

frequently as the agency deems necessary.

### Subpart G—Interpretations

SOURCE: 63 FR 37658, July 13, 1998, unless otherwise noted.

#### § 208.100 Sale of bank's money orders off premises as establishment of branch office.

(a) The Board of Governors has been asked to consider whether the appointment by a member bank of an agent to sell the bank's money orders, at a location other than the premises of the bank, constitutes the establishment of a branch office.

(b) Section 5155 of the Revised Statutes (12 U.S.C. 36), which is also applicable to member banks, defines the term branch as including "any branch bank, branch office, branch agency, additional office, or any branch place of business \* \* \* at which deposits are received, or checks paid, or money lent." The basic question is whether the sale of a bank's money orders by an agent amounts to the receipt of deposits at a branch place of business within the meaning of this statute.

(c) Money orders are classified as deposits for certain purposes. However, they bear a strong resemblance to traveler's checks that are issued by banks and sold off premises. In both cases, the purchaser does not intend to establish a deposit account in the bank, although a liability on the bank's part is created. Even though they result in a deposit liability, the Board is of the opinion that the issuance of a bank's money orders by an authorized agent does not involve the receipt of deposits at a "branch place of business" and accordingly does not require the Board's permission to establish a branch.

#### § 208.101 Obligations concerning institutional customers.

(a) As a result of broadened authority provided by the Government Securities Act Amendments of 1993 (15 U.S.C. 780-3 and 780-5), the Board is adopting sales practice rules for the government securities market, a market with a particularly broad institutional component. Accordingly, the Board believes it is appropriate to provide fur-

ther guidance to banks on their suitability obligations when making recommendations to institutional customers.

(b) The Board's Suitability Rule, § 208.37(d), is fundamental to fair dealing and is intended to promote ethical sales practices and high standards of professional conduct. Banks' responsibilities include having a reasonable basis for recommending a particular security or strategy, as well as having reasonable grounds for believing the recommendation is suitable for the customer to whom it is made. Banks are expected to meet the same high standards of competence, professionalism, and good faith regardless of the financial circumstances of the customer.

(c) In recommending to a customer the purchase, sale, or exchange of any government security, the bank shall have reasonable grounds for believing that the recommendation is suitable for the customer upon the basis of the facts, if any, disclosed by the customer as to the customer's other security holdings and financial situation and needs.

(d) The interpretation in this section concerns only the manner in which a bank determines that a recommendation is suitable for a particular institutional customer. The manner in which a bank fulfills this suitability obligation will vary, depending on the nature of the customer and the specific transaction. Accordingly, the interpretation in this section deals only with guidance regarding how a bank may fulfill customer-specific suitability obligations under § 208.37(d).<sup>7</sup>

(e) While it is difficult to define in advance the scope of a bank's suitability obligation with respect to a specific institutional customer transaction recommended by a bank, the Board has identified certain factors that may be relevant when considering

<sup>7</sup>The interpretation in this section does not address the obligation related to suitability that requires that a bank have " \* \* \* a 'reasonable basis' to believe that the recommendation could be suitable for at least some customers." In the Matter of the Application of F.J. Kaufman and Company of Virginia and Frederick J. Kaufman, Jr., 50 SEC 164 (1989).

compliance with §208.37(d). These factors are not intended to be requirements or the only factors to be considered but are offered merely as guidance in determining the scope of a bank's suitability obligations.

(f) The two most important considerations in determining the scope of a bank's suitability obligations in making recommendations to an institutional customer are the customer's capability to evaluate investment risk independently and the extent to which the customer is exercising independent judgement in evaluating a bank's recommendation. A bank must determine, based on the information available to it, the customer's capability to evaluate investment risk. In some cases, the bank may conclude that the customer is not capable of making independent investment decisions in general. In other cases, the institutional customer may have general capability, but may not be able to understand a particular type of instrument or its risk. This is more likely to arise with relatively new types of instruments, or those with significantly different risk or volatility characteristics than other investments generally made by the institution. If a customer is either generally not capable of evaluating investment risk or lacks sufficient capability to evaluate the particular product, the scope of a bank's customer-specific obligations under §208.37(d) would not be diminished by the fact that the bank was dealing with an institutional customer. On the other hand, the fact that a customer initially needed help understanding a potential investment need not necessarily imply that the customer did not ultimately develop an understanding and make an independent investment decision.

(g) A bank may conclude that a customer is exercising independent judgement if the customer's investment decision will be based on its own independent assessment of the opportunities and risks presented by a potential investment, market factors and other investment considerations. Where the bank has reasonable grounds for concluding that the institutional customer is making independent investment decisions and is capable of independently evaluating investment risk, then a

bank's obligations under §208.25(d) for a particular customer are fulfilled.<sup>8</sup> Where a customer has delegated decision-making authority to an agent, such as an investment advisor or a bank trust department, the interpretation in this section shall be applied to the agent.

(h) A determination of capability to evaluate investment risk independently will depend on an examination of the customer's capability to make its own investment decisions, including the resources available to the customer to make informed decisions. Relevant considerations could include:

(1) The use of one or more consultants, investment advisers, or bank trust departments;

(2) The general level of experience of the institutional customer in financial markets and specific experience with the type of instruments under consideration;

(3) The customer's ability to understand the economic features of the security involved;

(4) The customer's ability to independently evaluate how market developments would affect the security; and

(5) The complexity of the security or securities involved.

(i) A determination that a customer is making independent investment decisions will depend on the nature of the relationship that exists between the bank and the customer. Relevant considerations could include:

(1) Any written or oral understanding that exists between the bank and the customer regarding the nature of the relationship between the bank and the customer and the services to be rendered by the bank;

(2) The presence or absence of a pattern of acceptance of the bank's recommendations;

(3) The use by the customer of ideas, suggestions, market views and information obtained from other government securities brokers or dealers or market professionals, particularly those relating to the same type of securities; and

(4) The extent to which the bank has received from the customer current

<sup>8</sup> See footnote 7 in paragraph (d) of this section.

comprehensive portfolio information in connection with discussing recommended transactions or has not been provided important information regarding its portfolio or investment objectives.

(j) Banks are reminded that these factors are merely guidelines that will be utilized to determine whether a bank has fulfilled its suitability obligation with respect to a specific institutional customer transaction and that the inclusion or absence of any of these factors is not dispositive of the determination of suitability. Such a determination can only be made on a case-by-case basis taking into consideration all the facts and circumstances of a particular bank/customer relationship, assessed in the context of a particular transaction.

(k) For purposes of the interpretation in this section, an institutional customer shall be any entity other than a natural person. In determining the applicability of the interpretation in this section to an institutional customer, the Board will consider the dollar value of the securities that the institutional customer has in its portfolio and/or under management. While the interpretation in this section is potentially applicable to any institutional customer, the guidance contained in this section is more appropriately applied to an institutional customer with at least \$10 million invested in securities in the aggregate in its portfolio and/or under management.

APPENDIX A TO PART 208—CAPITAL ADEQUACY GUIDELINES FOR STATE MEMBER BANKS: RISK-BASED MEASURE

*I. Overview*

The Board of Governors of the Federal Reserve System has adopted a risk-based capital measure to assist in the assessment of the capital adequacy of state member banks.<sup>1</sup> The principal objectives of this measure are to: (i) Make regulatory capital requirements more sensitive to differences in risk profiles among banks; (ii) factor off-balance sheet exposures into the assessment of capital adequacy; (iii) minimize disincen-

<sup>1</sup>Supervisory ratios that relate capital to total assets for state member banks are outlined in appendix B of this part and in appendix B to part 225 of the Federal Reserve's Regulation Y, 12 CFR part 225.

tives to holding liquid, low-risk assets; and (iv) achieve greater consistency in the evaluation of the capital adequacy of major banks throughout the world.<sup>2</sup>

The risk-based capital guidelines include both a definition of capital and a framework for calculating weighted risk assets by assigning assets and off-balance sheet items to broad risk categories. A bank's risk-based capital ratio is calculated by dividing its qualifying capital (the numerator of the ratio) by its weighted risk assets (the denominator).<sup>3</sup> The definition of qualifying capital is outlined below in section II, and the procedures for calculating weighted risk assets are discussed in Section III. Attachment I illustrates a sample calculation of weighted risk assets and the risk-based capital ratio.

In addition, when certain banks that engage in trading activities calculate their risk-based capital ratio under this appendix A, they must also refer to appendix E of this part, which incorporates capital charges for certain market risks into the risk-based capital ratio. When calculating their risk-based capital ratio under this appendix A, such banks are required to refer to appendix E of this part for supplemental rules to determine qualifying and excess capital, calculate risk-weighted assets, calculate market risk equivalent assets, and calculate risk-based capital ratios adjusted for market risk.

The risk-based capital guidelines also establish a schedule for achieving a minimum supervisory standard for the ratio of qualifying capital to weighted risk assets and provide for transitional arrangements during a phase-in period to facilitate adoption and implementation of the measure at the end of 1992. These interim standards and transitional arrangements are set forth in section IV.

The risk-based guidelines apply to all state member banks on a consolidated basis. They

<sup>2</sup>The risk-based capital measure is based upon a framework developed jointly by supervisory authorities from the countries represented on the Basle Committee on Banking Regulations and Supervisory Practices (Basle Supervisors' Committee) and endorsed by the Group of Ten Central Bank Governors. The framework is described in a paper prepared by the BSC entitled "International Convergence of Capital Measurement," July 1988.

<sup>3</sup>Banks will initially be expected to utilize period-end amounts in calculating their risk-based capital ratios. When necessary and appropriate, ratios based on average balances may also be calculated on a case-by-case basis. Moreover, to the extent banks have data on average balances that can be used to calculate risk-based ratios, the Federal Reserve will take such data into account.

are to be used in the examination and supervisory process as well as in the analysis of applications acted upon by the Federal Reserve. Thus, in considering an application filed by a state member bank, the Federal Reserve will take into account the bank's risk-based capital ratio, the reasonableness of its capital plans, and the degree of progress it has demonstrated toward meeting the interim and final risk-based capital standards.

The risk-based capital ratio focuses principally on broad categories of credit risk, although the framework for assigning assets and off-balance-sheet items to risk categories does incorporate elements of transfer risk, as well as limited instances of interest rate and market risk. The framework incorporates risks arising from traditional banking activities as well as risks arising from nontraditional activities. The risk-based ratio does not, however, incorporate other factors that can affect an institution's financial condition. These factors include overall interest-rate exposure; liquidity, funding and market risks; the quality and level of earnings; investment, loan portfolio, and other concentrations of credit; certain risks arising from nontraditional activities; the quality of loans and investments; the effectiveness of loan and investment policies; and management's overall ability to monitor and control financial and operating risks, including the risks presented by concentrations of credit and nontraditional activities.

In addition to evaluating capital ratios, an overall assessment of capital adequacy must take account of those factors, including, in particular, the level and severity of problem and classified assets as well as a bank's exposure to declines in the economic value of its capital due to changes in interest rates. For this reason, the final supervisory judgment on a bank's capital adequacy may differ significantly from conclusions that might be drawn solely from the level of its risk-based capital ratio.

The risk-based capital guidelines establish *minimum* ratios of capital to weighted risk assets. In light of the considerations just discussed, banks generally are expected to operate well above the minimum risk-based ratios. In particular, banks contemplating significant expansion proposals are expected to maintain strong capital levels substantially above the minimum ratios and should not allow significant diminution of financial strength below these strong levels to fund their expansion plans. Institutions with high or inordinate levels of risk are also expected to operate well above minimum capital standards. In all cases, institutions should hold capital commensurate with the level and nature of the risks to which they are exposed. Banks that do not meet the minimum risk-based standard, or that are otherwise considered to be inadequately capitalized,

are expected to develop and implement plans acceptable to the Federal Reserve for achieving adequate levels of capital within a reasonable period of time.

The Board will monitor the implementation and effect of these guidelines in relation to domestic and international developments in the banking industry. When necessary and appropriate, the Board will consider the need to modify the guidelines in light of any significant changes in the economy, financial markets, banking practices, or other relevant factors.

## II. Definition of Qualifying Capital for the Risk-Based Capital Ratio

A bank's qualifying total capital consists of two types of capital components: "core capital elements" (comprising Tier 1 capital) and "supplementary capital elements" (comprising Tier 2 capital). These capital elements and the various limits, restrictions, and deductions to which they are subject, are discussed below and are set forth in Attachment II.

To qualify as an element of Tier 1 or Tier 2 capital, a capital instrument may not contain or be covered by any covenants, terms, or restrictions that are inconsistent with safe and sound banking practices.

Redemptions of permanent equity or other capital instruments before stated maturity could have a significant impact on a bank's overall capital structure. Consequently, a bank considering such a step should consult with the Federal Reserve before redeeming any equity or debt capital instrument (prior to maturity) if such redemption could have a material effect on the level or composition of the institution's capital base.<sup>4</sup>

### A. The Components of Qualifying Capital

1. *Core capital elements (Tier 1 capital).* The Tier 1 component of a bank's qualifying capital must represent at least 50 percent of qualifying total capital and may consist of the following items that are defined as core capital elements:

- (i) Common stockholders' equity.
- (ii) Qualifying noncumulative perpetual preferred stock (including related surplus).
- (iii) Minority interest in the equity accounts of consolidated subsidiaries.

Tier 1 capital is generally defined as the sum of core capital elements<sup>5</sup> less goodwill

<sup>4</sup>Consultation would not ordinarily be necessary if an instrument were redeemed with the proceeds of, or replaced by, a like amount of a similar or higher quality capital instrument and the organization's capital position is considered fully adequate by the Federal Reserve.

<sup>5</sup>During the transition period and subject to certain limitations set forth in section IV

and other intangible assets required to be deducted in accordance with section II.B.1.b. of this appendix.

a. *Common stockholders' equity.* For purposes of calculating the risk-based capital ratio, common stockholders' equity is limited to common stock; related surplus; and retained earnings, including capital reserves and adjustments for the cumulative effect of foreign currency translation, net of any treasury stock; less net unrealized holding losses on available-for-sale equity securities with readily determinable fair values. For this purpose, net unrealized holding gains on such equity securities and net unrealized holding gains (losses) on available-for-sale debt securities are not included in common stockholders' equity.

b. *Perpetual preferred stock.* Perpetual preferred stock is defined as preferred stock that does not have a maturity date, that cannot be redeemed at the option of the holder of the instrument, and that has no other provisions that will require future redemption of the issue. Consistent with these provisions, any perpetual preferred stock with a feature permitting redemption at the option of the issuer may qualify as capital only if the redemption is subject to prior approval of the Federal Reserve. In general, preferred stock will qualify for inclusion in capital only if it can absorb losses while the issuer operates as a going concern (a fundamental characteristic of equity capital) and only if the issuer has the ability and legal right to defer or eliminate preferred dividends.

The only form of perpetual preferred stock that state member banks may consider as an element of Tier 1 capital is noncumulative perpetual preferred. While the guidelines allow for the inclusion of noncumulative perpetual preferred stock in Tier 1, it is desirable from a supervisory standpoint that voting common stockholders' equity remain the dominant form of Tier 1 capital. Thus, state member banks should avoid overreliance on preferred stock or non-voting equity elements within Tier 1.

Perpetual preferred stock in which the dividend is reset periodically based, in whole or in part, upon the bank's current credit standing (that is, auction rate perpetual preferred stock, including so-called Dutch auction, money market, and remarketable preferred) will not qualify for inclusion in Tier 1 capital.<sup>7</sup> Such instruments, however, qualify for inclusion in Tier 2 capital.

below, Tier 1 capital may also include items defined as supplementary capital elements.

<sup>6</sup>[Reserved]

<sup>7</sup>Adjustable rate noncumulative perpetual preferred stock (that is, perpetual preferred stock in which the dividend rate is not affected by the issuer's credit standing or fi-

c. *Minority interest in equity accounts of consolidated subsidiaries.* This element is included in Tier 1 because, as a general rule, it represents equity that is freely available to absorb losses in operating subsidiaries. While not subject to an explicit sublimit within Tier 1, banks are expected to avoid using minority interest in the equity accounts of consolidated subsidiaries as an avenue for introducing into their capital structures elements that might not otherwise qualify as Tier 1 capital or that would, in effect, result in an excessive reliance on preferred stock within Tier 1.

2. *Supplementary capital elements (Tier 2 capital).* The Tier 2 component of a bank's qualifying total capital may consist of the following items that are defined as supplementary capital elements:

(i) Allowance for loan and lease losses (subject to limitations discussed below);

(ii) Perpetual preferred stock and related surplus (subject to conditions discussed below);

(iii) Hybrid capital instruments (as defined below) and mandatory convertible debt securities;

(iv) Term subordinated debt and intermediate-term preferred stock, including related surplus (subject to limitations discussed below);

(v) Unrealized holding gains on equity securities (subject to limitations discussed in section II.A.2.e. of this appendix).

The maximum amount of Tier 2 capital that may be included in a bank's qualifying total capital is limited to 100 percent of Tier 1 capital (net of goodwill and other intangible assets required to be deducted in accordance with section II.B.1.b. of this appendix).

The elements of supplementary capital are discussed in greater detail below.

a. *Allowance for loan and lease losses.* Allowances for loan and lease losses are reserves that have been established through a charge against earnings to absorb future losses on loans or lease financing receivables. Allowances for loan and lease losses exclude "allocated transfer risk reserves,"<sup>9</sup> and reserves created against identified losses.

During the transition period, the risk-based capital guidelines provide for reducing

nancial condition but is adjusted periodically according to a formula based solely on general market interest rates) may be included in Tier 1.

<sup>8</sup>[Reserved]

<sup>9</sup>Allocated transfer risk reserves are reserves that have been established in accordance with Section 905(a) of the International Lending Supervision Act of 1983, 12 U.S.C. 3904(a), against certain assets whose value U.S. supervisory authorities have found to be significantly impaired by protracted transfer risk problems.

the amount of this allowance that may be included in an institution's total capital. Initially, it is unlimited. However, by year-end 1990, the amount of the allowance for loan and lease losses that will qualify as capital will be limited to 1.5 percent of an institution's weighted risk assets. By the end of the transition period, the amount of the allowance qualifying for inclusion in Tier 2 capital may not exceed 1.25 percent of weighted risk assets.<sup>10</sup>

b. *Perpetual preferred stock.* Perpetual preferred stock, as noted above, is defined as preferred stock that has no maturity date, that cannot be redeemed at the option of the holder, and that has no other provisions that will require future redemption of the issue. Such instruments are eligible for inclusion in Tier 2 capital without limit.<sup>11</sup>

c. *Hybrid capital instruments and mandatory convertible debt securities.* Hybrid capital instruments include instruments that are essentially permanent in nature and that have certain characteristics of both equity and debt. Such instruments may be included in Tier 2 without limit. The general criteria hybrid capital instruments must meet in order to qualify for inclusion in Tier 2 capital are listed below:

(1) The instrument must be unsecured; fully paid-up; and subordinated to general creditors and must also be subordinated to claims of depositors.

(2) The instrument must not be redeemable at the option of the holder prior to maturity, except with the prior approval of the Federal Reserve. (Consistent with the Board's criteria for perpetual debt and mandatory convertible securities, this requirement implies that holders of such instruments may not accelerate the payment of principal except in the event of bankruptcy, insolvency, or reorganization.)

<sup>10</sup>The amount of the allowance for loan and lease losses that may be included in Tier 2 capital is based on a percentage of gross weighted risk assets. A bank may deduct reserves for loan and lease losses in excess of the amount permitted to be included in Tier 2 capital, as well as allocated transfer risk reserves, from the sum of gross weighted risk assets and use the resulting net sum of weighted risk assets in computing the denominator of the risk-based capital ratio.

<sup>11</sup>Long-term preferred stock with an original maturity of 20 years or more (including related surplus) will also qualify in this category as an element of Tier 2. If the holder of such an instrument has a right to require the issuer to redeem, repay, or repurchase the instrument prior to the original stated maturity, maturity would be defined, for risk-based capital purposes, as the earliest possible date on which the holder can put the instrument back to the issuing bank.

(3) The instrument must be available to participate in losses while the issuer is operating as a going concern. (Term subordinated debt would not meet this requirement.) To satisfy this requirement, the instrument must convert to common or perpetual preferred stock in the event that the accumulated losses exceed the sum of the retained earnings and capital surplus accounts of the issuer.

(4) The instrument must provide the option for the issuer to defer interest payments if: (a) The issuer does not report a profit in the preceding annual period (defined as combined profits for the most recent four quarters), and (b) the issuer eliminates cash dividends on common and preferred stock.

Mandatory convertible debt securities in the form of equity contract notes that meet the criteria set forth in 12 CFR part 225, appendix B, also qualify as unlimited elements of Tier 2 capital. In accordance with that appendix, equity commitment notes issued prior to May 15, 1985 also qualify for inclusion in Tier 2.

d. *Subordinated debt and intermediate term preferred stock.* (i) The aggregate amount of term subordinated debt (excluding mandatory convertible debt) and intermediate-term preferred stock that may be treated as supplementary capital is limited to 50 percent of Tier 1 capital (net of goodwill and other intangible assets required to be deducted in accordance with section II.B.1.b. of this appendix). Amounts in excess of these limits may be issued and, while not included in the ratio calculation, will be taken into account in the overall assessment of a bank's funding and financial condition.

(ii) Subordinated debt and intermediate-term preferred stock must have an original weighted average maturity of at least five years to qualify as supplementary capital. (If the holder has the option to require the issuer to redeem, repay, or repurchase the instrument prior to the original stated maturity, maturity would be defined, for risk-based capital purposes, as the earliest possible date on which the holder can put the instrument back to the issuing bank.)<sup>12</sup> In the case of subordinated debt, the instrument must be unsecured and must clearly

<sup>12</sup>As a limited-life capital instrument approaches maturity it begins to take on characteristics of a short-term obligation. For this reason, the outstanding amount of term subordinated debt and limited-life preferred stock eligible for inclusion in Tier 2 is reduced, or discounted, as these instruments approach maturity: one-fifth of the original amount (less redemptions) is excluded each year during the instrument's last five years before maturity. When the remaining maturity is less than one year, the instrument is excluded from Tier 2 capital.

state on its face that it is not a deposit and is not insured by a Federal agency. To qualify as capital in banks, debt must be subordinated to general creditors and claims of depositors. Consistent with current regulatory requirements, if a state member bank wishes to redeem subordinated debt before the stated maturity, it must receive prior approval of the Federal Reserve.

e. *Unrealized gains on equity securities and unrealized gains (losses) on other assets.* Up to 45 percent of pretax net unrealized holding gains (that is, the excess, if any, of the fair value over historical cost) on available-for-sale equity securities with readily determinable fair values may be included in supplementary capital. However, the Federal Reserve may exclude all or a portion of these unrealized gains from Tier 2 capital if the Federal Reserve determines that the equity securities are not prudently valued. Unrealized gains (losses) on other types of assets, such as bank premises and available-for-sale debt securities, are not included in supplementary capital, but the Federal Reserve may take these unrealized gains (losses) into account as additional factors when assessing a bank's overall capital adequacy.

f. *Revaluation reserves.* i. Such reserves reflect the formal balance sheet restatement or revaluation for capital purposes of asset carrying values to reflect current market values. The federal banking agencies generally have not included unrealized asset appreciation in capital ratio calculations, although they have long taken such values into account as a separate factor in assessing the overall financial strength of a bank.

ii. Consistent with long-standing supervisory practice, the excess of market values over book values for assets held by state member banks will generally not be recognized in supplementary capital or in the calculation of the risk-based capital ratio. However, all banks are encouraged to disclose their equivalent of premises (building) and security revaluation reserves. The Federal Reserve will consider any appreciation, as well as any depreciation, in specific asset values as additional considerations in assessing overall capital strength and financial condition.

#### B. DEDUCTIONS FROM CAPITAL AND OTHER ADJUSTMENTS

Certain assets are deducted from a bank's capital for the purpose of calculating the risk-based capital ratio.<sup>13</sup> These assets include:

(i)(a) Goodwill—deducted from the sum of core capital elements.

<sup>13</sup>Any assets deducted from capital in computing the numerator of the ratio are not included in weighted risk assets in computing the denominator of the ratio.

(b) Certain identifiable intangible assets, that is, intangible assets other than goodwill—deducted from the sum of core capital elements in accordance with section II.B.1.b. of this appendix.

(i) Investments in banking and finance subsidiaries that are not consolidated for accounting or supervisory purposes and, on a case-by-case basis, investments in other designated subsidiaries or associated companies at the discretion of the Federal Reserve—deducted from total capital components.

(iii) Reciprocal holdings of capital instruments of banking organizations—deducted from total capital components.

(iv) Deferred tax assets—portions are deducted from the sum of core capital elements in accordance with section II.B.4. of this Appendix A.

1. *Goodwill and other intangible assets.—a. Goodwill.* Goodwill in an intangible asset that represents the excess of the purchase price over the fair market value of identifiable assets acquired less liabilities assumed in acquisitions accounted for under the purchase method of accounting. State member banks generally have not been allowed to include goodwill in regulatory capital under current supervisory policies. Consistent with this policy, all goodwill in state member banks will be deducted from Tier 1 capital.

b. *Other intangible assets.* i. All servicing assets, including servicing assets on assets other than mortgages (i.e., nonmortgage servicing assets) are included in this Appendix A as identifiable intangible assets. The only types of identifiable intangible assets that may be included in, that is, not deducted from, a bank's capital are readily marketable mortgage servicing assets, non-mortgage servicing assets, and purchased credit card relationships. The total amount of these assets included in capital, in the aggregate, can not exceed 100 percent of Tier 1 capital. Nonmortgage servicing assets and purchased credit card relationships are subject to a separate sublimit of 25 percent of Tier 1 capital.<sup>14</sup>

ii. For purposes of calculating these limitations on mortgage servicing assets, non-mortgage servicing assets, and purchased

<sup>14</sup>Amounts of servicing assets and purchased credit card relationships in excess of these limitations, as well as identifiable intangible assets, including core deposit intangibles, including favorable leaseholds, are to be deducted from a bank's core capital elements in determining Tier 1 capital. However, identifiable intangible assets (other than mortgage servicing assets and purchased credit card relationships) acquired on or before February 19, 1992, generally will not be deducted from capital for supervisory purposes, although they will continue to be deducted for applications purposes.

credit card relationships, Tier 1 capital is defined as the sum of core capital elements, net of goodwill, and net of all identifiable intangible assets other than mortgage servicing assets, nonmortgage servicing assets, and purchased credit card relationships, regardless of the date acquired, but prior to the deduction of deferred tax assets.

iii. The amount of mortgage servicing assets, nonmortgage servicing assets, and purchased credit card relationships that a bank may include in capital shall be the lesser of 90 percent of their fair value, as determined in accordance with this section, or 100 percent of their book value, as adjusted for capital purposes in accordance with the instructions in the commercial bank Consolidated Reports of Condition and Income (Call Reports). If both the application of the limits on mortgage servicing assets, nonmortgage servicing assets, and purchased credit card relationships and the adjustment of the balance sheet amount for these assets would result in an amount being deducted from capital, the bank would deduct only the greater of the two amounts from its core capital elements in determining Tier 1 capital.

iv. Banks may elect to deduct disallowed servicing assets on a basis that is net of any associated deferred tax liability. Deferred tax liabilities netted in this manner cannot also be netted against deferred tax assets when determining the amount of deferred tax assets that are dependent upon future taxable income.

v. Banks must review the book value of all intangible assets at least quarterly and make adjustments to these values as necessary. The fair value of mortgage servicing assets, nonmortgage servicing assets, and purchased credit card relationships also must be determined at least quarterly. This determination shall include adjustments for any significant changes in original valuation assumptions, including changes in prepayment estimates or account attrition rates. Examiners will review both the book value and the fair value assigned to these assets, together with supporting documentation, during the examination process. In addition, the Federal Reserve may require, on a case-by-case basis, an independent valuation of a bank's intangible assets.

vi. The treatment of identifiable intangible assets set forth in this section generally will be used in the calculation of a bank's capital ratios for supervisory and applications purposes. However, in making an overall assessment of a bank's capital adequacy for applications purposes, the Board may, if it deems appropriate, take into account the quality and composition of a bank's capital, together with the quality and value of its tangible and intangible assets.

vii. Consistent with long-standing Board policy, banks experiencing substantial growth, whether internally or by acquisi-

tion, are expected to maintain strong capital positions substantially above minimum supervisory levels, without significant reliance on intangible assets.

2. *Investments in certain subsidiaries.* The aggregate amount of investments in banking or finance subsidiaries<sup>15</sup> whose financial statements are not consolidated for accounting or bank regulatory reporting purposes will be deducted from a bank's total capital components.<sup>16</sup> Generally, investments for this purpose are defined as equity and debt capital investments and any other instruments that are deemed to be capital in the particular subsidiary.

Advances (that is, loans, extensions of credit, guarantees, commitments, or any other forms of credit exposure) to the subsidiary that are not deemed to be capital will generally not be deducted from a bank's capital. Rather, such advances generally will be included in the bank's consolidated assets and be assigned to the 100 percent risk category, unless such obligations are backed by recognized collateral or guarantees, in which case they will be assigned to the risk category appropriate to such collateral or guarantees. These advances may, however, also be deducted from the bank's capital if, in the judgment of the Federal Reserve, the risks stemming from such advances are comparable to the risks associated with capital investments or if the advances involve other risk factors that warrant such an adjustment to capital for supervisory purposes. These other factors could include, for example, the absence of collateral support.

Inasmuch as the assets of unconsolidated banking and finance subsidiaries are not fully reflected in a bank's consolidated total assets, such assets may be viewed as the equivalent of off-balance sheet exposures since the operations of an unconsolidated subsidiary could expose the bank to considerable risk. For this reason, it is generally appropriate to view the capital resources invested in these unconsolidated entities as primarily supporting the risks inherent in these off-balance sheet assets, and not generally available to support risks or absorb losses elsewhere in the bank.

<sup>15</sup>For this purpose, a banking and finance subsidiary generally is defined as any company engaged in banking or finance in which the parent institution holds directly or indirectly more than 50 percent of the outstanding voting stock, or which is otherwise controlled or capable of being controlled by the parent institution.

<sup>16</sup>An exception to this deduction would be made in the case of shares acquired in the regular course of securing or collecting a debt previously contracted in good faith. The requirements for consolidation are spelled out in the instructions to the Call Report.

The Federal Reserve may, on a case-by-case basis, also deduct from a bank's capital, investments in certain other subsidiaries in order to determine if the consolidated bank meets minimum supervisory capital requirements without reliance on the resources invested in such subsidiaries.

The Federal Reserve will not automatically deduct investments in other consolidated subsidiaries or investments in joint ventures and associated companies.<sup>17</sup> Nonetheless, the resources invested in these entities, like investments in unconsolidated banking and finance subsidiaries, support assets not consolidated with the rest of the bank's activities and, therefore, may not be generally available to support additional leverage or absorb losses elsewhere in the bank. Moreover, experience has shown that banks stand behind the losses of affiliated institutions, such as joint ventures and associated companies, in order to protect the reputation of the organization as a whole. In some cases, this has led to losses that have exceeded the investments in such organizations.

For this reason, the Federal Reserve will monitor the level and nature of such investments for individual banks and, on a case-by-case basis may, for risk-based capital purposes, deduct such investments from total capital components, apply an appropriate risk-weighted capital charge against the bank's proportionate share of the assets of its associated companies, require a line-by-line consolidation of the entity (in the event that the bank's control over the entity makes it the functional equivalent of a subsidiary), or otherwise require the bank to operate with a risk-based capital ratio above the minimum.

In considering the appropriateness of such adjustments or actions, the Federal Reserve will generally take into account whether:

(1) The bank has significant influence over the financial or managerial policies or operations of the subsidiary, joint venture, or associated company;

(2) The bank is the largest investor in the affiliated company; or

(3) Other circumstances prevail that appear to closely tie the activities of the affiliated company to the bank.

3. *Reciprocal holdings of banking organizations' capital instruments.* Reciprocal holdings of banking organizations' capital instruments (that is, instruments that qualify as

<sup>17</sup>The definition of such entities is contained in the instructions to the commercial bank Call Report. Under regulatory reporting procedures, associated companies and joint ventures generally are defined as companies in which the bank owns 20 to 50 percent of the voting stock.

Tier 1 or Tier 2 capital)<sup>18</sup> will be deducted from a bank's total capital components for the purpose of determining the numerator of the risk-based capital ratio.

Reciprocal holdings are cross-holdings resulting from formal or informal arrangements in which two or more banking organizations swap, exchange, or otherwise agree to hold each other's capital instruments. Generally, deductions will be limited to intentional cross-holdings. At present, the Board does not intend to require banks to deduct non-reciprocal holdings of such capital instruments.<sup>19</sup>

4. *Deferred tax assets.* The amount of deferred tax assets that is dependent upon future taxable income, net of the valuation allowance for deferred tax assets, that may be included in, that is, not deducted from, a bank's capital may not exceed the lesser of (i) the amount of these deferred tax assets that the bank is expected to realize within one year of the calendar quarter-end date, based on its projections of future taxable income for that year,<sup>20</sup> or (ii) 10 percent of Tier

<sup>18</sup>See 12 CFR part 225, appendix A for instruments that qualify as Tier 1 and Tier 2 capital for bank holding companies.

<sup>19</sup>Deductions of holdings of capital securities also would not be made in the case of interstate "stake out" investments that comply with the Board's Policy Statement on Nonvoting Equity Investments, 12 CFR 225.143 (Federal Reserve Regulatory Service 4-172.1; 68 Federal Reserve Bulletin 413 (1982)). In addition, holdings of capital instruments issued by other banking organizations but taken in satisfaction of debts previously contracted would be exempt from any deduction from capital. The Board intends to monitor nonreciprocal holdings of other banking organizations' capital instruments and to provide information on such holdings to the Basle Supervisors' Committee as called for under the Basle capital framework.

<sup>20</sup>To determine the amount of expected deferred-tax assets realizable in the next 12 months, an institution should assume that all existing temporary differences fully reverse as of the report date. Projected future taxable income should not include net operating-loss carry-forwards to be used during that year or the amount of existing temporary differences a bank expects to reverse within the year. Such projections should include the estimated effect of tax-planning strategies that the organization expects to implement to realize net operating losses or tax-credit carry-forwards that would otherwise expire during the year. Institutions do not have to prepare a new 12-month projection each quarter. Rather, on interim report

*Continued*

1 capital. The reported amount of deferred tax assets, net of any valuation allowance for deferred tax assets, in excess of the lesser of these two amounts is to be deducted from a bank's core capital elements in determining Tier 1 capital. For purposes of calculating the 10 percent limitation, Tier 1 capital is defined as the sum of core capital elements, net of goodwill, and net of all other identifiable intangible assets other than mortgage and nonmortgage servicing assets and purchased credit card relationships, before any disallowed deferred tax assets are deducted. There generally is no limit in Tier 1 capital on the amount of deferred tax assets that can be realized from taxes paid in prior carry-back years or from future reversals of existing taxable temporary differences, but, for banks that have a parent, this may not exceed the amount the bank could reasonably expect its parent to refund.

### III. Procedures for Computing Weighted Risk Assets and Off-Balance Sheet Items

#### A. Procedures

Assets and credit equivalent amounts of off-balance sheet items of state member banks are assigned to one of several broad risk categories, according to the obligor, or, if relevant, the guarantor or the nature of the collateral. The aggregate dollar value of the amount in each category is then multiplied by the risk weight associated with that category. The resulting weighted values from each of the risk categories are added together, and this sum is the bank's total weighted risk assets that comprise the denominator of the risk-based capital ratio. Attachment I provides a sample calculation.

Risk weights for all off-balance sheet items are determined by a two-step process. First, the "credit equivalent amount" of off-balance sheet items is determined, in most cases by multiplying the off-balance sheet item by a credit conversion factor. Second, the credit equivalent amount is treated like any balance sheet asset and generally is assigned to the appropriate risk category according to the obligor, or, if relevant, the guarantor or the nature of the collateral.

In general, if a particular item qualifies for placement in more than one risk category, it is assigned to the category that has the lowest risk weight. A holding of a U.S. municipal revenue bond that is fully guaranteed by a U.S. bank, for example, would be assigned the 20 percent risk weight appropriate to claims guaranteed by U.S. banks, rather

dates, institutions may use the future-taxable-income projections for their current fiscal year, adjusted for any significant changes that have occurred or are expected to occur.

than the 50 percent risk weight appropriate to U.S. municipal revenue bonds.<sup>21</sup>

The terms *claims* and *securities* used in the context of the discussion of risk weights, unless otherwise specified, refer to loans or debt obligations of the entity on whom the claim is held. Assets in the form of stock or equity holdings in commercial or financial firms are assigned to the 100 percent risk category, unless some other treatment is explicitly permitted.

#### B. Collateral, Guarantees, and Other Considerations

1. *Collateral.* The only forms of collateral that are formally recognized by the risk-based capital framework are: Cash on deposit in the bank; securities issued or guaranteed by the central governments of the OECD-

<sup>21</sup>An investment in shares of a fund whose portfolio consists solely of various securities or money market instruments that, if held separately, would be assigned to different risk categories, is generally assigned to the risk category appropriate to the highest risk-weighted security or instrument that the fund is permitted to hold in accordance with its stated investment objectives. However, in no case will indirect holdings through shares in such funds be assigned to the zero percent risk category. For example, if a fund is permitted to hold U.S. Treasuries and commercial paper, shares in that fund would generally be assigned the 100 percent risk weight appropriate to commercial paper, regardless of the actual composition of the fund's investments at any particular time. Shares in a fund that may invest only in U.S. Treasury securities would generally be assigned to the 20 percent risk category. If, in order to maintain a necessary degree of short-term liquidity, a fund is permitted to hold an insignificant amount of its assets in short-term, highly liquid securities of superior credit quality that do not qualify for a preferential risk weight, such securities will generally not be taken into account in determining the risk category into which the bank's holding in the overall fund should be assigned. Regardless of the composition of the fund's securities, if the fund engages in any activities that appear speculative in nature (for example, use of futures, forwards, or option contracts for purposes other than to reduce interest rate risk) or has any other characteristics that are inconsistent with the preferential risk weighting assigned to the fund's investments, holdings in the fund will be assigned to the 100 percent risk category. During the examination process, the treatment of shares in such funds that are assigned to a lower risk weight will be subject to examiner review to ensure that they have been assigned an appropriate risk weight.

based group of countries<sup>22</sup>, U.S. Government agencies, or U.S. Government-sponsored agencies; and securities issued by multilateral lending institutions or regional development banks. Claims fully secured by such collateral generally are assigned to the 20 percent risk-weight category. Collateralized transactions meeting all the conditions described in section III.C.1. may be assigned a zero percent risk weight.

With regard to collateralized claims that may be assigned to the 20 percent risk-weight category, the extent to which qualifying securities are recognized as collateral is determined by their current market value. If such a claim is only partially secured, that is, the market value of the pledged securities is less than the face amount of a balance-sheet asset or an off-balance-sheet item, the portion that is covered by the market value of the qualifying collateral is assigned to the 20 percent risk category, and the portion of the claim that is not covered by collateral in the form of cash or a qualifying security is assigned to the risk category appropriate to the obligor or, if relevant, the guarantor. For example, to the extent that a claim on a private sector obligor is collateralized by the current market value of U.S. Government securities, it would be placed in the 20 percent risk category, and the balance would be assigned to the 100 percent risk category.

2. *Guarantees.* Guarantees of the OECD and non-OECD central governments, U.S. Gov-

ernment agencies, U.S. Government-sponsored agencies, state and local governments of the OECD-based group of countries, multilateral lending institutions and regional development banks, U.S. depository institutions, and foreign banks are also recognized. If a claim is partially guaranteed, that is, coverage of the guarantee is less than the face amount of a balance sheet asset or an off-balance sheet item, the portion that is not fully covered by the guarantee is assigned to the risk category appropriate to the obligor or, if relevant, to any collateral. The face amount of a claim covered by two types of guarantees that have different risk weights, such as a U.S. Government guarantee and a state guarantee, is to be apportioned between the two risk categories appropriate to the guarantors.

The existence of other forms of collateral or guarantees that the risk-based capital framework does not formally recognize may be taken into consideration in evaluating the risks inherent in a bank's loan portfolio—which, in turn, would affect the overall supervisory assessment of the bank's capital adequacy.

3. *Mortgage-backed securities.* Mortgage-backed securities, including pass-throughs and collateralized mortgage obligations (but not stripped mortgage-backed securities), that are *issued* or *guaranteed* by a U.S. Government agency or U.S. Government-sponsored agency are assigned to the risk weight category appropriate to the issuer or guarantor. Generally, a privately-issued mortgage-backed security meeting certain criteria set forth in the accompanying footnote,<sup>23</sup> is

<sup>22</sup>The OECD-based group of countries comprises all full members of the Organization for Economic Cooperation and Development (OECD) regardless of entry date, as well as countries that have concluded special lending arrangements with the International Monetary Fund (IMF) associated with the IMF's General Arrangements to Borrow, but excludes any country that has rescheduled its external sovereign debt within the previous five years. As of November 1995, the OECD included the following countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States; and Saudi Arabia had concluded special lending arrangements with the IMF associated with the IMF's General Arrangements to Borrow. A rescheduling of external sovereign debt generally would include any renegotiation of terms arising from a country's inability or unwillingness to meet its external debt service obligations, but generally would not include renegotiations of debt in the normal course of business, such as a renegotiation to allow the borrower to take advantage of a decline in interest rates or other change in market conditions.

<sup>23</sup>A privately-issued mortgage-backed security may be treated as an indirect holding of the underlying assets provided that: (1) The underlying assets are held by an independent trustee and the trustee has a first priority, perfected security interest in the underlying assets on behalf of the holders of the security; (2) either the holder of the security has an undivided *pro rata* ownership interest in the underlying mortgage assets or the trust or single purpose entity (or conduit) that issues the security has no liabilities unrelated to the issued securities; (3) the security is structured such that the cash flow from the underlying assets in all cases fully meets the cash flow requirements of the security without undue reliance on any reinvestment income; and (4) there is no material reinvestment risk associated with any funds awaiting distribution to the holders of the security. In addition, if the underlying assets of a mortgage-backed security are composed of more than one type of asset, for example, U.S. Government-sponsored agency securities and privately-issued pass-through securities that qualify for the 50 percent risk

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treated as essentially an indirect holding of the underlying assets, and assigned to the same risk category as the underlying assets, but in no case to the zero percent risk category. Privately-issued mortgage-backed securities whose structures do not qualify them to be regarded as indirect holdings of the underlying assets are assigned to the 100 percent risk category. During the examination process, privately-issued mortgage-backed securities that are assigned to a lower risk weight category will be subject to examiner review to ensure that they meet the appropriate criteria.

While the risk category to which mortgage-backed securities is assigned will generally be based upon the issuer or guarantor or, in the case of privately-issued mortgage-backed securities, the assets underlying the security, any class of a mortgage-backed security that can absorb more than its *pro rata* share of loss without the whole issue being in default (for example, a so-called subordinate class or residual interest), is assigned to the 100 percent risk category. Furthermore, all stripped mortgage-backed securities, including interest-only strips (IOs), principal-only strips (POs), and similar instruments are also assigned to the 100 percent risk weight category, regardless of the issuer or guarantor.

4. *Maturity.* Maturity is generally not a factor in assigning items to risk categories with the exception of claims on non-OECD banks, commitments, and interest rate and foreign exchange rate contracts. Except for commitments, short-term is defined as one year or less *remaining* maturity and long-term is defined as over one year *remaining* maturity. In the case of commitments, short-term is defined as one year or less *original* maturity and long-term is defined as over one year *original* maturity.<sup>24</sup>

5. *Small Business Loans and Leases on Personal Property Transferred with Recourse.* a. Notwithstanding other provisions of this appendix A, a qualifying bank that has transferred small business loans and leases on personal property (small business obligations) with recourse shall include in weighted-risk assets only the amount of retained recourse, provided two conditions are met. First, the transaction must be treated as a sale under GAAP and, second, the bank must establish pursuant to GAAP a non-capital reserve suf-

category, the entire mortgage-backed security is generally assigned to the category appropriate to the highest risk-weighted asset underlying the issue. Thus, in this example, the security would receive the 50 percent risk weight appropriate to the privately-issued pass-through securities.

<sup>24</sup>Through year-end 1992, remaining, rather than original, maturity may be used for determining the maturity of commitments.

ficient to meet the bank's reasonably estimated liability under the recourse arrangement. Only loans and leases 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 are eligible for this capital treatment.

b. For purposes of this appendix A, a bank is qualifying if it meets the criteria set forth in the Board's prompt corrective action regulation (12 CFR 208.40) for well capitalized or, by order of the Board, adequately capitalized. For purposes of determining whether a bank meets the criteria, its capital ratios must be calculated without regard to the preferential capital treatment for transfers of small business obligations with recourse specified in section III.B.5.a. of this appendix A. The total outstanding amount of recourse retained by a qualifying bank on transfers of small business obligations receiving the preferential capital treatment cannot exceed 15 percent of the bank's total risk-based capital. By order, the Board may approve a higher limit.

c. If a bank ceases to be qualifying or exceeds the 15 percent capital limitation, the preferential capital treatment will continue to apply to any transfers of small business obligations with recourse that were consummated during the time that the bank was qualifying and did not exceed the capital limit.

d. The risk-based capital ratios of the bank shall be calculated without regard to the preferential capital treatment for transfers of small business obligations with recourse specified in section III.B.5.a. of this appendix A for purposes of:

(i) Determining whether a bank is adequately capitalized, undercapitalized, significantly undercapitalized, or critically undercapitalized under prompt corrective action (12 CFR 208.43(b)(1)); and

(ii) Reclassifying a well capitalized bank to adequately capitalized and requiring an adequately capitalized bank to comply with certain mandatory or discretionary supervisory actions as if the bank were in the next lower prompt corrective action capital category (12 CFR 208.43(c)).

### C. Risk Weights

Attachment III contains a listing of the risk categories, a summary of the types of assets assigned to each category and the weight associated with each category, that is, 0 percent, 20 percent, 50 percent, and 100 percent. A brief explanation of the components of each category follows.

1. *Category 1: zero percent.* This category includes cash (domestic and foreign) owned and held in all offices of the bank or in transit and gold bullion held in the bank's own vaults or in another bank's vaults on an allocated basis, to the extent it is offset by gold

bullion liabilities.<sup>25</sup> The category also includes all direct claims (including securities, loans, and leases) on, and the portions of claims that are directly and unconditionally guaranteed by, the central governments<sup>26</sup> of the OECD countries and U.S. Government agencies,<sup>27</sup> as well as all direct local currency claims on, and the portions of local currency claims that are directly and unconditionally guaranteed by, the central governments of non-OECD countries, to the extent that the bank has liabilities booked in that currency. A claim is not considered to be unconditionally guaranteed by a central government if the validity of the guarantee is dependent upon some affirmative action by the holder or a third party. Generally, securities guaranteed by the U.S. Government or its agencies that are actively traded in financial markets, such as GNMA securities, are considered to be unconditionally guaranteed.

This category also includes claims collateralized by cash on deposit in the bank or by securities issued or guaranteed by

<sup>25</sup> All other holdings of bullion are assigned to the 100 percent risk category.

<sup>26</sup> A central government is defined to include departments and ministries, including the central bank, of the central government. The U.S. central bank includes the 12 Federal Reserve Banks, and the stock held in these banks as a condition of membership is assigned to the zero percent risk category. The definition of central government does not include state, provincial, or local governments; or commercial enterprises owned by the central government. In addition, it does not include local government entities or commercial enterprises whose obligations are guaranteed by the central government, although any claims on such entities guaranteed by central governments are placed in the same general risk category as other claims guaranteed by central governments. OECD central governments are defined as central governments of the OECD-based group of countries; non-OECD central governments are defined as central governments that do not belong to the OECD-based group countries.

<sup>27</sup> A U.S. Government agency is defined as 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. Such agencies include the Government National Mortgage Association (GNMA), the Veterans Administration (VA), the Federal Housing Administration (FHA), the Export-Import Bank (Exim Bank), the Overseas Private Investment Corporation (OPIC), the Commodity Credit Corporation (CCC), and the Small Business Administration (SBA).

OECD central governments or U.S. government agencies for which a positive margin of collateral is maintained on a daily basis, fully taking into account any change in the bank's exposure to the obligor or counterparty under a claim in relation to the market value of the collateral held in support of that claim.

2. *Category 2: 20 percent.* This category includes cash items in the process of collection, both foreign and domestic; short-term claims (including demand deposits) on, and the portions of short-term claims that are guaranteed<sup>28</sup> by, U.S. depository institutions<sup>29</sup> and foreign banks<sup>30</sup>; and long-term claims on, and the portions of long-term claims that are guaranteed by, U.S. depository institutions and OECD banks.<sup>31</sup>

<sup>28</sup> Claims guaranteed by U.S. depository institutions and foreign banks include risk participations in both bankers acceptances and standby letters of credit, as well as participations in commitments, that are conveyed to other U.S. depository institutions or foreign banks.

<sup>29</sup> U.S. depository institutions are defined to include branches (foreign and domestic) of federally-insured banks and depository institutions chartered and headquartered in the 50 states of the United States, the District of Columbia, Puerto Rico, and U.S. territories and possessions. The definition encompasses banks, mutual or stock savings banks, savings or building and loan associations, cooperative banks, credit unions, and international banking facilities of domestic banks. U.S.-chartered depository institutions owned by foreigners are also included in the definition. However, branches and agencies of foreign banks located in the U.S., as well as all bank holding companies, are excluded.

<sup>30</sup> Foreign banks are distinguished as either OECD banks or non-OECD banks. OECD banks include banks and their branches (foreign and domestic) organized under the laws of countries (other than the U.S.) that belong to the OECD-based group of countries. Non-OECD banks include banks and their branches (foreign and domestic) organized under the laws of countries that do not belong to the OECD-based group of countries. For this purpose, a bank is defined as an institution that engages in the business of banking; is recognized as a bank by the bank supervisory or monetary authorities of the country of its organization or principal banking operations; receives deposits to a substantial extent in the regular course of business; and has the power to accept demand deposits.

<sup>31</sup> Long-term claims on, or guaranteed by, non-OECD banks and all claims on bank holding companies are assigned to the 100

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This category also includes the portions of claims that are conditionally guaranteed by OECD central governments and U.S. Government agencies, as well as the portions of local currency claims that are conditionally guaranteed by non-OECD central governments, to the extent that the bank has liabilities booked in that currency. In addition, this category also includes claims on, and the portions of claims that are guaranteed by, U.S. government-sponsored<sup>32</sup> agencies and claims on, and the portions of claims guaranteed by, the International Bank for Reconstruction and Development (World Bank), the International Finance Corporation, the Interamerican Development Bank, the Asian Development Bank, the African Development Bank, the European Investment Bank, the European Bank for Reconstruction and Development, the Nordic Investment Bank, and other multilateral lending institutions or regional development banks in which the U.S. government is a shareholder or contributing member. General obligation claims on, or portions of claims guaranteed by the full faith and credit of, states or other political subdivisions of the U.S. or other countries of the OECD-based group are also assigned to this category.<sup>33</sup>

This category also includes the portions of claims (including repurchase transactions) collateralized by cash on deposit in the bank or by securities issued or guaranteed by OECD central governments or U.S. government agencies that do not qualify for the zero percent risk-weight category; collateralized by securities issued or guaranteed by U.S. government-sponsored agencies; or collateralized by securities issued by mul-

percent risk category, as are holdings of bank-issued securities that qualify as capital of the issuing banks.

<sup>32</sup> For this purpose, U.S. government-sponsored agencies are defined as agencies originally established or chartered by the Federal government to serve public purposes specified by the U.S. Congress but whose obligations are *not explicitly* guaranteed by the full faith and credit of the U.S. government. These agencies include the Federal Home Loan Mortgage Corporation (FHLMC), the Federal National Mortgage Association (FNMA), the Farm Credit System, the Federal Home Loan Bank System, and the Student Loan Marketing Association (SLMA). Claims on U.S. government-sponsored agencies include capital stock in a Federal Home Loan Bank that is held as a condition of membership in that Bank.

<sup>33</sup> Claims on, or guaranteed by, states or other political subdivisions of countries that do not belong to the OECD-based group of countries are placed in the 100 percent risk category.

tilateral lending institutions or regional development banks in which the U.S. government is a shareholder or contributing member.

3. *Category 3: 50 percent.* This category includes loans fully secured by first liens<sup>34</sup> on 1- to 4-family residential properties, either owner-occupied or rented, or on multifamily residential properties,<sup>35</sup> that meet certain criteria.<sup>36</sup> Loans included in this category must have been made in accordance with

<sup>34</sup>If a bank holds the first and junior liens(s) on a residential property and no other party holds an intervening lien, the transaction is treated as a single loan secured by a first lien for the purpose of determining the loan-to-value ratio.

<sup>35</sup>Loans that qualify as loans secured by 1- to 4-family residential properties or multifamily residential properties are listed in the instructions to the commercial bank Call Report. In addition, for risk-based capital purposes, loans secured by 1- to 4-family residential properties include loans to builders with substantial project equity for the construction of 1- to 4-family residences that have been presold under firm contracts to purchasers who have obtained firm commitments for permanent qualifying mortgage loans and have made substantial earnest money deposits.

The instructions to the Call Report also discuss the treatment of loans, including multifamily housing loans, that are sold subject to a pro rata loss sharing arrangement. Such an arrangement should be treated by the selling bank as sold (and excluded from balance sheet assets) to the extent that the sales agreement provides for the purchaser of the loan to share in any loss incurred on the loan on a pro rata basis with the selling bank. In such a transaction, from the standpoint of the selling bank, the portion of the loan that is treated as sold is not subject to the risk-based capital standards. In connection with sales of multifamily housing loans in which the purchaser of a loan shares in any loss incurred on the loan with the selling institution on other than a pro rata basis, these other loss sharing arrangements are taken into account for purposes of determining the extent to which such loans are treated by the selling bank as sold (and excluded from balance sheet assets) under the risk-based capital framework in the same manner as prescribed for reporting purposes in the instructions to the Call Report.

<sup>36</sup>Residential property loans that do not meet all the specified criteria or that are made for the purpose of speculative property development are placed in the 100 percent risk category.

prudent underwriting standards;<sup>37</sup> be performing in accordance with their original terms; and not be 90 days or more past due or carried in nonaccrual status. The following additional criteria must also be applied to a loan secured by a multifamily residential property that is included in this category: all principal and interest payments on the loan must have been made on time for at least the year preceding placement in this category, or in the case where the existing property owner is refinancing a loan on that property, all principal and interest payments on the loan being refinanced must have been made on time for at least the year preceding placement in this category; amortization of the principal and interest 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; and the annual net operating income (before debt service) generated by the property during its most recent fiscal year must not be less than 120 percent of the loan's current annual debt service (115 percent if the loan is based on a floating interest rate) 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 institution. Also included in this category are privately-issued mortgage-backed securities provided that

(1) The structure of the security meets the criteria described in section III(B)(3) above;

(2) If the security is backed by a pool of conventional mortgages, on 1- to 4-family residential or multifamily residential properties each underlying mortgage meets the criteria described above in this section for eligibility for the 50 percent risk category at the time the pool is originated;

<sup>37</sup> Prudent underwriting standards include a conservative ratio of the current loan balance to the value of the property. In the case of a loan secured by multifamily residential property, the loan-to-value ratio is not conservative if it exceeds 80 percent (75 percent if the loan is based on a floating interest rate). Prudent underwriting standards also dictate that a loan-to-value ratio used in the case of originating a loan to acquire a property would not be deemed conservative unless the value is based on the lower of the acquisition cost of the property or appraised (or if appropriate, evaluated) value. Otherwise, the loan-to-value ratio generally would be based upon the value of the property as determined by the most current appraisal, or if appropriate, the most current evaluation. All appraisals must be made in a manner consistent with the Federal banking agencies' real estate appraisal regulations and guidelines and with the bank's own appraisal guidelines.

(3) If the security is backed by privately-issued mortgage-backed securities, *each* underlying security qualifies for the 50 percent risk category; and

(4) If the security is backed by a pool of multifamily residential mortgages, principal and interest payments on the security are not 30 days or more past due.

Privately-issued mortgage-backed securities that do not meet these criteria or that do not qualify for a lower risk weight are generally assigned to the 100 percent risk category.

Also assigned to this category are *revenue* (non-general obligation) bonds or similar obligations, including loans and leases, that are obligations of states or other political subdivisions of the U.S. (for example, municipal revenue bonds) or other countries of the OECD-based group, but for which the government entity is committed to repay the debt with revenues from the specific projects financed, rather than from general tax funds.

Credit equivalent amounts of derivative contracts involving standard risk obligors (that is, obligors whose loans or debt securities would be assigned to the 100 percent risk category) are included in the 50 percent category, unless they are backed by collateral or guarantees that allow them to be placed in a lower risk category.

4. *Category 4: 100 percent.* All assets not included in the categories above are assigned to this category, which comprises standard risk assets. The bulk of the assets typically found in a loan portfolio would be assigned to the 100 percent category.

This category includes long-term claims on, or guaranteed by, non-OECD banks, and all claims on non-OECD central governments that entail some degree of transfer risk.<sup>38</sup> This category also includes all claims on foreign and domestic private sector obligors not included in the categories above (including loans to nondepository financial institutions and bank holding companies); claims on commercial firms owned by the public sector; customer liabilities to the bank on acceptances outstanding involving standard risk claims<sup>39</sup>; investments in fixed assets,

<sup>38</sup> Such assets include all non-local currency claims on, or guaranteed by, non-OECD central governments and those portions of local currency claims on, or guaranteed by, non-OECD central governments that exceed the local currency liabilities held by the bank.

<sup>39</sup> Customer liabilities on acceptances outstanding involving non-standard risk claims, such as claims on U.S. depository institutions, are assigned to the risk category appropriate to the identity of the obligor or, if relevant, the nature of the collateral or guarantees backing the claims. Portions of

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premises, and other real estate owned; common and preferred stock of corporations, including stock acquired for debts previously contracted; commercial and consumer loans (except those assigned to lower risk categories due to recognized guarantees or collateral and loans for residential property that qualify for a lower risk weight); mortgage-backed securities that do not meet criteria for assignment to a lower risk weight (including any classes of mortgage-backed securities that can absorb more than their *pro rata* share of loss without the whole issue being in default); and all stripped mortgage-backed and similar securities.

Also included in this category are industrial development bonds and similar obligations issued under the auspices of states or political subdivisions of the OECD-based group of countries for the benefit of a private party or enterprise where that party or enterprise, not the government entity, is obligated to pay the principal and interest, and all obligations of states or political subdivisions of countries that do not belong to the OECD-based group.

The following assets also are assigned a risk weight of 100 percent if they have not been deducted from capital: investments in unconsolidated companies, joint ventures, or associated companies; instruments that qualify as capital issued by other banking organizations; and any intangibles, including those that may have been grandfathered into capital.

#### D. Off-Balance Sheet Items

The face amount of an off-balance sheet item is incorporated into the risk-based capital ratio by multiplying it by a credit conversion factor. The resultant credit equivalent amount is assigned to the appropriate risk category according to the obligor, or, if relevant, the guarantor or the nature of the collateral.<sup>40</sup> Attachment IV sets forth the conversion factors for various types of off-balance sheet items.

##### 1. *Items with a 100 percent conversion factor.*

acceptances conveyed as risk participations to U.S. depository institutions or foreign banks are assigned to the 20 percent risk category appropriate to short-term claims guaranteed by U.S. depository institutions and foreign banks.

<sup>40</sup>The sufficiency of collateral and guarantees for off-balance-sheet items is determined by the market value of the collateral or the amount of the guarantee in relation to the face amount of the item, except for derivative contracts, for which this determination is generally made in relation to the credit equivalent amount. Collateral and guarantees are subject to the same provisions noted under section III.B. of this appendix A.

a. A 100 percent conversion factor applies to direct credit substitutes, which include guarantees, or equivalent instruments, backing financial claims, such as outstanding securities, loans, and other financial liabilities, or that back off-balance sheet items that require capital under the risk-based capital framework. Direct credit substitutes include, for example, financial standby letters of credit, or other equivalent irrevocable undertakings or surety arrangements, that guarantee repayment of financial obligations such as: commercial paper, tax-exempt securities, commercial or individual loans or debt obligations, or standby or commercial letters of credit. Direct credit substitutes also include the acquisition of risk participations in bankers acceptances and standby letters of credit, since both of these transactions, in effect, constitute a guarantee by the acquiring bank that the underlying account party (obligor) will repay its obligation to the originating, or issuing, institution.<sup>41</sup> (Standby letters of credit that are performance-related are discussed below and have a credit conversion factor of 50 percent.)

b. The full amount of a direct credit substitute is converted at 100 percent and the resulting credit equivalent amount is assigned to the risk category appropriate to the obligor or, if relevant, the guarantor or the nature of the collateral. In the case of a direct credit substitute in which a risk participation<sup>42</sup> has been conveyed, the full amount is still converted at 100 percent. However, the credit equivalent amount that has been conveyed is assigned to whichever risk category is lower: the risk category appropriate to the obligor, after giving effect to any relevant guarantees or collateral, or the risk category appropriate to the institution acquiring the participation. Any remainder is assigned to the risk category appropriate to the obligor, guarantor, or collateral. For example, the portion of a direct credit substitute conveyed as a risk participation to a U.S. domestic depository institution or foreign bank is assigned to the risk category appropriate to claims guaranteed by those institutions, that is, the 20 percent risk category.<sup>43</sup> This approach recognizes

<sup>41</sup>Credit equivalent amounts of acquisitions of risk participations are assigned to the risk category appropriate to the account party obligor, or, if relevant, the nature of the collateral or guarantees.

<sup>42</sup>That is, a participation in which the originating bank remains liable to the beneficiary for the full amount of the direct credit substitute if the party that has acquired the participation fails to pay when the instrument is drawn.

<sup>43</sup>Risk participations with a remaining maturity of over one year that are conveyed to

that such conveyances replace the originating bank's exposure to the obligor with an exposure to the institutions acquiring the risk participations.<sup>44</sup>

c. In the case of direct credit substitutes that take the form of a syndication as defined in the instructions to the commercial bank Call Report, that is, where each bank is obligated only for its *pro rata* share of the risk and there is no recourse to the originating bank, each bank will only include its *pro rata* share of the direct credit substitute in its risk-based capital calculation.

d. Financial standby letters of credit are distinguished from loan commitments (discussed below) in that standbys are irrevocable obligations of the bank to pay a third-party beneficiary when a customer (account party) fails to repay an outstanding loan or debt instrument (direct credit substitute). Performance standby letters of credit (performance bonds) are irrevocable obligations of the bank to pay a third-party beneficiary when a customer (account party) fails to perform some other contractual non-financial obligation.

e. The distinguishing characteristic of a standby letter of credit for risk-based capital purposes is the combination of irrevocability with the fact that funding is triggered by some failure to repay or perform an obligation. Thus, any commitment (by whatever name) that involves an *irrevocable* obligation to make a payment to the customer or to a third party in the event the customer fails to repay an outstanding debt obligation or fails to perform a contractual obligation is treated, for risk-based capital purposes, as respectively, a financial guarantee standby letter of credit or a performance standby.

f. A loan commitment, on the other hand, involves an obligation (with or without a material adverse change or similar clause) of the bank to fund its customer in the normal course of business should the customer seek to draw down the commitment.

g. Sale and repurchase agreements and asset sales with recourse (to the extent not included on the balance sheet) and forward agreements also are converted at 100 percent. The risk-based capital definition of the sale of assets with recourse, including the sale of 1- to 4-family residential mortgages, is the same as the definition contained in the instructions to the commercial bank Call Re-

non-OECD banks are to be assigned to the 100 percent risk category, unless a lower risk category is appropriate to the obligor, guarantor, or collateral.

<sup>44</sup>A risk participation in bankers acceptances conveyed to other institutions is also assigned to the risk category appropriate to the institution acquiring the participation or, if relevant, the guarantor or nature of the collateral.

port. Accordingly, the entire amount of any assets transferred with recourse that are not already included on the balance sheet, including pools of 1- to 4-family residential mortgages, are to be converted at 100 percent and assigned to the risk weight appropriate to the obligor, or if relevant, the nature of any collateral or guarantees. The terms of a transfer of assets with recourse may contractually limit the amount of the institution's liability to an amount less than the effective risk-based capital requirement for the assets being transferred with recourse. If such a transaction (including one that is reported as a financing, i.e., the assets are not removed from the balance sheet) meets the criteria for sales treatment under GAAP, the amount of total capital required is equal to the maximum amount of loss possible under the recourse provision. If the transaction is also treated as a sale for regulatory reporting purposes, then the required amount of capital may be reduced by the balance of any associated non-capital liability account established pursuant to GAAP to cover estimated probable losses under the recourse provision. So-called "loan strips" (that is, short-term advances sold under long-term commitments without direct recourse) are defined in the instructions to the commercial bank Call Report and for risk-based capital purposes as assets sold with recourse.

h. Forward agreements are legally binding contractual obligations to purchase assets with certain drawdown at a specified future date. Such obligations include forward purchases, forward deposits placed,<sup>45</sup> and partly-paid shares and securities; they do not include commitments to make residential mortgage loans or forward foreign exchange contracts.

i. Securities lent by a bank are treated in one of two ways, depending upon whether the lender is at risk of loss. If a bank, as agent for a customer, lends the customer's securities and does not indemnify the customer against loss, then the transaction is excluded from the risk-based capital calculation. If, alternatively, a bank lends its own securities or, acting as agent for a customer, lends the customer's securities and indemnifies the customer against loss, the transaction is converted at 100 percent and assigned to the risk weight category appropriate to the obligor, to any collateral delivered to the lending bank, or, if applicable, to the independent custodian acting on the lender's behalf. Where a bank is acting as agent for a customer in a transaction involving the lending or sale of securities that is collateralized by cash delivered to the bank, the transaction is deemed to be collateralized by cash on deposit in the bank for purposes of determining

<sup>45</sup>Forward deposits accepted are treated as interest rate contracts.

the appropriate risk-weight category, provided that any indemnification is limited to no more than the difference between the market value of the securities and the cash collateral received and any reinvestment risk associated with that cash collateral is borne by the customer.

2. *Items with a 50 percent conversion factor.* Transaction-related contingencies are converted at 50 percent. Such contingencies include bid bonds, performance bonds, warranties, standby letters of credit related to particular transactions, and performance standby letters of credit, as well as acquisitions of risk participations in performance standby letters of credit. Performance standby letters of credit represent obligations backing the performance of nonfinancial or commercial contracts or undertakings. 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.

The unused portion of commitments with an *original* maturity exceeding one year,<sup>46</sup> including underwriting commitments, and commercial and consumer credit commitments also are converted at 50 percent. Original maturity is defined as the length of time between the date the commitment is issued and the earliest date on which: (1) The bank can, at its option, unconditionally (without cause) cancel the commitment,<sup>47</sup> and (2) the bank is scheduled to (and as a normal practice actually does) review the facility to determine whether or not it should be extended. Such reviews must continue to be conducted at least annually for such a facility to qualify as a short-term commitment.

Commitments are defined as any legally binding arrangements that obligate a bank to extend credit in the form of loans or leases; to purchase loans, securities, or other assets; or to participate in loans and leases. They also include overdraft facilities, revolving credit, home equity and mortgage lines of credit, and similar transactions. Normally, commitments involve a written contract or agreement and a commitment fee, or

<sup>46</sup>Through year-end 1992, remaining maturity may be used for determining the maturity of off-balance sheet loan commitments; thereafter, original maturity must be used.

<sup>47</sup>In the case of consumer home equity or mortgage lines of credit secured by liens on 1–4 family residential properties, the bank is deemed able to unconditionally cancel the commitment for the purpose of this criterion if, at its option, it can prohibit additional extensions of credit, reduce the credit line, and terminate the commitment to the full extent permitted by relevant Federal law.

some other form of consideration. Commitments are included in weighted risk assets regardless of whether they contain "material adverse change" clauses or other provisions that are intended to relieve the issuer of its funding obligation under certain conditions. In the case of commitments structured as syndications, where the bank is obligated solely for its *pro rata* share, only the bank's proportional share of the syndicated commitment is taken into account in calculating the risk-based capital ratio.

Facilities that are unconditionally cancellable (without cause) at any time by the bank are not deemed to be commitments, provided the bank makes a separate credit decision before each drawing under the facility. Commitments with an original maturity of one year or less are deemed to involve low risk and, therefore, are not assessed a capital charge. Such short-term commitments are defined to include the unused portion of lines of credit on retail credit cards and related plans (as defined in the instructions to the commercial bank Call Report) if the bank has the unconditional right to cancel the line of credit at any time, in accordance with applicable law.

Once a commitment has been converted at 50 percent, any portion that has been conveyed to other U.S. depository institutions or OECD banks as participations in which the originating bank retains the full obligation to the borrower if the participating bank fails to pay when the instrument is drawn, is assigned to the 20 percent risk category. This treatment is analogous to that accorded to conveyances of risk participations in standby letters of credit. The acquisition of a participation in a commitment by a bank is converted at 50 percent and assigned to the risk category appropriate to the account party obligor or, if relevant, the nature of the collateral or guarantees.

Revolving underwriting facilities (RUFs), note issuance facilities (NIFs), and other similar arrangements also are converted at 50 percent regardless of maturity. These are facilities under which a borrower can issue on a revolving basis short-term paper in its own name, but for which the underwriting banks have a legally binding commitment either to purchase any notes the borrower is unable to sell by the roll-over date or to advance funds to the borrower.

3. *Items with a 20 percent conversion factor.* Short-term, self-liquidating trade-related contingencies which arise from the movement of goods are converted at 20 percent. Such contingencies generally include commercial letters of credit and other documentary letters of credit collateralized by the underlying shipments.

4. *Items with a zero percent conversion factor.* These include unused portions of commitments with an original maturity of one year

or less,<sup>48</sup> or which are unconditionally cancellable at any time, provided a separate credit decision is made before each drawing under the facility. Unused portions of lines of credit on retail credit cards and related plans are deemed to be short-term commitments if the bank has the unconditional right to cancel the line of credit at any time, in accordance with applicable law.

E. Derivative Contracts (Interest Rate, Exchange Rate, Commodity—including precious metals) and Equity-Linked Contracts)

1. *Scope.* Credit equivalent amounts are computed for each of the following off-balance-sheet derivative contracts:

a. Interest Rate Contracts. These include single currency interest rate swaps, basis swaps, forward rate agreements, interest rate options purchased (including caps, collars, and floors purchased), and any other instrument linked to interest rates that gives rise to similar credit risks (including when-issued securities and forward deposits accepted).

b. Exchange Rate Contracts. These include cross-currency interest rate swaps, forward foreign exchange contracts, currency options purchased, and any other instrument linked to exchange rates that gives rise to similar credit risks.

c. Equity Derivative Contracts. These include equity-linked swaps, equity-linked options purchased, forward equity-linked contracts, and any other instrument linked to equities that gives rise to similar credit risks.

d. Commodity (including precious metal) Derivative Contracts. These include commodity-linked swaps, commodity-linked options purchased, forward commodity-linked contracts, and any other instrument linked to commodities that gives rise to similar credit risks.

e. Exceptions. Exchange rate contracts with an original maturity of fourteen or

fewer calendar days and derivative contracts traded on exchanges that require daily receipt and payment of cash variation margin may be excluded from the risk-based ratio calculation. Gold contracts are accorded the same treatment as exchange rate contracts except that gold contracts with an original maturity of fourteen or fewer calendar days are included in the risk-based ratio calculation. Over-the-counter options purchased are included and treated in the same way as other derivative contracts.

2. *Calculation of credit equivalent amounts.* a.

The credit equivalent amount of a derivative contract that is not subject to a qualifying bilateral netting contract in accordance with section III.E.3. of this appendix A is equal to the sum of (i) the current exposure (sometimes referred to as the replacement cost) of the contract; and (ii) an estimate of the potential future credit exposure of the contract.

b. The current exposure is determined by the mark-to-market value of the contract. If the mark-to-market value is positive, then the current exposure is equal to that mark-to-market value. If the mark-to-market value is zero or negative, then the current exposure is zero. Mark-to-market values are measured in dollars, regardless of the currency or currencies specified in the contract, and should reflect changes in underlying rates, prices, and indices, as well as counterparty credit quality.

c. The potential future credit exposure of a contract, including a contract with a negative mark-to-market value, is estimated by multiplying the notional principal amount of the contract by a credit conversion factor. Banks should use, subject to examiner review, the effective rather than the apparent or stated notional amount in this calculation. The credit conversion factors are:

CONVERSION FACTORS

[In percent]

Remaining maturity	Interest rate	Exchange rate and gold	Equity	Commodity, excluding precious metals	Precious metals, except gold
One year or less .....	0.0	1.0	6.0	10.0	7.0
Over one to five years .....	0.5	5.0	8.0	12.0	7.0
Over five years .....	1.5	7.5	10.0	15.0	8.0

d. For a contract that is structured such that on specified dates any outstanding exposure is settled and the terms are reset so that the market value of the contract is

zero, the remaining maturity is equal to the time until the next reset date. For an interest rate contract with a remaining maturity

<sup>48</sup>Through year-end 1992, remaining maturity may be used for determining term to maturity for off-balance sheet loan commit-

ments; thereafter, original maturity must be used.

of more than one year that meets these criteria, the minimum conversion factor is 0.5 percent.

e. For a contract with multiple exchanges of principal, the conversion factor is multiplied by the number of remaining payments in the contract. A derivative contract not included in the definitions of interest rate, exchange rate, equity, or commodity contracts as set forth in section III.E.1. of this appendix A, is subject to the same conversion factors as a commodity, excluding precious metals.

f. No potential future exposure is calculated for a single currency interest rate swap in which payments are made based upon two floating rate indices (a so called floating/floating or basis swap); the credit exposure on such a contract is evaluated solely on the basis of the mark-to-market value.

g. The Board notes that the conversion factors set forth above, which are based on observed volatilities of the particular types of instruments, are subject to review and modification in light of changing volatilities or market conditions.

3. *Netting.* a. For purposes of this appendix A, netting refers to the offsetting of positive and negative mark-to-market values when determining a current exposure to be used in the calculation of a credit equivalent amount. Any legally enforceable form of bilateral netting (that is, netting with a single counterparty) of derivative contracts is recognized for purposes of calculating the credit equivalent amount provided that:

i. The netting is accomplished under a written netting contract that creates a single legal obligation, covering all included individual contracts, with the effect that the bank would have a claim to receive, or obligation to pay, only the net amount of the sum of the positive and negative mark-to-market values on included individual contracts in the event that a counterparty, or a counterparty to whom the contract has been validly assigned, fails to perform due to any of the following events: default, insolvency, liquidation, or similar circumstances.

ii. The bank obtains a written and reasoned legal opinion(s) representing that in the event of a legal challenge—including one resulting from default, insolvency, liquidation, or similar circumstances—the relevant court and administrative authorities would find the bank's exposure to be the net amount under:

1. The law of the jurisdiction in which the counterparty is chartered or the equivalent location in the case of noncorporate entities, and if a branch of the counterparty is involved, then also under the law of the jurisdiction in which the branch is located;

2. The law that governs the individual contracts covered by the netting contract; and

3. The law that governs the netting contract.

iii. The bank establishes and maintains procedures to ensure that the legal characteristics of netting contracts are kept under review in the light of possible changes in relevant law.

iv. The bank maintains in its files documentation adequate to support the netting of derivative contracts, including a copy of the bilateral netting contract and necessary legal opinions.

b. A contract containing a walkaway clause is not eligible for netting for purposes of calculating the credit equivalent amount.<sup>49</sup>

c. A bank netting individual contracts for the purpose of calculating credit equivalent amounts of derivative contracts, represents that it has met the requirements of this appendix A and all the appropriate documents are in the bank's files and available for inspection by the Federal Reserve. The Federal Reserve may determine that a bank's files are inadequate or that a netting contract, or any of its underlying individual contracts, may not be legally enforceable under any one of the bodies of law described in section III.E.3.a.ii. of this appendix A. If such a determination is made, the netting contract may be disqualified from recognition for risk-based capital purposes or underlying individual contracts may be treated as though they are not subject to the netting contract.

d. The credit equivalent amount of contracts that are subject to a qualifying bilateral netting contract is calculated by adding (i) the current exposure of the netting contract (net current exposure) and (ii) the sum of the estimates of potential future credit exposures on all individual contracts subject to the netting contract (gross potential future exposure) adjusted to reflect the effects of the netting contract.<sup>50</sup>

e. The net current exposure is the sum of all positive and negative mark-to-market values of the individual contracts included in the netting contract. If the net sum of the mark-to-market values is positive, then the

<sup>49</sup>A walkaway clause is a provision in a netting contract that permits a non-defaulting counterparty to make lower payments than it would make otherwise under the contract, or no payment at all, to a defaulter or to the estate of a defaulter, even if the defaulter or the estate of the defaulter is a net creditor under the contract.

<sup>50</sup>For purposes of calculating potential future credit exposure to a netting counterparty for foreign exchange contracts and other similar contracts in which notional principal is equivalent to cash flows, total notional principal is defined as the net receipts falling due on each value date in each currency.

net current exposure is equal to that sum. If the net sum of the mark-to-market values is zero or negative, then the net current exposure is zero. The Federal Reserve may determine that a netting contract qualifies for risk-based capital netting treatment even though certain individual contracts included under the netting contract may not qualify. In such instances, the nonqualifying contracts should be treated as individual contracts that are not subject to the netting contract.

f. Gross potential future exposure, or  $A_{gross}$ , is calculated by summing the estimates of potential future exposure (determined in accordance with section III.E.2 of this appendix A) for each individual contract subject to the qualifying bilateral netting contract.

g. The effects of the bilateral netting contract on the gross potential future exposure are recognized through the application of a formula that results in an adjusted add-on amount ( $A_{net}$ ). The formula, which employs the ratio of net current exposure to gross current exposure (NGR) is expressed as:

$$A_{net} = (0.4 \times A_{gross}) + 0.6(NGR \times A_{gross})$$

h. The NGR may be calculated in accordance with either the counterparty-by-counterparty approach or the aggregate approach.

i. Under the counterparty-by-counterparty approach, the NGR is the ratio of the net current exposure for a netting contract to the gross current exposure of the netting contract. The gross current exposure is the sum of the current exposures of all individual contracts subject to the netting contract calculated in accordance with section III.E.2. of this appendix A. Net negative mark-to-market values for individual netting contracts with the same counterparty may not be used to offset net positive mark-to-market values for other netting contracts with that counterparty.

ii. Under the aggregate approach, the NGR is the ratio of the sum of all of the net current exposures for qualifying bilateral netting contracts to the sum of all of the gross current exposures for those netting contracts (each gross current exposure is calculated in the same manner as in section III.E.3.h.i. of this appendix A). Net negative mark-to-market values for individual counterparties may not be used to offset net positive mark-to-market values for other counterparties.

iii. A bank must consistently use either the counterparty-by-counterparty approach or the aggregate approach to calculate the NGR. Regardless of the approach used, the NGR should be applied individually to each qualifying bilateral netting contract to determine the adjusted add-on for that netting contract.

i. In the event a netting contract covers contracts that are normally excluded from

the risk-based ratio calculation—for example, exchange rate contracts with an original maturity of fourteen or fewer calendar days or instruments traded on exchanges that require daily payment and receipt of cash variation margin—a bank may elect to either include or exclude all mark-to-market values of such contracts when determining net current exposure, provided the method chosen is applied consistently.

4. *Risk Weights.* Once the credit equivalent amount for a derivative contract, or a group of derivative contracts subject to a qualifying bilateral netting contract, has been determined, that amount is assigned to the risk category appropriate to the counterparty, or, if relevant, the guarantor or the nature of any collateral.<sup>51</sup> However, the maximum risk weight applicable to the credit equivalent amount of such contracts is 50 percent.

5. *Avoidance of double counting.* a. In certain cases, credit exposures arising from the derivative contracts covered by section III.E. of this appendix A may already be reflected, in part, on the balance sheet. To avoid double counting such exposures in the assessment of capital adequacy and, perhaps, assigning inappropriate risk weights, counterparty credit exposures arising from the derivative instruments covered by these guidelines may need to be excluded from balance sheet assets in calculating a bank's risk-based capital ratios.

b. Examples of the calculation of credit equivalent amounts for contracts covered under this section III.E. are contained in Attachment V of this appendix A.

#### IV. Minimum Supervisory Ratios and Standards

The interim and final supervisory standards set forth below specify *minimum* supervisory ratios based primarily on broad credit risk considerations. As noted above, the risk-based ratio does not take explicit account of the quality of individual asset portfolios or the range of other types of risks to which banks may be exposed, such as interest rate, liquidity, market or operational risks. For this reason, banks are generally expected to operate with capital positions above the minimum ratios.

Institutions with high or inordinate levels of risk are expected to operate well above minimum capital standards. Banks experiencing or anticipating significant growth are also expected to maintain capital, including

<sup>51</sup>For derivative contracts, sufficiency of collateral or guarantees is generally determined by the market value of the collateral or the amount of the guarantee in relation to the credit equivalent amount. Collateral and guarantees are subject to the same provisions noted under section III.B. of this appendix A.

tangible capital positions, well above the minimum levels. For example, most such institutions generally have operated at capital levels ranging from 100 to 200 basis points above the stated minimums. Higher capital ratios could be required if warranted by the particular circumstances or risk profiles of individual banks. In all cases, banks should hold capital commensurate with the level and nature of all of the risks, including the volume and severity of problem loans, to which they are exposed.

Upon adoption of the risk-based framework, any bank that does not meet the interim or final supervisory ratios, or whose capital is otherwise considered inadequate, is expected to develop and implement a plan acceptable to the Federal Reserve for achieving an adequate level of capital consistent with the provisions of these guidelines or with the special circumstances affecting the individual institution. In addition, such banks should avoid any actions, including increased risk-taking or unwarranted expansion, that would lower or further erode their capital positions.

#### A. Minimum Risk-Based Ratio After Transition Period

As reflected in Attachment VI, by year-end 1992, all state member banks should meet a minimum ratio of qualifying total capital to weighted risk assets of 8 percent, of which at least 4.0 percentage points should be in the form of Tier 1 capital. For purposes of section IV.A., Tier 1 capital is defined as the sum of core capital elements less goodwill and other intangible assets required to be deducted in accordance with section II.B.1.b. of this appendix. The maximum amount of supplementary capital elements that qualifies as Tier 2 capital is limited to 100 percent of Tier 1 capital. In addition, the combined maximum amount of subordinated debt and intermediate-term preferred stock that qualifies as Tier 2 capital is limited to 50 percent of Tier 1 capital. The maximum amount of the allowance for loan and lease losses that qualifies as Tier 2 capital is limited to 1.25 percent of gross weighted risk assets. Allowances for loan and lease losses in excess of this limit may, of course, be maintained, but would not be included in a bank's total capital. The Federal Reserve will continue to require banks to maintain reserves at levels fully sufficient to cover losses inherent in their loan portfolios.

Qualifying total capital is calculated by adding Tier 1 capital and Tier 2 capital (limited to 100 percent of Tier 1 capital) and then deducting from this sum certain investments in banking or finance subsidiaries that are not consolidated for accounting or supervisory purposes, reciprocal holdings of banking organization capital securities, or other items at the direction of the Federal Re-

serve. These deductions are discussed above in section II(B).

#### B. Transition Arrangements

The transition period for implementing the risk-based capital standard ends on December 31, 1992.<sup>52</sup> Initially, the risk-based capital guidelines do not establish a minimum level of capital. However, by year-end 1990, banks are expected to meet a minimum interim target ratio for qualifying total capital to weighted risk assets of 7.25 percent, at least one-half of which should be in the form of Tier 1 capital. For purposes of meeting the 1990 interim target, the amount of loan loss reserves that may be included in capital is limited to 1.5 percent of weighted risk assets and up to 10 percent of a bank's Tier 1 capital may consist of supplementary capital elements. Thus, the 7.25 percent interim target ratio implies a minimum ratio of Tier 1 capital to weighted risk assets of 3.6 percent (one-half of 7.25) and a minimum ratio of core capital elements to weighted risk assets ratio of 3.25 percent (nine-tenths of the Tier 1 capital ratio).

Through year-end 1990, banks have the option of complying with the minimum 7.25 percent year-end 1990 risk-based capital standard, in lieu of the minimum 5.5 percent

<sup>52</sup>The Basle capital framework does not establish an initial minimum standard for the risk-based capital ratio before the end of 1990. However, for the purpose of calculating a risk-based capital ratio prior to year-end 1990, no sublimit is placed on the amount of the allowance for loan and lease losses includable in Tier 2. In addition, this framework permits, under temporary transition arrangements, a certain percentage of a bank's Tier 1 capital to be made up of supplementary capital elements. In particular, supplementary elements may constitute 25 percent of a bank's Tier 1 capital (before the deduction of goodwill) up to the end of 1990; from year-end 1990 up to the end of 1992, this allowable percentage of supplementary elements in Tier 1 declines to 10 percent of Tier 1 (before the deduction of goodwill). Beginning on December 31, 1992, supplementary elements may not be included in Tier 1. The amount of subordinated debt and intermediate-term preferred stock temporarily included in Tier 1 under these arrangements will not be subject to the sublimit on the amount of such instruments includable in Tier 2 capital. Goodwill must be deducted from the sum of a bank's permanent core capital elements (that is, common equity, noncumulative perpetual preferred stock, and minority interest in the equity of unconsolidated subsidiaries) plus supplementary items that may temporarily qualify as Tier 1 elements for the purpose of calculating Tier 1 (net of goodwill), Tier 2, and total capital.

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primary and 6 percent total capital to total assets capital ratios set forth in appendix B to part 225 of the Federal Reserve's Regulation Y. In addition, as more fully set forth in

appendix B to this part, banks are expected to maintain a minimum ratio of Tier 1 capital total assets during this transition period.

ATTACHMENT I—SAMPLE CALCULATION OF RISK-BASED CAPITAL RATIO FOR STATE MEMBER BANKS

Example of a bank with \$6,000 in total capital and the following assets and off-balance sheet items:

Balance Sheet Assets:	
Cash	\$5,000
U.S. Treasuries	20,000
Balances at domestic banks	5,000
Loans secured by first liens on 1-4 family residential properties	5,000
Loans to private corporations	65,000
<b>Total Balance Sheet Assets</b>	<b>\$100,000</b>
Off-Balance Sheet Items:	
Standby letters of credit ("SLCs") backing general obligation debt issues of U.S. municipalities ("GOs")	\$10,000
Long-term legally binding commitments to private corporations	20,000
<b>Total Off-Balance Sheet Items</b>	<b>30,000</b>

This bank's total capital to *total* assets (leverage) ratio would be:  $(\$6,000/\$100,000)=6.00\%$

To compute the bank's weighted risk assets:

1. Compute the credit equivalent amount of each off-balance sheet ("OBS") item

OBS item	Face value	Conversion factor	Credit equivalent amount
SLCS backing municipal GOs	\$10,000 ×	1.00 =	\$10,000
Long-term commitments to private corporations	20,000 ×	0.50 =	10,000
<b>2. Multiply each balance sheet asset and the credit equivalent amount of each OBS item by the appropriate risk weight.</b>			
0% Category:			
Cash	\$ 5,000		
U.S. Treasuries	20,000		
<b>20% Category:</b>			
Balances at domestic banks	25,000 ×	0 =	0
Credit equivalent amounts of SLCSs backing GOs of U.S. municipalities	5,000		
	10,000		
<b>50% Category:</b>			
Loans secured by first liens on 1-4 family residential properties	15,000 ×	.20 =	\$3,000
Loans to private corporations	5,000 ×	.50 =	2,500
100% Category:			
Loans to private corporations	65,000		
Credit equivalent amounts of long-term commitments to private corporations	10,000		
<b>Total risk-weighted assets</b>	<b>75,000 ×</b>	<b>1.00 =</b>	<b>75,000</b>
<b>Total capital</b>			<b>80,500</b>

This bank's ratio of total capital to weighted risk assets (risk-based capital ratio) would be:  $(\$6,000/\$80,500)=7.45\%$

ATTACHMENT II—SUMMARY DEFINITION OF QUALIFYING CAPITAL FOR STATE MEMBER BANKS\* USING THE YEAR-END 1992 STANDARDS

Components	Minimum requirements after transition period
Core Capital (Tier 1): Common stockholders' equity ..... Qualifying non-cumulative perpetual preferred stock ..... Minority interest in equity accounts of consolidated subsidiaries .....	Must equal or exceed 4% of weighted risk assets. No limit. No limit; banks should avoid undue reliance on preferred stock in Tier 1. Banks should avoid using minority interests to introduce elements not otherwise qualifying for Tier 1 capital.
Less: Goodwill and other intangible assets required to be deducted from capital. <sup>1</sup> Supplementary Capital (Tier 2): Allowance for loan and lease losses ..... Perpetual preferred stock ..... Hybrid capital instruments and equity contract notes ..... Subordinated debt and intermediate-term preferred stock (original weighted average maturity of 5 years or more). Revaluation reserves (equity and building) .....	Total of Tier 2 is limited to 100% of Tier 1. <sup>2</sup> Limited to 1,25% of weighted risk assets. <sup>2</sup> No limit within Tier 2. No limit within Tier 2. Subordinated debt and intermediate-term preferred stock are limited to 50% of Tier 1; <sup>3</sup> amortized for capital purposes as they approach maturity. Not included; banks encouraged to disclose; may be evaluated on a case-by-case basis for international comparisons; and taken into account in making an overall assessment of capital.
Deductions (from sum of Tier 1 and Tier 2): Investments in unconsolidated subsidiaries Reciprocal holdings of banking organizations' capital securities Other deductions (such as other subsidiaries or joint ventures) as determined by supervisory authority. Total Capital (Tier 1+Tier 2)-Deductions .....	On a case-by-case basis or as a matter of policy after formal rulemaking. Must equal or exceed 8% of weighted risk assets.

\*See discussion in section II of the Guidelines for a complete description of the requirements for, and the limitations on, the components of qualifying capital.

<sup>1</sup> Requirements for the deduction of other intangible assets are set forth in section II.B.1.b. of this appendix.

<sup>2</sup> Amounts in excess of limitations are permitted but do not qualify as capital.

<sup>3</sup> Amounts in excess of limitations are permitted but do not qualify as capital.

ATTACHMENT III—SUMMARY OF RISK WEIGHTS  
AND RISK CATEGORIES FOR STATE MEMBER  
BANKS

## Category 1: Zero Percent

1. Cash (domestic and foreign) held in the bank or in transit.
2. Balances due from Federal Reserve Banks (including Federal Reserve Bank stock) and central banks in other OECD countries.
3. Direct claims on, and the portions of claims that are unconditionally guaranteed by, the U.S. Treasury and U.S. Government agencies<sup>1</sup> and the central governments of other OECD countries, and local currency claims on, and the portions of local currency claims that are unconditionally guaranteed by, the central governments of non-OECD countries including the central banks of non-OECD countries), to the extent that the bank has liabilities booked in that currency.
4. Gold bullion held in the bank's vaults or in another's vaults on an allocated basis, to the extent offset by gold bullion liabilities.
5. Claims collateralized by cash on deposit in the bank or by securities issued or guaranteed by OECD central governments or U.S. government agencies for which a positive margin of collateral is maintained on a daily basis, fully taking into account any change in the bank's exposure to the obligor or counterparty under a claim in relation to the market value of the collateral held in support of that claim.

## Category 2: 20 Percent

1. Cash items in the process of collection.
2. All claims (long- or short-term) on, and the portions of claims (long- or short-term) that are guaranteed by, U.S. depository institutions and OECD banks.
3. Short-term claims (remaining maturity of one year or less) on, and the portions of short-term claims that are guaranteed by, non-OECD banks.
4. The portions of claims that are conditionally guaranteed by the central governments of OECD countries and U.S. Government agencies, and the portions of local currency claims that are conditionally guaranteed by the central governments of non-OECD countries, to the extent that the bank has liabilities booked in that currency.

<sup>1</sup>For the purpose of calculating the risk-based capital ratio, a U.S. Government agency is defined as 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.

5. Claims on, and the portions of claims that are guaranteed by, U.S. Government-sponsored agencies.<sup>2</sup>

6. General obligation claims on, and the portions of claims that are guaranteed by the full faith and credit of, local governments and political subdivisions of the U.S. and other OECD local governments.

7. Claims on, and the portions of claims that are guaranteed by, official multilateral lending institutions or regional development banks.

8. The portions of claims that are collateralized<sup>3</sup> by cash on deposit in the bank or by securities issued or guaranteed by the U.S. Treasury, the central governments of other OECD countries, and U.S. government agencies that do not qualify for the zero percent risk-weight category, or that are collateralized by securities issued or guaranteed by U.S. government-sponsored agencies.

9. The portions of claims that are collateralized<sup>3</sup> by securities issued by official multilateral lending institutions or regional development banks.

10. Certain privately-issued securities representing indirect ownership of mortgage-backed U.S. Government agency or U.S. Government-sponsored agency securities.

11. Investment in shares of a fund whose portfolio is permitted to hold only securities that would qualify for the zero or 20 percent risk categories.

## Category 3: 50 Percent

1. Loans fully secured by first liens on 1-to 4-family residential properties or on multi-family residential properties that have been made in accordance with prudent underwriting standards, that are performing in accordance with their original terms, that are not past due or in nonaccrual status, and that meet other qualifying criteria, and certain privately-issued mortgage-backed securities representing indirect ownership of such loans. (Loans made for speculative purposes are excluded.)

2. Revenue bonds or similar claims that are obligations of U.S. state or local governments, or other OECD local governments, but for which the government entity is committed to repay the debt only out of revenues from the facilities financed.

<sup>2</sup>For the purpose of calculating the risk-based capital ratio, a U.S. Government-sponsored agency is defined as an agency originally established or chartered to serve public purposes specified by the U.S. Congress but whose obligations are not *explicitly* guaranteed by the full faith and credit of the U.S. Government.

<sup>3</sup>The extent of collateralization is determined by current market value.

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3. Credit equivalent amounts of interest rate and foreign exchange rate related contracts, except for those assigned to a lower risk category.

Category 4: 100 Percent

1. All other claims on private obligors.
2. Claims on, or guaranteed by, non-OECD foreign banks with a remaining maturity exceeding one year.
3. Claims on, or guaranteed by, non-OECD central governments that are not included in item 3 of Category 1 or item 4 of Category 2; all claims on non-OECD state or local governments.
4. Obligations issued by U.S. state or local governments, or other OECD local governments (including industrial development authorities and similar entities), repayable solely by a private party or enterprise.
5. Premises, plant, and equipment; other fixed assets; and other real estate owned.
6. Investments in any unconsolidated subsidiaries, joint ventures, or associated companies—if not deducted from capital.
7. Instruments issued by other banking organizations that qualify as capital—if not deducted from capital.
8. Claims on commercial firms owned by a government.
9. All other assets, including any intangible assets that are not deducted from capital.

ATTACHMENT IV—CREDIT CONVERSION FACTORS FOR OFF-BALANCE-SHEET ITEMS FOR STATE MEMBER BANKS

100 Percent Conversion Factor

1. Direct credit substitutes. (These include general guarantees of indebtedness and all guarantee-type instruments, including standby letters of credit backing the financial obligations of other parties.)
2. Risk participations in bankers acceptances and direct credit substitutes, such as standby letters of credit.
3. Sale and repurchase agreements and assets sold with recourse that are not included on the balance sheet.
4. Forward agreements to purchase assets, including financing facilities, on which drawdown is certain.

5. Securities lent for which the bank is at risk.

50 Percent Conversion Factor

1. Transaction-related contingencies. (These include bid-bonds, performance bonds, warranties, and standby letters of credit backing the nonfinancial performance of other parties.)
2. Unused portions of commitments with an original maturity exceeding one year, including underwriting commitments and commercial credit lines.
3. Revolving underwriting facilities (RUFs), note issuance facilities (NIFs), and similar arrangements.

20 Percent Conversion Factor

Short-term, self-liquidating trade-related contingencies, including commercial letters of credit.

Zero Percent Conversion Factor

Unused portions of commitments with an original maturity of one year or less, or which are unconditionally cancellable at any time, provided a separate credit decision is made before each drawing.

Credit Conversion for Derivative Contracts

1. The credit equivalent amount of a derivative contract is the sum of the current credit exposure of the contract and an estimate of potential future increases in credit exposure. The current exposure is the positive mark-to-market value of the contract (or zero if the mark-to-market value is zero or negative). For derivative contracts that are subject to a qualifying bilateral netting contract, the current exposure is, generally, the net sum of the positive and negative mark-to-market values of the contracts included in the netting contract (or zero if the net sum of the mark-to-market values is zero or negative). The potential future exposure is calculated by multiplying the effective notional amount of a contract by one of the following credit conversion factors, as appropriate:

CONVERSION FACTORS  
[In percent]

Remaining maturity	Interest rate	Exchange rate and gold	Equity	Commodity, excluding precious metals	Precious metals, except gold
One year or less .....	0.0	1.0	6.0	10.0	7.0
Over one to five years .....	0.5	5.0	8.0	12.0	7.0
Over five years .....	1.5	7.5	10.0	15.0	8.0

For contracts subject to a qualifying bilateral netting contract, the potential future exposure is, generally, the sum of the individual potential future exposures for each contract included under the netting contract adjusted by the application of the following formula:

$$A_{\text{net}} = (0.4 \times A_{\text{gross}}) + 0.6(\text{NGR} \times A_{\text{gross}})$$

NGR is the ratio of net current exposure to gross current exposure.

2. No potential future exposure is calculated for single currency interest rate

swaps in which payments are made based upon two floating indices, that is, so called floating/floating or basis swaps. The credit exposure on these contracts is evaluated solely on the basis of their mark-to-market value. Exchange rate contracts with an original maturity of fourteen days or fewer are excluded. Instruments traded on exchanges that require daily receipt and payment of cash variation margin are also excluded.

ATTACHMENT V—CALCULATING CREDIT EQUIVALENT AMOUNTS FOR DERIVATIVE CONTRACTS

Type of contract	Notional principal amount	Conversion factor	Potential exposure (dollars)	Mark-to-market	Current exposure (dollars)	Credit equivalent amount
(1) 120-day forward foreign exchange	5,000,000	0.01	50,000	100,000	100,000	150,000
(2) 4-year forward foreign exchange	6,000,000	0.05	300,000	-120,000	0	300,000
(3) 3-year single-currency fixed & floating interest rate swap	10,000,000	0.005	50,000	200,000	200,000	250,000
(4) 6-month oil swap	10,000,000	0.10	1,000,000	-250,000	0	1,000,000
(5) 7-year cross-currency floating & floating interest rate swap	20,000,000	0.075	1,500,000	-1,500,000	0	1,500,000
Total			2,900,000	+	300,000	3,200,000

a. If contracts (1) through (5) above are subject to a qualifying bilateral netting contract, then the following applies:

Contract	Potential future exposure	Net current exposure	Credit equivalent amount
(1)	50,000		
(2)	300,000		
(3)	50,000		
(4)	1,000,000		
(5)	1,500,000		
Total	2,900,000	+0	2,900,000

NOTE: The total of the mark-to-market values from the first table is -\$1,370,000. Since this is a negative amount, the net current exposure is zero.

b. To recognize the effects of bilateral netting on potential future exposure the following formula applies:

$$A_{\text{net}} = (.4 \times A_{\text{gross}}) + .6(\text{NGR} \times A_{\text{gross}})$$

c. In the above example where the net current exposure is zero, the credit equivalent amount would be calculated as follows:

$$\begin{aligned} \text{NGR} &= 0 = (0/300,000) \\ A_{\text{net}} &= (0.4 \times \$2,900,000) + 0.6 (0 \times \$2,900,000) \\ A_{\text{net}} &= \$1,160,000 \end{aligned}$$

The credit equivalent amount is \$1,160,000+0=\$1,160,000.

d. If the net current exposure was a positive number, for example \$200,000, the credit equivalent amount would be calculated as follows:

$$\begin{aligned} \text{NGR} &= .67 = (\$200,000/\$300,000) \\ A_{\text{net}} &= (0.4 \times \$2,900,000) + 0.6 (.67 \times \$2,900,000) \\ A_{\text{net}} &= \$2,325,800. \end{aligned}$$

The credit equivalent amount would be \$2,325,800+\$200,000=\$2,525,800.

ATTACHMENT VI—SUMMARY

	Transitional arrangements for State member banks		Final arrangement—Year-end 1992
	Initial	Year-end 1990	
1. Minimum standard of total capital to weighted risk assets.	None	7.25%	8.0%
2. Definition of Tier 1 capital	Common equity, qualifying noncum. perpetual preferred stock, minority interests, plus supplementary elements <sup>1</sup> less goodwill.	Common equity, qualifying noncum. perpetual preferred stock, minority interests, plus supplementary elements <sup>2</sup> less goodwill.	Common equity, qualifying noncumulative perpetual preferred stock, and minority interest less goodwill and other intangible assets required to be deducted from capital. <sup>3</sup>
3. Minimum standard of Tier 1 capital to weighted risk assets.	None	3.625%	4.0%
4. Minimum standard of stockholders' equity to weighted risk assets.	None	3.25%	4.0%
5. Limitations on supplementary capital elements:			
a. Allowance for loan and lease losses	No limit within Tier 2	1.5% of weighted risk assets	1.25% of weighted risk assets.
b. Qualifying perpetual preferred stock	No limit within Tier 2	No limit within Tier 2	No limit within Tier 2.
c. Hybrid capital instruments and equity contract notes.	No limit within Tier 2	No limit within Tier 2	No limit within Tier 2.
d. Subordinated debt and intermediate term preferred stock.	Combined maximum of 50% of Tier 1	Combined maximum of 50% of Tier 1	Combined maximum of 50% of Tier 1.
e. Total qualifying Tier 2 capital	May not exceed Tier 1 capital	May not exceed Tier 1 capital	May not exceed Tier 1 capital.
6. Definition of total capital	Tier 1 plus Tier 2 less reciprocal holdings of banking organizations' capital instruments. —investments in unconsolidated subsidiaries.	Tier 1 plus Tier 2 less reciprocal holdings of banking organizations' capital instruments. —investments in unconsolidated subsidiaries.	Tier 1 plus Tier 2 less reciprocal holdings of banking organizations' capital instruments. —investments in unconsolidated subsidiaries.

<sup>1</sup> Supplementary elements may be included in Tier 1 up to 25% of the sum of Tier 1 plus goodwill.

<sup>2</sup> Supplementary elements may be included in Tier 1 up to 10% of the sum of Tier 1 plus goodwill.

<sup>3</sup> Requirements for the deduction of other intangible assets are set forth in section II.B.1.b. of this appendix.

[54 FR 4198, Jan. 27, 1989; 54 FR 12531, Mar. 27, 1989, as amended at 55 FR 32831, Aug. 10, 1990; 56 FR 51156, Oct. 10, 1991; 57 FR 2012, Jan. 17, 1992; 57 FR 60719, Dec. 22, 1992; 57 FR 62179, 62182, Dec. 30, 1992; 58 FR 7979, Feb. 11, 1993; 58 FR 68738, Dec. 29, 1993; Reg. H, 59 FR 62992, Dec. 7, 1994; 59 FR 63244, Dec. 8, 1994; 59 FR 64563, Dec. 15, 1994; 59 FR 65924, 65925, Dec. 22, 1994; 60 FR 8180, Feb. 13, 1995; 60 FR 39229, 39230, Aug. 1, 1995; 60 FR 39493, Aug. 2, 1995; 60 FR 45615, Aug. 31, 1995; 60 FR 46176, 46178, Sept. 5, 1995; 60 FR 60044, Dec. 20, 1995; 61 FR 47370, Sept. 6, 1996; 63 FR 42675, Aug. 10, 1998; 63 FR 46322, Sept. 1, 1998; 63 FR 58621, Nov. 2, 1998]

APPENDIX B TO PART 208—CAPITAL ADEQUACY GUIDELINES FOR STATE MEMBER BANKS: TIER 1 LEVERAGE MEASURE

I. OVERVIEW

a. The Board of Governors of the Federal Reserve System has adopted a minimum ratio of tier 1 capital to total assets to assist in the assessment of the capital adequacy of state member banks.<sup>1</sup> The principal objective of this measure is to place a constraint on the maximum degree to which a state member bank can leverage its equity capital base. It is intended to be used as a supplement to the risk-based capital measure.

b. The guidelines apply to all state member banks on a consolidated basis and are to be used in the examination and supervisory process as well as in the analysis of applications acted upon by the Federal Reserve. The Board will review the guidelines from time to time and will consider the need for possible adjustments in light of any significant changes in the economy, financial markets, and banking practices.

II. THE TIER 1 LEVERAGE RATIO

a. The Board has established a *minimum* level of tier 1 capital to total assets of 3 percent. An institution operating at or near these levels is expected to have well-diversified risk, including no undue interest-rate risk exposure; excellent asset quality; high liquidity; and good earnings; and in general be considered a strong banking organization, rated composite 1 under CAMEL rating system of banks. Institutions not meeting these characteristics, as well as institutions with supervisory, financial, or operational weaknesses, are expected to operate well above minimum capital standards. Institutions experiencing or anticipating significant growth also are expected to maintain capital ratios, including tangible capital positions, well above the minimum levels. For example, most such banks generally have operated at capital levels ranging from 100 to 200 basis points above the stated minimums. Higher capital ratios could be required if warranted by the particular circumstances or risk profiles of individual banks. Thus for all but the most highly rated banks meeting the conditions set forth above, the minimum tier 1 leverage ratio is to be 3 percent plus an additional cushion of a least 100 to 200 basis points. In all cases, banking institutions should hold capital commensurate with the level and nature of all risks, including the

<sup>1</sup>Supervisory risk-based capital ratios that related capital to weighted-risk assets for state member banks are outlined in Appendix A to this part.

volume and severity of problem loans, to which they are exposed.

b. A bank's Tier 1 leverage ratio is calculated by dividing its Tier 1 capital (the numerator of the ratio) by its average total consolidated assets (the denominator of the ratio). The ratio will also be calculated using period-end assets whenever necessary, on a case-by-case basis. For the purpose of this leverage ratio, the definition of Tier 1 capital as set forth in the risk-based capital guidelines contained in Appendix A of this part will be used.<sup>2</sup> As a general matter, average total consolidated assets are defined as the quarterly average total assets (defined net of the allowance for loan and lease losses) reported on the bank's Reports of Condition and Income (Call Reports), less goodwill; amounts of mortgage servicing assets, non-mortgage servicing assets, and purchased credit card relationships that, in the aggregate, are in excess of 100 percent of Tier 1 capital; amounts of nonmortgage servicing assets and purchased credit card relationships that, in the aggregate, are in excess of 25 percent of Tier 1 capital; all other identifiable intangible assets; any investments in subsidiaries or associated companies that the Federal Reserve determines should be deducted from Tier 1 capital; and deferred tax assets that are dependent upon future taxable income, net of their valuation allowance, in excess of the limitation set forth in section II.B.4 of Appendix A of this part.<sup>3</sup>

c. Notwithstanding other provisions of this appendix B, a qualifying bank that has transferred small business loans and leases on personal property (small business obligations) with recourse shall, for purposes of calculating its tier 1 leverage ratio, exclude from its average total consolidated assets the outstanding principal amount of the

<sup>2</sup>Tier 1 capital for state member banks includes common equity, minority interest in the equity accounts of consolidated subsidiaries, and qualifying noncumulative perpetual preferred stock. In addition, as a general matter, Tier 1 capital excludes goodwill; amounts of mortgage servicing assets, non-mortgage servicing assets, and purchased credit card relationships that, in the aggregate, exceed 100 percent of Tier 1 capital; nonmortgage servicing assets and purchased credit card relationships that, in the aggregate, exceed 25 percent of Tier 1 capital; other identifiable intangible assets; and deferred tax assets that are dependent upon future taxable income, net of their valuation allowance, in excess of certain limitations. The Federal Reserve may exclude certain investments in subsidiaries or associated companies as appropriate.

<sup>3</sup>Deductions from Tier 1 capital and other adjustments are discussed more fully in section II.B. in Appendix A of this part.

small business loans and leases transferred with recourse, provided two conditions are met. First, the transaction must be treated as a sale under generally accepted accounting principles (GAAP) and, second, the bank must establish pursuant to GAAP a non-capital reserve sufficient to meet the bank's reasonably estimated liability under the recourse arrangement. Only loans and leases 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 are eligible for this capital treatment.

d. For purposes of this appendix B, a bank is qualifying if it meets the criteria set forth in the Board's prompt corrective action regulation (12 CFR 208.40) for well capitalized or, by order of the Board, adequately capitalized. For purposes of determining whether a bank meets these criteria, its capital ratios must be calculated without regard to the preferential capital treatment for transfers of small business obligations with recourse specified in section II.c. of this appendix B. The total outstanding amount of recourse retained by a qualifying bank on transfers of small business obligations receiving the preferential capital treatment cannot exceed 15 percent of the bank's total risk-based capital. By order, the Board may approve a higher limit.

e. If a bank ceases to be qualifying or exceeds the 15 percent capital limitation, the preferential capital treatment will continue to apply to any transfers of small business obligations with recourse that were consummated during the time that the bank was qualifying and did not exceed the capital limit.

f. The leverage capital ratio of the bank shall be calculated without regard to the preferential capital treatment for transfers of small business obligations with recourse specified in section II of this appendix B for purposes of:

(i) Determining whether a bank is adequately capitalized, undercapitalized, significantly undercapitalized, or critically undercapitalized under prompt corrective action (12 CFR 208.43(b)(1)); and

(ii) Reclassifying a well capitalized bank to adequately capitalized and requiring an adequately capitalized bank to comply with certain mandatory or discretionary supervisory actions as if the bank were in the next lower prompt corrective action capital category (12 CFR 208.43(c)).

g. Whenever appropriate, including when a bank is undertaking expansion, seeking to engage in new activities or otherwise facing unusual or abnormal risks, the Board will continue to consider the level of an individual bank's tangible tier 1 leverage ratio (after deducting all intangibles) in making an overall assessment of capital adequacy. This is consistent with the Federal Reserve's

risk-based capital guidelines an long-standing Board policy and practice with regard to leverage guidelines. Banks experiencing growth, whether internally or by acquisition, are expected to maintain strong capital position substantially above minimum supervisory levels, without significant reliance on intangible assets.

[Reg. H, 59 FR 65925, Dec. 22, 1994, as amended at 60 FR 39230, Aug. 1, 1995; 60 FR 45615, Aug. 31, 1995; 63 FR 42675, Aug. 10, 1998; 63 FR 58621, Nov. 2, 1998]

#### APPENDIX C TO PART 208—INTERAGENCY GUIDELINES FOR REAL ESTATE LENDING POLICIES

The agencies' regulations require that each insured depository institution adopt and maintain a written policy that establishes appropriate limits and standards for all extensions of credit that are secured by liens on or interests in real estate or made for the purpose of financing the construction of a building or other improvements.<sup>1</sup> These guidelines are intended to assist institutions in the formulation and maintenance of a real estate lending policy that is appropriate to the size of the institution and the nature and scope of its individual operations, as well as satisfies the requirements of the regulation.

Each institution's policies must be comprehensive, and consistent with safe and sound lending practices, and must ensure that the institution operates within limits and according to standards that are reviewed and approved at least annually by the board of directors. Real estate lending is an integral part of many institutions' business plans and, when undertaken in a prudent manner, will not be subject to examiner criticism.

#### LOAN PORTFOLIO MANAGEMENT CONSIDERATIONS

The lending policy should contain a general outline of the scope and distribution of the institution's credit facilities and the manner in which real estate loans are made, serviced, and collected. In particular, the institution's policies on real estate lending should:

- Identify the geographic areas in which the institution will consider lending.
- Establish a loan portfolio diversification policy and set limits for real estate loans by type and geographic market (e.g., limits on higher risk loans).
- Identify appropriate terms and conditions by type of real estate loan.

<sup>1</sup>The agencies have adopted a uniform rule on real estate lending. See 12 CFR part 365 (FDIC); 12 CFR part 208, subpart E (FRB); 12 CFR part 34, subpart D (OCC); and 12 CFR 563.100-101 (OTS).

- Establish loan origination and approval procedures, both generally and by size and type of loan.
- Establish prudent underwriting standards that are clear and measurable, including loan-to-value limits, that are consistent with these supervisory guidelines.
- Establish review and approval procedures for exception loans, including loans with loan-to-value percentages in excess of supervisory limits.
- Establish loan administration procedures, including documentation, disbursement, collateral inspection, collection, and loan review.
- Establish real estate appraisal and evaluation programs.
- Require that management monitor the loan portfolio and provide timely and adequate reports to the board of directors.

The institution should consider both internal and external factors in the formulation of its loan policies and strategic plan. Factors that should be considered include:

- The size and financial condition of the institution.
- The expertise and size of the lending staff.
- The need to avoid undue concentrations of risk.
- Compliance with all real estate related laws and regulations, including the Community Reinvestment Act, anti-discrimination laws, and for savings associations, the Qualified Thrift Lender test.
- Market conditions.

The institution should monitor conditions in the real estate markets in its lending area so that it can react quickly to changes in market conditions that are relevant to its lending decisions. Market supply and demand factors that should be considered include:

- Demographic indicators, including population and employment trends.
- Zoning requirements.
- Current and projected vacancy, construction, and absorption rates.
- Current and projected lease terms, rental rates, and sales prices, including concessions.
- Current and projected operating expenses for different types of projects.
- Economic indicators, including trends and diversification of the lending area.
- Valuation trends, including discount and direct capitalization rates.

#### UNDERWRITING STANDARDS

Prudently underwritten real estate loans should reflect all relevant credit factors, including:

- The capacity of the borrower, or income from the underlying property, to adequately service the debt.
- The value of the mortgaged property.

- The overall creditworthiness of the borrower.
- The level of equity invested in the property.
- Any secondary sources of repayment.
- Any additional collateral or credit enhancements (such as guarantees, mortgage insurance or takeout commitments).

The lending policies should reflect the level of risk that is acceptable to the board of directors and provide clear and measurable underwriting standards that enable the institution's lending staff to evaluate these credit factors. The underwriting standards should address:

- The maximum loan amount by type of property.
- Maximum loan maturities by type of property.
- Amortization schedules.
- Pricing structure for different types of real estate loans.
- Loan-to-value limits by type of property.

For development and construction projects, and completed commercial properties, the policy should also establish, commensurate with the size and type of the project or property:

- Requirements for feasibility studies and sensitivity and risk analyses (*e.g.*, sensitivity of income projections to changes in economic variables such as interest rates, vacancy rates, or operating expenses).
- Minimum requirements for initial investment and maintenance of hard equity by the borrower (*e.g.*, cash or unencumbered investment in the underlying property).
- Minimum standards for net worth, cash flow, and debt service coverage of the borrower or underlying property.
- Standards for the acceptability of and limits on non-amortizing loans.
- Standards for the acceptability of and limits on the use of interest reserves.
- Pre-leasing and pre-sale requirements for income-producing property.
- Pre-sale and minimum unit release requirements for non-income-producing property loans.
- Limits on partial recourse or non-recourse loans and requirements for guarantor support.
- Requirements for takeout commitments.
- Minimum covenants for loan agreements.

#### LOAN ADMINISTRATION

The institution should also establish loan administration procedures for its real estate portfolio that address:

- Documentation, including:

Type and frequency of financial statements, including requirements for verification of information provided by the borrower;

Type and frequency of collateral evaluations (appraisals and other estimates of value).

- Loan closing and disbursement.
- Payment processing.
- Escrow administration.
- Collateral administration.
- Loan payoffs.
- Collections and foreclosure, including:
  - Delinquency follow-up procedures;
  - Foreclosure timing;
  - Extensions and other forms of forbearance;
  - Acceptance of deeds in lieu of foreclosure.
- Claims processing (e.g., seeking recovery on a defaulted loan covered by a government guaranty or insurance program).
- Servicing and participation agreements.

**SUPERVISORY LOAN-TO-VALUE LIMITS**

Institutions should establish their own internal loan-to-value limits for real estate loans. These internal limits should not exceed the following supervisory limits:

Loan category	Loan-to-value limit (percent)
Raw land .....	65
Land development .....	75
Construction:	
Commercial, multifamily, <sup>1</sup> and other non-residential .....	80
1- to 4-family residential .....	85
Improved property .....	85
Owner-occupied 1- to 4-family and home equity .....	( <sup>2</sup> )

<sup>1</sup>Multifamily construction includes condominiums and cooperatives.

<sup>2</sup>A loan-to-value limit has not been established for permanent mortgage or home equity loans on owner-occupied, 1- to 4-family residential property. However, for any such loan with a loan-to-value ratio that equals or exceeds 90 percent at origination, an institution should require appropriate credit enhancement in the form of either mortgage insurance or readily marketable collateral.

The supervisory loan-to-value limits should be applied to the underlying property that collateralizes the loan. For loans that fund multiple phases of the same real estate project (e.g., a loan for both land development and construction of an office building), the appropriate loan-to-value limit is the limit applicable to the final phase of the project funded by the loan; however, loan disbursements should not exceed actual development or construction outlays. In situations where a loan is fully cross-collateralized by two or more properties or is secured by a collateral pool of two or more properties, the appropriate maximum loan amount under supervisory loan-to-value limits is the sum of the value of each property, less senior liens, multiplied by the appropriate loan-to-value limit for each property. To ensure that collateral margins remain within the supervisory limits, lenders should redetermine conformity whenever collateral

substitutions are made to the collateral pool.

In establishing internal loan-to-value limits, each lender is expected to carefully consider the institution-specific and market factors listed under "Loan Portfolio Management Considerations," as well as any other relevant factors, such as the particular subcategory or type of loan. For any subcategory of loans that exhibits greater credit risk than the overall category, a lender should consider the establishment of an internal loan-to-value limit for that subcategory that is lower than the limit for the overall category.

The loan-to-value ratio is only one of several pertinent credit factors to be considered when underwriting a real estate loan. Other credit factors to be taken into account are highlighted in the "Underwriting Standards" section above. Because of these other factors, the establishment of these supervisory limits should not be interpreted to mean that loans at these levels will automatically be considered sound.

**LOANS IN EXCESS OF THE SUPERVISORY LOAN-TO-VALUE LIMITS**

The agencies recognize that appropriate loan-to-value limits vary not only among categories of real estate loans but also among individual loans. Therefore, it may be appropriate in individual cases to originate or purchase loans with loan-to-value ratios in excess of the supervisory loan-to-value limits, based on the support provided by other credit factors. Such loans should be identified in the institutions's records, and their aggregate amount reported at least quarterly to the institution's board of directors. (See additional reporting requirements described under "Exceptions to the General Policy.")

The aggregate amount of all loans in excess of the supervisory loan-to-value limits should not exceed 100 percent of total capital.<sup>2</sup> Moreover, within the aggregate limit, total loans for all commercial, agricultural, multifamily or other non-1-to-4 family residential properties should not exceed 30 percent of total capital. An institution will come under increased supervisory scrutiny as the total of such loans approaches these levels.

<sup>2</sup>For the state member banks, the term "total capital" means "total risk-based capital" as defined in appendix A to 12 CFR part 208. For insured state non-member banks, "total capital" refers to that term described in table I of appendix A to 12 CFR part 325. For national banks, the term "total capital" is defined at 12 CFR 3.2(e). For savings associations, the term "total capital" is defined at 12 CFR 567.5(c).

In determining the aggregate amount of such loans, institutions should: (a) Include all loans secured by the same property if any one of those loans exceeds the supervisory loan-to-value limits; and (b) include the recourse obligation of any such loan sold with recourse. Conversely, a loan should no longer be reported to the directors as part of aggregate totals when reduction in principal or senior liens, or additional contribution of collateral or equity (e.g., improvements to the real property securing the loan), bring the loan-to-value ratio into compliance with supervisory limits.

#### EXCLUDED TRANSACTIONS

The agencies also recognize that there are a number of lending situations in which other factors significantly outweigh the need to apply the supervisory loan-to-value limits. These include:

- Loans guaranteed or insured by the U.S. government or its agencies, provided that the amount of the guaranty or insurance is at least equal to the portion of the loan that exceeds the supervisory loan-to-value limit.
- Loans backed by the full faith and credit of a state government, provided that the amount of the assurance is at least equal to the portion of the loan that exceeds the supervisory loan-to-value limit.
- Loans guaranteed or insured by a state, municipal or local government, or an agency thereof, provided that the amount of the guaranty or insurance is at least equal to the portion of the loan that exceeds the supervisory loan-to-value limit, and provided that the lender has determined that the guarantor or insurer has the financial capacity and willingness to perform under the terms of the guaranty or insurance agreement.
- Loans that are to be sold promptly after origination, without recourse, to a financially responsible third party.
- Loans that are renewed, refinanced, or restructured without the advancement of new funds or an increase in the line of credit (except for reasonable closing costs), or loans that are renewed, refinanced, or restructured in connection with a workout situation, either with or without the advancement of new funds, where consistent with safe and sound banking practices and part of a clearly defined and well-documented program to achieve orderly liquidation of the debt, reduce risk of loss, or maximize recovery on the loan.
- Loans that facilitate the sale of real estate acquired by the lender in the ordinary course of collecting a debt previously contracted in good faith.
- Loans for which a lien on or interest in real property is taken as additional collateral through an abundance of caution by the lender (e.g., the institution takes a blanket lien on all or substantially all of the assets

of the borrower, and the value of the real property is low relative to the aggregate value of all other collateral).

- Loans, such as working capital loans, where the lender does not rely principally on real estate as security and the extension of credit is not used to acquire, develop, or construct permanent improvements on real property.
- Loans for the purpose of financing permanent improvements to real property, but not secured by the property, if such security interest is not required by prudent underwriting practice.

#### EXCEPTIONS TO THE GENERAL LENDING POLICY

Some provision should be made for the consideration of loan requests from credit-worthy borrowers whose credit needs do not fit within the institution's general lending policy. An institution may provide for prudently underwritten exceptions to its lending policies, including loan-to-value limits, on a loan-by-loan basis. However, any exceptions from the supervisory loan-to-value limits should conform to the aggregate limits on such loans discussed above.

The board of directors is responsible for establishing standards for the review and approval of exception loans. Each institution should establish an appropriate internal process for the review and approval of loans that do not conform to its own internal policy standards. The approval of any such loan should be supported by a written justification that clearly sets forth all of the relevant credit factors that support the underwriting decision. The justification and approval documents for such loans should be maintained as a part of the permanent loan file. Each institution should monitor compliance with its real estate lending policy and individually report exception loans of a significant size to its board of directors.

#### SUPERVISORY REVIEW OF REAL ESTATE LENDING POLICIES AND PRACTICES

The real estate lending policies of institutions will be evaluated by examiners during the course of their examinations to determine if the policies are consistent with safe and sound lending practices, these guidelines, and the requirements of the regulation. In evaluating the adequacy of the institution's real estate lending policies and practices, examiners will take into consideration the following factors:

- The nature and scope of the institution's real estate lending activities.
- The size and financial condition of the institution.
- The quality of the institution's management and internal controls.
- The expertise and size of the lending and loan administration staff.
- Market conditions.

Lending policy exception reports will also be reviewed by examiners during the course of their examinations to determine whether the institutions' exceptions are adequately documented and appropriate in light of all of the relevant credit considerations. An excessive volume of exceptions to an institution's real estate lending policy may signal a weakening of its underwriting practices, or may suggest a need to revise the loan policy.

## DEFINITIONS

For the purposes of these Guidelines:

*Construction loan* means an extension of credit for the purpose of erecting or rehabilitating buildings or other structures, including any infrastructure necessary for development.

*Extension of credit or loan* means:

(1) The total amount of any loan, line of credit, or other legally binding lending commitment with respect to real property; and

(2) The total amount, based on the amount of consideration paid, of any loan, line of credit, or other legally binding lending commitment acquired by a lender by purchase, assignment, or otherwise.

*Improved property loan* means an extension of credit secured by one of the following types of real property:

(1) Farmland, ranchland or timberland committed to ongoing management and agricultural production;

(2) 1- to 4-family residential property that is not owner-occupied;

(3) Residential property containing five or more individual dwelling units;

(4) Completed commercial property; or

(5) Other income-producing property that has been completed and is available for occupancy and use, except income-producing owner-occupied 1- to 4-family residential property.

*Land development loan* means an extension of credit for the purpose of improving unimproved real property prior to the erection of structures. The improvement of unimproved real property may include the laying or placement of sewers, water pipes, utility cables, streets, and other infrastructure necessary for future development.

*Loan origination* means the time of inception of the obligation to extend credit (i.e., when the last event or prerequisite, controllable by the lender, occurs causing the lender to become legally bound to fund an extension of credit).

*Loan-to-value or loan-to-value ratio* means the percentage or ratio that is derived at the time of loan origination by dividing an extension of credit by the total value of the property(ies) securing or being improved by the extension of credit plus the amount of any readily marketable collateral and other acceptable collateral that secures the extension of credit. The total amount of all senior liens on or interests in such property(ies)

should be included in determining the loan-to-value ratio. When mortgage insurance or collateral is used in the calculation of the loan-to-value ratio, and such credit enhancement is later released or replaced, the loan-to-value ratio should be recalculated.

*Other acceptable collateral* means any collateral in which the lender has a perfected security interest, that has a quantifiable value, and is accepted by the lender in accordance with safe and sound lending practices. Other acceptable collateral should be appropriately discounted by the lender consistent with the lender's usual practices for making loans secured by such collateral. Other acceptable collateral includes, among other items, unconditional irrevocable standby letters of credit for the benefit of the lender.

*Owner-occupied*, when used in conjunction with the term *1- to 4-family residential property* means that the owner of the underlying real property occupies at least one unit of the real property as a principal residence of the owner.

*Readily marketable collateral* means insured deposits, financial instruments, and bullion in which the lender has a perfected interest. Financial instruments and bullion must be salable under ordinary circumstances with reasonable promptness at a fair market value determined by quotations based on actual transactions, on an auction or similarly available daily bid and ask price market. Readily marketable collateral should be appropriately discounted by the lender consistent with the lender's usual practices for making loans secured by such collateral.

*Value* means an opinion or estimate, set forth in an appraisal or evaluation, whichever may be appropriate, of the market value of real property, prepared in accordance with the agency's appraisal regulations and guidance. For loans to purchase an existing property, the term "value" means the lesser of the actual acquisition cost or the estimate of value.

*1- to 4-family residential property* means property containing fewer than five individual dwelling units, including manufactured homes permanently affixed to the underlying property (when deemed to be real property under state law).

[57 FR 62896, 62900, Dec. 31, 1992; 58 FR 4460, Jan. 14, 1993; 63 FR 58621, Nov. 2, 1998]

## APPENDIX D-1 TO PART 208—INTER-AGENCY GUIDELINES ESTABLISHING STANDARDS FOR SAFETY AND SOUNDNESS

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## I. INTRODUCTION

i. Section 39 of the Federal Deposit Insurance Act<sup>1</sup> (FDI Act) requires each Federal banking agency (collectively, the agencies) to establish certain safety and soundness standards by regulation or by guideline for all insured depository institutions. Under section 39, the agencies must establish three types of standards: (1) Operational and managerial standards; (2) compensation standards; and (3) such standards relating to asset quality, earnings, and stock valuation as they determine to be appropriate.

ii. Section 39(a) requires the agencies to establish operational and managerial standards relating to: (1) Internal controls, information systems and internal audit systems, in accordance with section 36 of the FDI Act (12 U.S.C. 1831m); (2) loan documentation; (3) credit underwriting; (4) interest rate exposure; (5) asset growth; and (6) compensation, fees, and benefits, in accordance with subsection (c) of section 39. Section 39(b) requires the agencies to establish standards relating to asset quality, earnings, and stock valuation that the agencies determine to be appropriate.

iii. Section 39(c) requires the agencies to establish standards prohibiting as an unsafe and unsound practice any compensatory arrangement that would provide any executive officer, employee, director, or principal shareholder of the institution with excessive compensation, fees or benefits and any compensatory arrangement that could lead to

<sup>1</sup>Section 39 of the Federal Deposit Insurance Act (12 U.S.C. 1831p-1) was added by section 132 of the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), Pub. L. 102-242, 105 Stat. 2236 (1991), and amended by section 956 of the Housing and Community Development Act of 1992, Pub. L. 102-550, 106 Stat. 3895 (1992) and section 318 of the Riegle Community Development and Regulatory Improvement Act of 1994, Pub. L. 103-325, 108 Stat. 2160 (1994).

material financial loss to an institution. Section 39(c) also requires that the agencies establish standards that specify when compensation is excessive.

iv. If an agency determines that an institution fails to meet any standard established by guideline under subsection (a) or (b) of section 39, the agency may require the institution to submit to the agency an acceptable plan to achieve compliance with the standard. In the event that an institution fails to submit an acceptable plan within the time allowed by the agency or fails in any material respect to implement an accepted plan, the agency must, by order, require the institution to correct the deficiency. The agency may, and in some cases must, take other supervisory actions until the deficiency has been corrected.

v. The agencies have adopted amendments to their rules and regulations to establish deadlines for submission and review of compliance plans.<sup>2</sup>

vi. The following Guidelines set out the safety and soundness standards that the agencies use to identify and address problems at insured depository institutions before capital becomes impaired. The agencies believe that the standards adopted in these Guidelines serve this end without dictating how institutions must be managed and operated. These standards are designed to identify potential safety and soundness concerns and ensure that action is taken to address those concerns before they pose a risk to the deposit insurance funds.

*A. Preservation of Existing Authority*

Neither section 39 nor these Guidelines in any way limits the authority of the agencies to address unsafe or unsound practices, violations of law, unsafe or unsound conditions, or other practices. Action under section 39 and these Guidelines may be taken independently of, in conjunction with, or in addition to any other enforcement action available to the agencies. Nothing in these Guidelines limits the authority of the FDIC pursuant to section 38(i)(2)(F) of the FDI Act (12 U.S.C. 1831(o)) and Part 325 of Title 12 of the Code of Federal Regulations.

*B. Definitions*

1. *In general.* For purposes of these Guidelines, except as modified in the Guidelines or unless the context otherwise requires, the

<sup>2</sup>For the Office of the Comptroller of the Currency, these regulations appear at 12 CFR Part 30; for the Board of Governors of the Federal Reserve System, these regulations appear at 12 CFR Part 263; for the Federal Deposit Insurance Corporation, these regulations appear at 12 CFR Part 308, subpart R, and for the Office of Thrift Supervision, these regulations appear at 12 CFR Part 570.

terms used have the same meanings as set forth in sections 3 and 39 of the FDI Act (12 U.S.C. 1813 and 1831p-1).

2. *Board of directors*, in the case of a state-licensed insured branch of a foreign bank and in the case of a federal branch of a foreign bank, means the managing official in charge of the insured foreign branch.

3. *Compensation* means all direct and indirect payments or benefits, both cash and non-cash, granted to or for the benefit of any executive officer, employee, director, or principal shareholder, including but not limited to payments or benefits derived from an employment contract, compensation or benefit agreement, fee arrangement, perquisite, stock option plan, postemployment benefit, or other compensatory arrangement.

4. *Director* shall have the meaning described in 12 CFR 215.2(c).<sup>3</sup>

5. *Executive officer* shall have the meaning described in 12 CFR 215.2(d).<sup>4</sup>

6. *Principal shareholder* shall have the meaning described in 12 CFR 215.2(l).<sup>5</sup>

## II. Operational and Managerial Standards

### A. *Internal controls and information systems.*

An institution should have internal controls and information systems that are appropriate to the size of the institution and the nature, scope and risk of its activities and that provide for:

1. An organizational structure that establishes clear lines of authority and responsibility for monitoring adherence to established policies;
2. Effective risk assessment;
3. Timely and accurate financial, operational and regulatory reports;
4. Adequate procedures to safeguard and manage assets; and
5. Compliance with applicable laws and regulations.

B. *Internal audit system.* An institution should have an internal audit system that is appropriate to the size of the institution and the nature and scope of its activities and that provides for:

1. Adequate monitoring of the system of internal controls through an internal audit function. For an institution whose size, complexity or scope of operations does not warrant a full scale internal audit function, a system of independent reviews of key internal controls may be used;

<sup>3</sup>In applying these definitions for savings associations, pursuant to 12 U.S.C. 1464, savings associations shall use the terms "savings association" and "insured savings association" in place of the terms "member bank" and "insured bank".

<sup>4</sup>See footnote 3 in section I.B.4. of this appendix.

<sup>5</sup>See footnote 3 in section I.B.4. of this appendix.

2. Independence and objectivity;

3. Qualified persons;

4. Adequate testing and review of information systems;

5. Adequate documentation of tests and findings and any corrective actions;

6. Verification and review of management actions to address material weaknesses; and

7. Review by the institution's audit committee or board of directors of the effectiveness of the internal audit systems.

C. *Loan documentation.* An institution should establish and maintain loan documentation practices that:

1. Enable the institution to make an informed lending decision and to assess risk, as necessary, on an ongoing basis;

2. Identify the purpose of a loan and the source of repayment, and assess the ability of the borrower to repay the indebtedness in a timely manner;

3. Ensure that any claim against a borrower is legally enforceable;

4. Demonstrate appropriate administration and monitoring of a loan; and

5. Take account of the size and complexity of a loan.

D. *Credit underwriting.* An institution should establish and maintain prudent credit underwriting practices that:

1. Are commensurate with the types of loans the institution will make and consider the terms and conditions under which they will be made;

2. Consider the nature of the markets in which loans will be made;

3. Provide for consideration, prior to credit commitment, of the borrower's overall financial condition and resources, the financial responsibility of any guarantor, the nature and value of any underlying collateral, and the borrower's character and willingness to repay as agreed;

4. Establish a system of independent, ongoing credit review and appropriate communication to management and to the board of directors;

5. Take adequate account of concentration of credit risk; and

6. Are appropriate to the size of the institution and the nature and scope of its activities.

E. *Interest rate exposure.* An institution should:

1. Manage interest rate risk in a manner that is appropriate to the size of the institution and the complexity of its assets and liabilities; and

2. Provide for periodic reporting to management and the board of directors regarding interest rate risk with adequate information for management and the board of directors to assess the level of risk.

F. *Asset growth.* An institution's asset growth should be prudent and consider:

1. The source, volatility and use of the funds that support asset growth;

2. Any increase in credit risk or interest rate risk as a result of growth; and

3. The effect of growth on the institution's capital.

G. *Asset quality.* An insured depository institution should establish and maintain a system that is commensurate with the institution's size and the nature and scope of its operations to identify problem assets and prevent deterioration in those assets. The institution should:

1. Conduct periodic asset quality reviews to identify problem assets;
2. Estimate the inherent losses in those assets and establish reserves that are sufficient to absorb estimated losses;
3. Compare problem asset totals to capital;
4. Take appropriate corrective action to resolve problem assets;
5. Consider the size and potential risks of material asset concentrations; and
6. Provide periodic asset reports with adequate information for management and the board of directors to assess the level of asset risk.

H. *Earnings.* An insured depository institution should establish and maintain a system that is commensurate with the institution's size and the nature and scope of its operations to evaluate and monitor earnings and ensure that earnings are sufficient to maintain adequate capital and reserves. The institution should:

1. Compare recent earnings trends relative to equity, assets, or other commonly used benchmarks to the institution's historical results and those of its peers;
2. Evaluate the adequacy of earnings given the size, complexity, and risk profile of the institution's assets and operations;
3. Assess the source, volatility, and sustainability of earnings, including the effect of nonrecurring or extraordinary income or expense;
4. Take steps to ensure that earnings are sufficient to maintain adequate capital and reserves after considering the institution's asset quality and growth rate; and
5. Provide periodic earnings reports with adequate information for management and the board of directors to assess earnings performance.

I. *Compensation, fees and benefits.* An institution should maintain safeguards to prevent the payment of compensation, fees, and benefits that are excessive or that could lead to material financial loss to the institution.

### III. PROHIBITION ON COMPENSATION THAT CONSTITUTES AN UNSAFE AND UNSOUND PRACTICE

#### A. *Excessive Compensation*

Excessive compensation is prohibited as an unsafe and unsound practice. Compensation shall be considered excessive when amounts paid are unreasonable or disproportionate to

the services performed by an executive officer, employee, director, or principal shareholder, considering the following:

1. The combined value of all cash and non-cash benefits provided to the individual;
2. The compensation history of the individual and other individuals with comparable expertise at the institution;
3. The financial condition of the institution;
4. Comparable compensation practices at comparable institutions, based upon such factors as asset size, geographic location, and the complexity of the loan portfolio or other assets;
5. For postemployment benefits, the projected total cost and benefit to the institution;
6. Any connection between the individual and any fraudulent act or omission, breach of trust or fiduciary duty, or insider abuse with regard to the institution; and
7. Any other factors the agencies determine to be relevant.

#### B. *Compensation Leading to Material Financial Loss*

Compensation that could lead to material financial loss to an institution is prohibited as an unsafe and unsound practice.

[60 FR 35678, 35682, July 10, 1995, as amended by Reg. H, 61 FR 43951, Aug. 27, 1996]

### APPENDIX D-2 TO PART 208—INTERAGENCY GUIDELINES ESTABLISHING YEAR 2000 STANDARDS FOR SAFETY AND SOUNDNESS

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#### I. INTRODUCTION

The Interagency Guidelines Establishing Year 2000 Standards for Safety and Soundness (Guidelines) set forth safety and soundness standards pursuant to section 39 of the Federal Deposit Insurance Act (section 39) (12 U.S.C. 1831p-1) that are applicable to an

insured depository institution's efforts to achieve Year 2000 readiness. The Guidelines, which also interpret the general standards in the Interagency Guidelines Establishing Standards for Safety and Soundness adopted in 1995, apply to all insured depository institutions.

#### A. Preservation of Existing Authority

Neither section 39 nor the Guidelines in any way limits the authority of the Federal banking agencies to address unsafe or unsound practices, violations of law, unsafe or unsound conditions, or other practices. The Federal banking agencies, in their sole discretion, may take appropriate actions so that insured depository institutions will be able to successfully continue business operations after January 1, 2000, including on a case-by-case basis requiring actions by dates that are later than the key dates set forth in the Guidelines. Action under section 39 and the Guidelines may be taken independently of, in conjunction with, or in addition to any other action, including enforcement action, available to the Federal banking agencies.

#### B. Definitions

1. *In general.* For purposes of the Guidelines the following definitions apply:

a. *Business resumption contingency plan* means a plan that describes how mission-critical systems of the insured depository institution will continue to operate in the event there are system failures in processing, calculating, comparing, or sequencing date or time data from, into, or between the 20th and 21st centuries; or the years 1999 and 2000; or with regard to leap year calculations.

b. *External system* means a system the renovation of which is not controlled by the insured depository institution, including systems provided by service providers and any interfaces with external third party suppliers and other material third parties.

c. *External third party supplier* means a service provider or software vendor that supplies services or products to insured depository institutions.

d. *Internal system* means a system the renovation of which is controlled by the insured depository institution, including software, operating systems, mainframe computers, personal computers, readers/sorters, and proof machines. Internal system also may include a system controlled by the insured depository institution with embedded integrated circuits (e.g., heating and cooling systems, vaults, communications, security systems, and elevators).

e. *Mission-critical system* means an application or system that is vital to the successful continuance of a core business activity. An application or system may be mission-critical if it interfaces with a designated mission-

critical system. Software products also may be mission-critical.

f. *Other material third party* means a third party, other than an external third party supplier, to whom an insured depository institution transmits data or from whom an insured depository institution receives data, including business partners (e.g., credit bureaus), other insured depository institutions, payment system providers, clearinghouses, customers, and utilities.

g. *Remediation contingency plan* means a plan that describes how the insured depository institution will mitigate the risks associated with the failure to successfully complete renovation, testing, or implementation of its mission-critical systems.

h. *Renovation* means code enhancements, hardware and software upgrades, system replacements, and other associated changes that ensure that the insured depository institution's mission-critical systems and applications are Year 2000 ready.

i. *Year 2000 ready or readiness* with respect to a system or application means the system or application accurately processes, calculates, compares, or sequences date or time data from, into, or between the 20th and 21st centuries; or the years 1999 and 2000; or with regard to leap year calculations.

## II. YEAR 2000 STANDARDS FOR SAFETY AND SOUNDNESS

A. *Review of Mission-Critical Systems For Year 2000 Readiness.* Each insured depository institution shall in writing:

1. Identify all internal and external mission-critical systems that are not Year 2000 ready;

2. Establish priorities for accomplishing work and allocating resources to renovating internal mission-critical systems;

3. Identify the resource requirements and individuals assigned to the Year 2000 project on internal mission-critical systems;

4. Establish reasonable deadlines for commencing and completing the renovation of such internal mission-critical systems;

5. Develop and adopt a project plan that addresses the insured depository institution's Year 2000 renovation, testing, contingency planning, and management oversight process; and

6. Develop a due diligence process to monitor and evaluate the efforts of external third party suppliers to achieve Year 2000 readiness.

B. *Renovation of Internal Mission-Critical Systems.* Each insured depository institution shall commence renovation of all internal mission-critical systems that are not Year 2000 ready in sufficient time that testing of the renovation can be substantially completed by December 31, 1998.

C. *Renovation of External Mission-Critical Systems.* Each insured depository institution shall:

1. Determine the ability of external third party suppliers to renovate external mission-critical systems that are not Year 2000 ready and to complete the renovation in sufficient time to substantially complete testing by March 31, 1999;

2. Maintain written documentation of all its communications with external third party suppliers regarding their ability to renovate timely and effectively external mission-critical systems that are not Year 2000 ready; and

3. Develop in writing an ongoing due diligence process to monitor and evaluate the efforts of external third party suppliers to achieve Year 2000 readiness, including:

a. monitoring the efforts of external third party suppliers to achieve Year 2000 readiness on at least a quarterly basis and documenting communications with these suppliers; and

b. reviewing the insured depository institution's contractual arrangements with external third party suppliers to determine the parties' rights and obligations to achieve Year 2000 readiness.

D. *Testing of Mission-Critical Systems.* Each insured depository institution shall:

1. Develop and implement an effective written testing plan for both internal and external systems. Such a plan shall include the testing environment, testing methodology, testing schedules, budget projections, participants to be involved in testing, and the critical dates to be tested to achieve Year 2000 readiness;

2. Verify the adequacy of the testing process and validate the results of the tests with the assistance of the project manager responsible for Year 2000 readiness, the owner of the system tested, and an objective independent party (such as an auditor, a consultant, or a qualified individual from within or outside of the insured depository institution who is independent of the process under review);

3. Substantially complete testing of internal mission-critical systems by December 31, 1998;

4. Commence testing of external mission-critical systems by January 1, 1999;

5. Substantially complete testing of external mission-critical systems by March 31, 1999;

6. Commence testing with other material third parties by March 31, 1999; and

7. Complete testing of all mission-critical systems by June 30, 1999.

E. *Business Resumption Contingency Planning.* Each insured depository institution shall develop and implement an effective written business resumption contingency plan that, at a minimum:

1. Defines scenarios for mission-critical systems failing to achieve Year 2000 readiness;

2. Evaluates options and selects a reasonable contingency strategy for those systems;

3. Provides for the periodic testing of the business resumption contingency plan; and

4. Provides for independent testing of the business resumption contingency plan by an objective independent party, such as an auditor, consultant, or qualified individual from another area of the insured depository institution who was not involved in the formulation of the business resumption contingency plan.

F. *Remediation Contingency Planning.* Each insured depository institution that has failed to successfully complete renovation, testing, and implementation of a mission-critical system, or is in the process of remediation and is not on schedule with the key dates in section II.D, shall develop and implement an effective written remediation contingency plan that, at a minimum:

1. Outlines the alternatives available if remediation efforts are not successful, including the availability of alternative external third party suppliers, and selects a reasonable contingency strategy; and

2. Establishes trigger dates for activating the remediation contingency plan, taking into account the time necessary to convert to alternative external third party suppliers or to complete any other selected strategy.

G. *Customer Risk.* Each insured depository institution shall develop and implement a written due diligence process that:

1. Identifies customers, including fund providers, fund takers, and capital market/asset management counterparties, that represent material risk exposure to the institution;

2. Evaluates their Year 2000 preparedness;

3. Assesses their existing and potential Year 2000 risk to the institution; and 4. Implements appropriate risk controls, including controls for underwriting risk, to manage and mitigate their Year 2000 risk to the institution.

H. *Involvement of the Board of Directors and Management.*

1. During all stages of the renovation, testing, and contingency planning process, the board of directors and management of each insured depository institution shall:

a. be actively involved in managing efforts to plan, allocate resources, and monitor progress towards attaining Year 2000 readiness;

b. oversee the efforts of the insured depository institution to achieve Year 2000 readiness and allocate sufficient resources to resolve problems relating to the institution's Year 2000 readiness; and

c. evaluate the Year 2000 risk associated with any strategic business initiatives contemplated by the insured depository institution, including mergers and acquisitions, major systems development, corporate alliances, and system interdependencies.

2. In addition, the board of directors, at a minimum, shall require from management, and management shall provide to the board of directors, written status reports, at least quarterly and as otherwise appropriate to keep the directorate fully informed, of the insured depository institution's efforts in achieving Year 2000 readiness. Such written status reports shall, at a minimum, include:

- a. The overall progress of the insured depository institution's efforts in achieving Year 2000 readiness;
- b. The insured depository institution's interim progress in renovating, validating, and contingency planning measured against the insured depository institution's Year 2000 project plan as adopted under section II.A.5. of appendix B;
- c. The status of efforts by key external third party suppliers and other material third parties in achieving Year 2000 readiness;
- d. The results of the testing process;
- e. The status of contingency planning efforts; and
- f. The status of the ongoing assessment of customer risk.

[63 FR 55484, 55486, Oct. 15, 1998]

APPENDIX E TO PART 208—CAPITAL ADEQUACY GUIDELINES FOR STATE MEMBER BANKS; MARKET RISK MEASURE

*Section 1. Purpose, Applicability, Scope, and Effective Date*

(a) *Purpose.* The purpose of this appendix is to ensure that banks with significant exposure to market risk maintain adequate capital to support that exposure.<sup>1</sup> This appendix supplements and adjusts the risk-based capital ratio calculations under appendix A of this part with respect to those banks.

(b) *Applicability.* (1) This appendix applies to any insured state member bank whose trading activity<sup>2</sup> (on a worldwide consolidated basis) equals:

- (i) 10 percent or more of total assets;<sup>3</sup> or

<sup>1</sup>This appendix is based on a framework developed jointly by supervisory authorities from the countries represented on the Basle Committee on Banking Supervision and endorsed by the Group of Ten Central Bank Governors. The framework is described in a Basle Committee paper entitled "Amendment to the Capital Accord to Incorporate Market Risks," January 1996. Also see modifications issued in September 1997.

<sup>2</sup>Trading activity means the gross sum of trading assets and liabilities as reported in the bank's most recent quarterly Consolidated Report of Condition and Income (Call Report).

<sup>3</sup>Total assets means quarter-end total assets as reported in the bank's most recent Call Report.

- (ii) \$1 billion or more.

(2) The Federal Reserve may additionally apply this appendix to any insured state member bank if the Federal Reserve deems it necessary or appropriate for safe and sound banking practices.

(3) The Federal Reserve may exclude an insured state member bank otherwise meeting the criteria of paragraph (b)(1) of this section from coverage under this appendix if it determines the bank meets such criteria as a consequence of accounting, operational, or similar considerations, and the Federal Reserve deems it consistent with safe and sound banking practices.

(c) *Scope.* The capital requirements of this appendix support market risk associated with a bank's covered positions.

(d) *Effective date.* This appendix is effective as of January 1, 1997. Compliance is not mandatory until January 1, 1998. Subject to supervisory approval, a bank may opt to comply with this appendix as early as January 1, 1997.<sup>4</sup>

*Section 2. Definitions*

For purposes of this appendix, the following definitions apply:

(a) *Covered positions* means all positions in a bank's trading account, and all foreign exchange<sup>5</sup> and commodity positions, whether or not in the trading account.<sup>6</sup> Positions include on-balance-sheet assets and liabilities and off-balance-sheet items. Securities subject to repurchase and lending agreements are included as if they are still owned by the lender.

(b) *Market risk* means the risk of loss resulting from movements in market prices. Market risk consists of general market risk and specific risk components.

(1) *General market risk* means changes in the market value of covered positions resulting from broad market movements, such as changes in the general level of interest rates, equity prices, foreign exchange rates, or commodity prices.

(2) *Specific risk* means changes in the market value of specific positions due to factors other than broad market movements. Specific risk includes such risk as idiosyncratic variation, as well as event and default risk.

(c) *Tier 1* and *Tier 2 capital* are defined in appendix A of this part.

(d) *Tier 3 capital* is subordinated debt that is unsecured; is fully paid up; has an original

<sup>4</sup>A bank that voluntarily complies with the final rule prior to January 1, 1998, must comply with all of its provisions.

<sup>5</sup>Subject to supervisory review, a bank may exclude structural positions in foreign currencies from its covered positions.

<sup>6</sup>The term trading account is defined in the instructions to the Call Report.

maturity of at least two years; is not redeemable before maturity without prior approval by the Federal Reserve; includes a lock-in clause precluding payment of either interest or principal (even at maturity) if the payment would cause the issuing bank's risk-based capital ratio to fall or remain below the minimum required under appendix A of this part; and does not contain and is not covered by any covenants, terms, or restrictions that are inconsistent with safe and sound banking practices.

(e) *Value-at-risk (VAR)* means the estimate of the maximum amount that the value of covered positions could decline during a fixed holding period within a stated confidence level, measured in accordance with section 4 of this appendix.

#### *Section 3. Adjustments to the Risk-Based Capital Ratio Calculations*

(a) *Risk-based capital ratio denominator.* A bank subject to this appendix shall calculate its risk-based capital ratio denominator as follows:

(1) *Adjusted risk-weighted assets.* Calculate adjusted risk-weighted assets, which equals risk-weighted assets (as determined in accordance with appendix A of this part), excluding the risk-weighted amounts of all covered positions (except foreign exchange positions outside the trading account and over-the-counter derivative positions).<sup>7</sup>

(2) *Measure for market risk.* Calculate the measure for market risk, which equals the sum of the VAR-based capital charge, the specific risk add-on (if any), and the capital charge for de minimis exposures (if any).

(i) *VAR-based capital charge.* The VAR-based capital charge equals the higher of:

(A) The previous day's VAR measure; or

(B) The average of the daily VAR measures for each of the preceding 60 business days multiplied by three, except as provided in section 4(e) of this appendix;

(ii) *Specific risk add-on.* The specific risk add-on is calculated in accordance with section 5 of this appendix; and

(iii) *Capital charge for de minimis exposure.* The capital charge for de minimis exposure is calculated in accordance with section 4(a) of this appendix.

(3) *Market risk equivalent assets.* Calculate market risk equivalent assets by multiplying the measure for market risk (as calculated in paragraph (a)(2) of this section) by 12.5.

(4) *Denominator calculation.* Add market risk equivalent assets (as calculated in para-

<sup>7</sup>Foreign exchange positions outside the trading account and all over-the-counter derivative positions, whether or not in the trading account, must be included in adjusted risk weighted assets as determined in appendix A of this part.

graph (a)(3) of this section) to adjusted risk-weighted assets (as calculated in paragraph (a)(1) of this section). The resulting sum is the bank's risk-based capital ratio denominator.

(b) *Risk-based capital ratio numerator.* A bank subject to this appendix shall calculate its risk-based capital ratio numerator by allocating capital as follows:

(1) *Credit risk allocation.* Allocate Tier 1 and Tier 2 capital equal to 8.0 percent of adjusted risk-weighted assets (as calculated in paragraph (a)(1) of this section).<sup>8</sup>

(2) *Market risk allocation.* Allocate Tier 1, Tier 2, and Tier 3 capital equal to the measure for market risk as calculated in paragraph (a)(2) of this section. The sum of Tier 2 and Tier 3 capital allocated for market risk must not exceed 250 percent of Tier 1 capital allocated for market risk. (This requirement means that Tier 1 capital allocated in this paragraph (b)(2) must equal at least 28.6 percent of the measure for market risk.)

(3) *Restrictions.* (i) The sum of Tier 2 capital (both allocated and excess) and Tier 3 capital (allocated in paragraph (b)(2) of this section) may not exceed 100 percent of Tier 1 capital (both allocated and excess).<sup>9</sup>

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

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

#### *Section 4. Internal Models.*

(a) *General.* For risk-based capital purposes, a bank subject to this appendix must use its internal model to measure its daily VAR, in accordance with the requirements of this section.<sup>10</sup> The Federal Reserve may permit a bank to use alternative techniques to

<sup>8</sup>A bank may not allocate Tier 3 capital to support credit risk (as calculated under appendix A of this part).

<sup>9</sup>Excess Tier 1 capital means Tier 1 capital that has not been allocated in paragraphs (b)(1) and (b)(2) of this section. Excess Tier 2 capital means Tier 2 capital that has not been allocated in paragraph (b)(1) and (b)(2) of this section, subject to the restrictions in paragraph (b)(3) of this section.

<sup>10</sup>A bank's internal model may use any generally accepted measurement techniques, such as variance-covariance models, historical simulations, or Monte Carlo simulations. However, the level of sophistication and accuracy of a bank's internal model must be commensurate with the nature and size of its covered positions. A bank that modifies its

measure the market risk of de minimis exposures so long as the techniques adequately measure associated market risk.

(b) *Qualitative requirements.* A bank subject to this appendix must have a risk management system that meets the following minimum qualitative requirements:

(1) The bank must have a risk control unit that reports directly to senior management and is independent from business trading units.

(2) The bank's internal risk measurement model must be integrated into the daily management process.

(3) The bank's policies and procedures must identify, and the bank must conduct, appropriate stress tests and backtests.<sup>11</sup> The bank's policies and procedures must identify the procedures to follow in response to the results of such tests.

(4) The bank must conduct independent reviews of its risk measurement and risk management systems at least annually.

(c) *Market risk factors.* The bank's internal model must use risk factors sufficient to measure the market risk inherent in all covered positions. The risk factors must address interest rate risk,<sup>12</sup> equity price risk, foreign exchange rate risk, and commodity price risk.

(d) *Quantitative requirements.* For regulatory capital purposes, VAR measures must meet the following quantitative requirements:

(1) The VAR measures must be calculated on a daily basis using a 99 percent, one-tailed confidence level with a price shock equivalent to a ten-business day movement in rates and prices. In order to calculate VAR measures based on a ten-day price shock, the bank may either calculate ten-day figures directly or convert VAR figures based on holding periods other than ten days to the equivalent of a ten-day holding period (for

instance, by multiplying a one-day VAR measure by the square root of ten).

(2) The VAR measures must be based on an historical observation period (or effective observation period for a bank using a weighting scheme or other similar method) of at least one year. The bank must update data sets at least once every three months or more frequently as market conditions warrant.

(3) The VAR measures must include the risks arising from the non-linear price characteristics of options positions and the sensitivity of the market value of the positions to changes in the volatility of the underlying rates or prices. A bank with a large or complex options portfolio must measure the volatility of options positions by different maturities.

(4) The VAR measures may incorporate empirical correlations within and across risk categories, provided that the bank's process for measuring correlations is sound. In the event that the VAR measures do not incorporate empirical correlations across risk categories, then the bank must add the separate VAR measures for the four major risk categories to determine its aggregate VAR measure.

(e) *Backtesting.* (1) Beginning one year after a bank starts to comply with this appendix, a bank must conduct backtesting by comparing each of its most recent 250 business days' actual net trading profit or loss<sup>13</sup> with the corresponding daily VAR measures generated for internal risk measurement purposes and calibrated to a one-day holding period and a 99 percent, one-tailed confidence level.

(2) Once each quarter, the bank must identify the number of exceptions, that is, the number of business days for which the magnitude of the actual daily net trading loss, if any, exceeds the corresponding daily VAR measure.

(3) A bank must use the multiplication factor indicated in Table 1 of this appendix in determining its capital charge for market risk under section 3(a)(2)(i)(B) of this appendix until it obtains the next quarter's backtesting results, unless the Federal Reserve determines that a different adjustment or other action is appropriate.

existing modeling procedures to comply with the requirements of this appendix for risk-based capital purposes should, nonetheless, continue to use the internal model it considers most appropriate in evaluating risks for other purposes.

<sup>11</sup>Stress tests provide information about the impact of adverse market events on a bank's covered positions. Backtests provide information about the accuracy of an internal model by comparing a bank's daily VAR measures to its corresponding daily trading profits and losses.

<sup>12</sup>For material exposures in the major currencies and markets, modeling techniques must capture spread risk and must incorporate enough segments of the yield curve—at least six—to capture differences in volatility and less than perfect correlation of rates along the yield curve.

TABLE 1.—MULTIPLICATION FACTOR BASED ON RESULTS OF BACKTESTING

Number of exceptions	Multiplication factor
4 or fewer .....	3.00

<sup>13</sup>Actual net trading profits and losses typically include such things as realized and unrealized gains and losses on portfolio positions as well as fee income and commissions associated with trading activities.

TABLE 1.—MULTIPLICATION FACTOR BASED ON RESULTS OF BACKTESTING—Continued

Number of exceptions	Multiplication factor
5 .....	3.40
6 .....	3.50
7 .....	3.65
8 .....	3.75
9 .....	3.85
10 or more .....	4.00

*Section 5. Specific Risk*

(a) *Modeled specific risk* A bank may use its internal model to measure specific risk. If the bank has demonstrated to the Federal Reserve that its internal model measures the specific risk, including event and default risk as well as idiosyncratic variation, of covered debt and equity positions and includes the specific risk measures in the VAR-based capital charge in section 3(a)(2)(i) of this appendix, then the bank has no specific risk add-on for purposes of section 3(a)(2)(ii) of this appendix. The model should explain the historical price variation in the trading portfolio and capture concentration, both magnitude and changes in composition. The model should also be robust to an adverse environment and have been validated through backtesting which assesses whether specific risk is being accurately captured.

(b) *Add-on charge for modeled specific risk.* If a bank's model measures specific risk, but the bank has not been able to demonstrate to the Federal Reserve that the model adequately measures event and default risk for covered debt and equity positions, then the bank's specific risk add-on is determined as follows:

(1) If the model is susceptible to valid separation of the VAR measure into a specific risk portion and a general market risk portion, then the specific risk add-on is equal to the previous day's specific risk portion.

(2) If the model does not separate the VAR measure into a specific risk portion and a general market risk portion, then the specific risk add-on is the sum of the previous day's VAR measures for subportfolios of covered debt and covered equity positions.

(c) *Add-on charge if specific risk is not modeled.* If a bank does not model specific risk in accordance with paragraph (a) or (b) of this section, then the bank's specific risk add-on charge equals the components for covered debt and equity positions as appropriate:

(1) *Covered debt positions.* (i) For purposes of this section 5, covered debt positions means fixed-rate or floating-rate debt instruments located in the trading account and instruments located in the trading account with values that react primarily to changes in interest rates, including certain non-convertible preferred stock, convertible bonds, and instruments subject to repurchase and lend-

ing agreements. Also included are derivatives (including written and purchased options) for which the underlying instrument is a covered debt instrument that is subject to a non-zero specific risk capital charge.

(A) For covered debt positions that are derivatives, a bank must risk-weight (as described in paragraph (c)(1)(iii) of this section) the market value of the effective notional amount of the underlying debt instrument or index portfolio. Swaps must be included as the notional position in the underlying debt instrument or index portfolio, with a receiving side treated as a long position and a paying side treated as a short position; and

(B) For covered debt positions that are options, whether long or short, a bank must risk-weight (as described in paragraph (c)(1)(iii) of this section) the market value of the effective notional amount of the underlying debt instrument or index multiplied by the option's delta.

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

(iii) A bank must multiply the absolute value of the current market value of each net long or short covered debt position by the appropriate specific risk weighting factor indicated in Table 2 of this appendix. The specific risk capital charge component for covered debt positions is the sum of the weighted values.

TABLE 2.—SPECIFIC RISK WEIGHTING FACTORS FOR COVERED DEBT POSITIONS

Category	Remaining maturity (contractual)	Weighting factor (in percent)
Government .....	N/A .....	0.00
Qualifying .....	6 months or less .....	0.25
	Over 6 months to 24 months .....	1.00
	Over 24 months .....	1.60
Other .....	N/A .....	8.00

(A) The *government* category includes all debt instruments of central governments of OECD-based countries<sup>14</sup> including bonds, Treasury bills, and other short-term instruments, as well as local currency instruments of non-OECD central governments to the extent the bank has liabilities booked in that currency.

(B) The *qualifying* category includes debt instruments of U.S. government-sponsored agencies, general obligation debt instruments issued by states and other political subdivisions of OECD-based countries, multilateral development banks, and debt instruments issued by U.S. depository institutions

<sup>14</sup>Organization for Economic Cooperation and Development (OECD)-based countries is defined in appendix A of this part.

or OECD-banks that do not qualify as capital of the issuing institution.<sup>15</sup> This category also includes other debt instruments, including corporate debt and revenue instruments issued by states and other political subdivisions of OECD countries, that are:

(1) Rated investment-grade by at least two nationally recognized credit rating services;

(2) Rated investment-grade by one nationally recognized credit rating agency and not rated less than investment-grade by any other credit rating agency; or

(3) Unrated, but deemed to be of comparable investment quality by the reporting bank and the issuer has instruments listed on a recognized stock exchange, subject to review by the Federal Reserve.

(C) The *other* category includes debt instruments that are not included in the government or qualifying categories.

(2) *Covered equity positions.* (i) For purposes of this section 5, covered equity positions means equity instruments located in the trading account and instruments located in the trading account with values that react primarily to changes in equity prices, including voting or non-voting common stock, certain convertible bonds, and commitments to buy or sell equity instruments. Also included are derivatives (including written and purchased options) for which the underlying is a covered equity position.

(A) For covered equity positions that are derivatives, a bank must risk weight (as described in paragraph (c)(2)(iii) of this section) the market value of the effective notional amount of the underlying equity instrument or equity portfolio. Swaps must be included as the notional position in the underlying equity instrument or index portfolio, with a receiving side treated as a long position and a paying side treated as a short position; and

(B) For covered equity positions that are options, whether long or short, a bank must risk weight (as described in paragraph (c)(2)(iii) of this section) the market value of the effective notional amount of the underlying equity instrument or index multiplied by the option's delta.

(ii) A bank may net long and short covered equity positions (including derivatives) in identical equity issues or equity indices in the same market.<sup>16</sup>

(iii)(A) A bank must multiply the absolute value of the current market value of each net long or short covered equity position by

<sup>15</sup>U.S. government-sponsored agencies, multilateral development banks, and OECD banks are defined in appendix A of this part.

<sup>16</sup>A bank may also net positions in depository receipts against an opposite position in the underlying equity or identical equity in different markets, provided that the bank includes the costs of conversion.

a risk weighting factor of 8.0 percent, or by 4.0 percent if the equity is held in a portfolio that is both liquid and well-diversified.<sup>17</sup> For covered equity positions that are index contracts comprising a well-diversified portfolio of equity instruments, the net long or short position is multiplied by a risk weighting factor of 2.0 percent.

(B) For covered equity positions from the following futures-related arbitrage strategies, a bank may apply a 2.0 percent risk weighting factor to one side (long or short) of each position with the opposite side exempt from charge, subject to review by the Federal Reserve:

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

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

(C) For futures contracts on broadly-based indices that are matched by offsetting positions in a basket of stocks comprising the index, a bank may apply a 2.0 percent risk 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 comprises at least 90 percent of the capitalization of the index.

(iv) The specific risk capital charge component for covered equity positions is the sum of the weighted values.

[Reg. H, 61 FR 47370, Sept. 6, 1996, as amended at 62 FR 68067, Dec. 30, 1997]

## PART 209—ISSUE AND CANCELLATION OF FEDERAL RESERVE BANK CAPITAL STOCK (REGULATION I)

Sec.

209.1 Authority, purpose, and scope.

209.2 Banks desiring to become member banks.

209.3 Cancellation of Reserve Bank stock.

209.4 Amounts and payments.

209.5 The share register.

<sup>17</sup>A portfolio is liquid and well-diversified if: (1) It is characterized by a limited sensitivity to price changes of any single equity issue or closely related group of equity issues held in the portfolio; (2) the volatility of the portfolio's value is not dominated by the volatility of any individual equity issue or by equity issues from any single industry or economic sector; (3) it contains a large number of individual equity positions, with no single position representing a substantial portion of the portfolio's total market value; and (4) it consists mainly of issues traded on organized exchanges or in well-established over-the-counter markets.