.-based credit exposures, which is the maximum level under the Board's rule, would reflect an assessment that the U.S. financial sector is experiencing a period of significantly elevated or rapidly increasing system-wide vulnerabilities. Importantly, as a macroprudential policy tool, the CCyB will be activated and deactivated based on broad developments and trends in the U.S. financial system, rather than the activities of any individual banking organization.

(e) Similarly, the Board would remove or reduce the CCyB when the conditions that led to its activation abate or lessen. Additionally, the Board would remove or reduce the CCyB when release of CCyB capital would promote financial stability. Indeed, for the CCyB to be most effective, the CCyB should be deactivated or reduced in a timely manner. Deactivating the CCyB in a timely manner could, for example, promote the prompt realization of loan losses by advanced approaches institutions and the removal of such loans from their balance sheets and would reduce the likelihood that advanced approaches institutions would significantly pare their risk-weighted assets in order to maintain their capital ratios during a downturn.

(f) The pace and magnitude of changes in the CCyB will depend importantly on the underly-

ing conditions in the financial sector and the economy as well as the desired effects of the proposed change in the CCyB. If vulnerabilities are rising gradually, then incremental increases in the level of the CCyB may be appropriate. Incremental increases would allow banks to augment their capital primarily through retained earnings and allow policymakers additional time to assess the effects of the policy change before making subsequent adjustments. However, if vulnerabilities in the financial system are building rapidly, then larger or more frequent adjustments may be necessary to increase loss-absorbing capacity sooner and potentially to mitigate the rise in vulnerabilities.

(g) The Board will also consider whether the CCyB is the most appropriate of its available policy instruments to address the financial system vulnerabilities highlighted by the framework's judgmental assessments and empirical models. The CCyB primarily is intended to address cyclical vulnerabilities, rather than structural vulnerabilities that do not vary significantly over time. Structural vulnerabilities are better addressed through targeted reforms or permanent increases in financial system resilience. Two central factors for the Board to consider are whether advanced approaches institutions are exposed—either directly or indirectly—to the vulnerabilities identified in the comprehensive judgmental assessment or by the quantitative indicators that suggest activation of the CCyB and whether advanced approaches institutions are contributing—either directly or indirectly—to these highlighted vulnerabilities.

(h) In setting the CCyB for advanced approaches institutions that it supervises, the Board plans to consult with the OCC and FDIC on their analyses of financial system vulnerabilities and on the extent to which advanced approaches banking organizations are either exposed to or contributing to these vulnerabilities.

5. Communication of the U.S. CCyB with the Public

(a) The Board expects to consider at least once per year the applicable level of the U.S.

CCyB. The Board will review financial conditions regularly throughout the year and may adjust the CCyB more frequently as a result of those monitoring activities.

(b) Further, the Board will continue to communicate with the public in other formats regarding its assessment of U.S. financial stability, including financial system vulnerabilities. In the event that the Board considered that a change in the CCyB were appropriate, it would, in proposing the change, include a discussion of the reasons for the proposed action as determined by the particular circumstances. In addition, the Board's biannual *Monetary Policy Report to Congress*, usually published in February and July, will continue to contain a section that reports on developments pertaining to the stability of the U.S. financial system.¹² That portion of the report will be an important vehicle for updating the public on how the Board's current assessment of financial system vulnerabilities bears on the setting of the CCyB.

6. Monitoring the Effects of the U.S. CCyB

(a) The effects of the U.S. CCyB ultimately will depend on the level at which it is set, the size and nature of any adjustments in the level, and the timeliness with which it is increased or decreased. The extent to which the CCyB may affect vulnerabilities in the broader financial system depends upon a complex set of interactions between required capital levels at the largest banking organizations and the economy and financial markets. In addition to the direct effects, the secondary economic effects could be amplified if financial markets extract a signal from the announcement of a change in the CCyB about subsequent actions that might be taken by the Board. Moreover, financial market participants might react by updating their expectations

¹² For the most recent discussion in this format, see box titled "Developments Related to Financial Stability," in Board of Governors of the Federal Reserve System, *Monetary Policy Report to Congress*, June 2016, pp. 20-21.

about future asset prices in specific markets or broader economic activity based on the concerns expressed by the regulators in communications announcing a policy change.

(b) The Board will monitor and analyze adjustments by banking organizations and other financial institutions to the CCyB: whether a change in the CCyB leads to observed changes in risk-based capital ratios at advanced approaches institutions, as well as whether those adjustments are achieved passively through retained earnings, or actively through changes in capital distributions or in risk-weighted assets. Other factors to be monitored include the extent to which loan growth and interest rate spreads on loans made by affected banking organizations change relative to loan growth and loan spreads at banking organizations that are not subject to the buffer. Another consideration in setting the CCyB and other macroprudential tools is the extent to which the adjustments by advanced approaches institutions to higher capital buffers lead to migration of credit market activity outside of those banking organizations, especially to the nonbank financial sector. Depending on the amount of migration, which institutions are affected by it, and the remaining exposures of advanced approaches institutions, those adjustments could cause the Board to favor either a higher or a lower value of the CCyB.

(c) The Board will also monitor information regarding the levels of and changes in the CCyB in other countries. The Basel Committee on Banking Supervision is expected to maintain this information for member countries in a publically available form on its Web site.¹³ Using that data in conjunction with supervisory and publicly available datasets, the Board will be able to draw not only upon the experience of the United States but also that of other countries to refine estimates of the effects of changes in the CCyB.

¹³ BIS, Countercyclical capital buffer (CCyB), www.bis.org/bcbs/ccyb/index.htm.

Statutory Authority for Regulation Q

- 3-2900**
FEDERAL RESERVE ACT
See section 9 at 1-054 *et seq.*, section 11 at 2-239, and section 21 at 1-180 *et seq.*
- 3-2901**
HOME OWNERS' LOAN ACT
SECTION 3—Administrative Provisions
(a) *Powers.* In accordance with subtitle A of title III of the Dodd-Frank Wall Street Reform and Consumer Protection Act, the appropriate Federal banking agency shall have all powers which—
(1) were vested in the Federal Home Loan Bank Board (in the Board's capacity as such) or the Chairman of such Board on the day before the date of the enactment of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989; and
(2) were not—
(A) transferred to the Federal Deposit Insurance Corporation, the Federal Housing Finance Board, the Resolution Trust Corporation, or the Federal Home Loan Mortgage Corporation pursuant to any amendment made by such Act; or
(B) established under any provision of law repealed by such Act.
(b) *State homestead provisions.* No provision of this Act or any other provision of law administered by the appropriate Federal banking agency shall be construed as superseding any homestead provision of any State constitution, including any implementing State statute, in effect on September 29, 1994, or any subsequent amendment to such a State constitutional or statutory provision in effect on September 29, 1994, that exempts the homestead of any person from foreclosure, or forced sale, for the payment of all debts, other than a purchase money obligation relating to the homestead, taxes due on the homestead, or an obligation arising from work and material used in constructing improvements on the homestead.
- [12 USC 1462a. As amended by acts of Sept. 23, 1994 (108 Stat. 2232); Sept. 29, 1994 (108 Stat. 2352); Oct. 13, 2006 (120 Stat. 1994); and July 21, 2010 (124 Stat. 1558).]
See section 10 at 4-763.
- 3-2901**
FEDERAL DEPOSIT INSURANCE ACT
See section 8 at 1-355 *et seq.*, section 18 at 1-386 *et seq.*, section 37 at 1-400.3 *et seq.*, section 38 at 1-400.4 *et seq.*, section 39 at 1-401 *et seq.*, and section 46 at 1-401.73 *et seq.*
- BANK HOLDING COMPANY ACT**
See section 5 at 4-083 *et seq.* and section 13 at 4-102.
- INTERNATIONAL LENDING SUPERVISION ACT**
See section 905 at 3-672.15 and sections 907-910 at 3-672.25 *et seq.*
- 3-2902**
DODD-FRANK WALL STREET REFORM AND CONSUMER PROTECTION ACT
See section 165 at 4-782 *et seq.*
- SECTION 171—Leverage and Risk-Based Capital Requirements**
(a) *Definitions.* For purposes of this section, the following definitions shall apply:
(1) *Generally applicable leverage capital requirements.* The term “generally applicable leverage capital requirements” means—
(A) the minimum ratios of tier 1 capital to average total assets, as established by the appropriate Federal banking agencies to apply to insured depository institutions

under the prompt corrective action regulations implementing section 1831o of this title, regardless of total consolidated asset size or foreign financial exposure; and

(B) includes the regulatory capital components in the numerator of that capital requirement, average total assets in the denominator of that capital requirement, and the required ratio of the numerator to the denominator.

(2) *Generally applicable risk-based capital requirements.* The term “generally applicable risk-based capital requirements” means—

(A) the risk-based capital requirements, as established by the appropriate Federal banking agencies to apply to insured depository institutions under the prompt corrective action regulations implementing section 1831o of this title, regardless of total consolidated asset size or foreign financial exposure; and

(B) includes the regulatory capital components in the numerator of those capital requirements, the risk-weighted assets in the denominator of those capital requirements, and the required ratio of the numerator to the denominator.

(3) *Definition of depository institution holding company.* The term “depository institution holding company” means a bank holding company or a savings and loan holding company (as those terms are defined in section 1813 of this title) that is organized in the United States, including any bank or savings and loan holding company that is owned or controlled by a foreign organization, but does not include the foreign organization.

(b) *Minimum capital requirements.*

(1) *Minimum leverage capital requirements.* The appropriate Federal banking agencies shall establish minimum leverage capital requirements on a consolidated basis for insured depository institutions, depository institution holding companies, and nonbank financial companies supervised by the Board of Governors. The minimum leverage capital requirements established under this paragraph shall not be less than the gener-

ally applicable leverage capital requirements, which shall serve as a floor for any capital requirements that the agency may require, nor quantitatively lower than the generally applicable leverage capital requirements that were in effect for insured depository institutions as of July 21, 2010.

(2) *Minimum risk-based capital requirements.* The appropriate Federal banking agencies shall establish minimum risk-based capital requirements on a consolidated basis for insured depository institutions, depository institution holding companies, and nonbank financial companies supervised by the Board of Governors. The minimum risk-based capital requirements established under this paragraph shall not be less than the generally applicable risk-based capital requirements, which shall serve as a floor for any capital requirements that the agency may require, nor quantitatively lower than the generally applicable risk-based capital requirements that were in effect for insured depository institutions as of July 21, 2010.

(3) *Investments in financial subsidiaries.* For purposes of this section, investments in financial subsidiaries that insured depository institutions are required to deduct from regulatory capital under section 24a of this title or section 1831w(a)(2) of this title need not be deducted from regulatory capital by depository institution holding companies or nonbank financial companies supervised by the Board of Governors, unless such capital deduction is required by the Board of Governors or the primary financial regulatory agency in the case of nonbank financial companies supervised by the Board of Governors.

(4) *Effective dates and phase-in periods.*

(A) *Debt or equity instruments on or after May 19, 2010.* For debt or equity instruments issued on or after May 19, 2010, by depository institution holding companies or by nonbank financial companies supervised by the Board of Governors, this section shall be deemed to have become effective as of May 19, 2010.

(B) *Debt or equity instruments issued before May 19, 2010.* For debt or equity instruments issued before May 19, 2010, by depository institution holding compa-

nies or by nonbank financial companies supervised by the Board of Governors, any regulatory capital deductions required under this section shall be phased in incrementally over a period of 3 years, with the phase-in period to begin on January 1, 2013, except as set forth in subparagraph (C).

(C) *Debt or equity instruments of smaller institutions.* For debt or equity instruments issued before May 19, 2010, by depository institution holding companies with total consolidated assets of less than \$15,000,000,000 as of December 31, 2009, or March 31, 2010, and by organizations that were mutual holding companies on May 19, 2010, the capital deductions that would be required for other institutions under this section are not required as a result of this section.

(D) *Depository institution holding companies not previously supervised by the Board of Governors.* For any depository institution holding company that was not supervised by the Board of Governors as of May 19, 2010, the requirements of this section, except as set forth in subparagraphs (A) and (B), shall be effective 5 years after July 21, 2010.

(E) *Certain bank holding company subsidiaries of foreign banking organizations.* For bank holding company subsidiaries of foreign banking organizations that have relied on Supervision and Regulation Letter SR-01-1 issued by the Board of Governors (as in effect on May 19, 2010), the requirements of this section, except as set forth in subparagraph (A), shall be effective 5 years after July 21, 2010.

(5) *Exceptions.* This section shall not apply to—

(A) debt or equity instruments issued to the United States or any agency or instrumentality thereof pursuant to the Emergency Economic Stabilization Act of 2008, and prior to October 4, 2010;

(B) any Federal home loan bank; or

(C) any bank holding company or savings and loan holding company that is subject to the application of appendix C to part 225 of title 12, Code of Federal

Regulations (commonly known as the “Small Bank Holding Company and Savings and Loan Holding Company Policy Statement”).

(6) *Study and report on small institution access to capital.*

(A) *Study required.* The Comptroller General of the United States, after consultation with the Federal banking agencies, shall conduct a study of access to capital by smaller insured depository institutions.

(B) *Scope.* For purposes of this study required by subparagraph (A), the term “smaller insured depository institution” means an insured depository institution with total consolidated assets of \$5,000,000,000 or less.

(C) *Report to Congress.* Not later than 18 months after July 21, 2010, the Comptroller General of the United States shall submit to the Committee on Banking, Housing, and Urban Affairs of the Senate and the Committee on Financial Services of the House of Representatives a report summarizing the results of the study conducted under subparagraph (A), together with any recommendations for legislative or regulatory action that would enhance the access to capital of smaller insured depository institutions, in a manner that is consistent with safe and sound banking operations.

(7) *Capital requirements to address activities that pose risks to the financial system.*

(A) *In general.* Subject to the recommendations of the Council, in accordance with section 5330 of this title, the Federal banking agencies shall develop capital requirements applicable to insured depository institutions, depository institution holding companies, and nonbank financial companies supervised by the Board of Governors that address the risks that the activities of such institutions pose, not only to the institution engaging in the activity, but to other public and private stakeholders in the event of adverse performance, disruption, or failure of the institution or the activity.

(B) *Content.* Such rules shall address, at a minimum, the risks arising from—

(i) significant volumes of activity in derivatives, securitized products purchased and sold, financial guarantees purchased and sold, securities borrowing and lending, and repurchase agreements and reverse repurchase agreements;

(ii) concentrations in assets for which the values presented in financial reports are based on models rather than

historical cost or prices deriving from deep and liquid 2-way markets; and

(iii) concentrations in market share for any activity that would substantially disrupt financial markets if the institution is forced to unexpectedly cease the activity.

[12 USC 5371. As amended by acts of Dec. 4, 2015 (129 Stat. 1798) and May 24, 2018 (132 Stat. 1312).]