

IB47**Risk-Based Capital Definitions and Adequacy** [Section 11-103-201, C.R.S.]

A. Purpose.

An important function of the Banking Board and the Division of Banking is to evaluate the adequacy of capital maintained by each regulated institution. Such an evaluation involves the consideration of numerous factors, including the riskiness of an institution's assets and off-balance sheet items. This Rule implements the Banking Board's risk-based capital guidelines.

The risk-based capital ratio derived from these guidelines is an important factor in the Banking Board and the Division of Banking's evaluation of an institution's capital adequacy. However, because this measure addresses only credit risk, the 8 percent minimum ratio should not be viewed as the level to be targeted, but rather as a floor. The final supervisory judgment on an institution's capital adequacy is based on an individualized assessment of numerous factors, including those listed in Banking Board Rule CB101.51(E)(1). With respect to the consideration of these factors, the Banking Board and Division of Banking will give particular attention to any institution with significant exposure to declines in the economic value of its capital due to changes in interest rates. As a result, it may differ from the conclusion drawn from an isolated comparison of an institution's risk-based capital ratio to the 8 percent minimum specified in these guidelines. In addition to the standards established by these risk-based capital guidelines, all state-chartered industrial banks must maintain a minimum capital-to-total assets ratio pursuant to Banking Board Rule IB47.

Certain components of capital, categories of on-balance sheet assets, and categories of off-balance sheet items appearing in this Rule may not apply to state chartered industrial banks. Nothing in this Rule shall be construed to increase the powers of state chartered industrial banks.

B. Definitions. For the purposes of this Rule, the following definitions apply:

1. "Adjusted carrying value" means the aggregate value that investments are carried on the balance sheet of the institution reduced by any unrealized gains on the investments that are reflected in such carrying value but excluded from the institution's Tier 1 capital and reduced by any associated deferred tax liabilities. For example, for investments held as available-for-sale (AFS), the adjusted carrying value of the investments would be the aggregate carrying value of the investments (as reflected on the consolidated balance sheet of the institution) less any unrealized gains on those investments that are included in other comprehensive income and that are not reflected in Tier 1 capital, and less any associated deferred tax liabilities. Unrealized losses on AFS nonfinancial equity investments must be deducted from Tier 1 capital pursuant to Paragraph (B)(10) of this Rule. The treatment of small business investment companies that are consolidated for accounting purposes under generally accepted accounting principles is discussed in Paragraph (C)(1)(h)(2) of this Rule. For investments in a nonfinancial company that is consolidated for accounting purposes, the institution's adjusted carrying value of the investment is determined under the equity method of accounting (net of any intangibles associated with the investment that are deducted from the institution's Tier 1 capital pursuant to Paragraph (C)(1)(e) of this Rule). Even though the assets of the nonfinancial company are consolidated for accounting purposes, these assets (as well as the credit equivalent amounts of the company's off-balance sheet items) are excluded from the institution's risk-weighted assets.
2. "Allowances for loan and lease losses" means those general valuation allowances that have been established through charges against earnings to absorb losses on loan and lease financing receivables. Allowances for loan and lease losses exclude allocated transfer risk reserves established, and specific reserves created against identified loss.
3. "Asset-backed commercial paper program" means a program that primarily issues externally rated commercial paper backed by assets or other exposures held in a bankruptcy-remote special purpose entity.

4. "Asset-backed commercial paper sponsor" means an institution that:
 - a. Establishes an asset-backed commercial paper program;
 - b. Approves the sellers permitted to participate in an asset-backed commercial paper program;
 - c. Approves the asset pools to be purchased by an asset-backed commercial paper program; or
 - d. Administers the asset-backed commercial paper program by monitoring the assets, arranging for debt placement, compiling monthly reports, or ensuring compliance with the program documents and with the program's credit and investment policy.
5. "Associated company" means any corporation, partnership, business trust, joint venture, association, or similar organization in which an institution directly or indirectly holds a 20 to 50 percent ownership interest.
6. "Banking and finance subsidiary" means any subsidiary of an institution that engages in banking- and finance-related activities.
7. "Cash items in the process of collection" means checks or drafts in the process of collection that are drawn on another depository institution, including a central bank, and that are payable immediately upon presentation in the country in which the reporting institution's office that is clearing or collecting the check or draft is located; United States Government checks that are drawn on the United States Treasury or any other United States Government or Government-sponsored agency and that are payable immediately upon presentation; broker's security drafts and commodity or bill-of-lading drafts payable immediately upon presentation in the United States or the country in which the reporting institution's office that is handling the drafts is located; and unposted debts.
8. "Central government" means the national governing authority of a country; it includes the departments, ministries and agencies of the central government and the central bank. The U.S. Central Bank includes the twelve Federal Reserve Banks. The definition of central government does not include the following: State, provincial or local governments; commercial enterprises owned by the central government that are entities engaged in activities involving trade, commerce or profit that are generally conducted or performed in the private sector of the United States economy; and noncentral government entities whose obligations are guaranteed by the central government.
9. "Commitment" means any arrangement that obligates an institution to:
 - a. Purchase loans or securities; or
 - b. Extend credit in the form of loans or leases, participations in loans or leases, overdraft facilities, revolving credit facilities, home equity lines of credit, liquidity facilities, or similar transactions.
10. "Common stockholders' equity" means common stock, common stock surplus, undivided profits, capital reserves, and adjustments for the cumulative effect of foreign currency translation, less net unrealized holding losses on available-for-sale equity securities with readily determinable fair values.
11. "Conditional guarantee" means a contingent obligation of the United States Government or its agencies, or the central government of an Organization of Economic Cooperation and Development (OECD) country, the validity of which to the beneficiary is dependent upon some affirmative action; e.g., servicing requirements, on the part of the beneficiary of the guarantee or a third party.
12. "Deferred tax assets" means the tax consequences attributable to tax carryforwards and deductible temporary differences. Tax carryforwards are deductions or credits that cannot be used for tax purposes during the current period, but can be carried forward to reduce taxable income or taxes payable in a future period or periods. Temporary differences are financial events or transactions that are recognized in one period for financial statement purposes, but are recognized in another period or periods for income tax purposes. Deductible temporary differences are temporary differences that result in a reduction of taxable income in a future period or periods.
13. "Derivative contract" means generally a financial contract whose value is derived from the values of one or more underlying assets, reference rates or indexes of asset values.

- Derivative contracts include interest rate, foreign exchange rate, equity, precious metals and commodity contracts, or any other instrument that poses similar credit risks.
14. "Depository institution" means a financial institution that engages in the business of banking; that is recognized as a bank by the bank supervisory or monetary authorities of the country of its incorporation and the country of its principal banking operations; that receives deposits to a substantial extent in the regular course of business; and that has the power to accept demand deposits. In the United States, this definition encompasses all federally insured offices of commercial banks, mutual and stock savings banks, savings or building and loan associations (stock and mutual), cooperative banks, credit unions, and international banking facilities of domestic depository institutions. In addition, this definition encompasses all federally insured Colorado state chartered offices of industrial banks and trust companies. Bank holding companies are excluded from this definition. For the purposes of assigning risk weights, the differentiation between OECD depository institutions and non-OECD depository institutions is based on the country of incorporation. Claims on branches and agencies of foreign banks located in the United States are to be categorized on the basis of the parent bank's country of incorporation.
 15. "Equity investment" means any equity instrument including warrants and call options that give the holder the right to purchase an equity instrument, any equity feature of a debt instrument (such as a warrant or call option), and any debt instrument that is convertible into equity. An investment in any other instrument, including subordinated debt or other types of debt instruments, may be treated as an equity investment if the Banking Board determines that the instrument is the functional equivalent of equity or exposes the institution to essentially the same risks as an equity instrument.
 16. "Exchange rate contracts" include: Cross-currency interest rate swaps; forward foreign exchange rate contracts; currency options purchased; and any similar instrument that, in the opinion of the Banking Board gives rise to similar risks.
 17. "Goodwill" means an intangible asset that represents the excess of the purchase price over the fair market value of tangible and identifiable intangible assets acquired in purchases accounted for under the purchase method of accounting.
 18. "Intangible assets" include mortgage and non-mortgage servicing assets [but exclude any interest only (IO) strips receivable related to these mortgage and nonmortgage servicing assets], purchased credit card relationships, goodwill, favorable leaseholds, and core deposit value.
 19. "Interest rate contracts" include: Single currency interest rate swaps; basis swaps; forward rate agreements; interest rate options purchased; forward deposits accepted; and any similar instrument that, in the opinion of the Banking Board, gives rise to similar risks, including when-issued securities.
 20. "Liquidity facility" means a legally binding commitment to provide liquidity to various types of transactions, structures, or programs. A liquidity facility that supports asset-backed commercial paper, in any amount, by lending to, or purchasing assets from any structure, program, or conduit constitutes an asset-backed commercial paper liquidity facility.
 21. "Multifamily residential property" means any residential property consisting of five or more dwelling units including apartment buildings, condominiums, cooperatives, and other similar structures primarily for residential use, but not including hospitals, nursing homes, or other similar facilities.
 22. "Nationally recognized statistical rating organization (NRSRO)" means an entity recognized by the Division of Market Regulation of the Securities and Exchange Commission (or any successor Division) (Commission or SEC) as a nationally recognized statistical rating organization for various purposes, including the Commission's uniform net capital requirements for brokers and dealers.
 23. "Nonfinancial equity investment" means any equity investment held by an institution in a nonfinancial company through a small business investment company (SBIC) under section 302(b) of the Small Business Investment Act of 1958 or under the portfolio investment provisions of Regulation K. An equity investment made under section 302(b) of the Small Business Investment Act of 1958 in a SBIC that is not consolidated with the institution is treated as a nonfinancial equity investment in the manner provided in

Paragraph (C)(1)(h)(2)(c) of this Rule. A nonfinancial company is an entity that engages in any activity that has not been determined to be permissible for an institution to conduct directly or to be financial in nature or incidental to financial activities under section 4(k) of the Bank Holding Company Act.

24. "OECD-based group of countries" comprises all full members of the OECD regardless of entry date, plus 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. These countries are hereinafter referred to as "OECD countries." 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 changes in market conditions. (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.)
25. "Original maturity" means, with respect to a commitment, the earliest possible date after a commitment is made on which the commitment is scheduled to expire (i.e., it will reach its stated maturity and cease to be binding on either party), provided that either:
- a. The commitment is not subject to extension or renewal and will actually expire on its stated expiration date; or
 - b. If the commitment is subject to extension or renewal beyond its stated expiration date, the stated expiration date will be deemed the original maturity only if the extension or renewal must be based upon terms and conditions independently negotiated in good faith with the customer at the time of the extension or renewal and upon a new, bona fide credit analysis utilizing current information on financial condition and trends.
26. "Preferred stock" includes the following instruments:
- a. "Convertible preferred stock," means preferred stock that is mandatorily convertible into either common or perpetual preferred stock;
 - b. "Intermediate-term preferred stock," means preferred stock with an original maturity of at least five years, but less than twenty (20) years;
 - c. "Long-term preferred stock," means preferred stock with an original maturity of twenty (20) years or more; and
 - d. "Perpetual preferred stock," means preferred stock without a fixed 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.

For purposes of these instruments, preferred stock that can be redeemed at the option of the holder is deemed to have an "original maturity" of the earliest possible date on which it may be so redeemed.

27. "Public-sector entities" include states, local authorities and governmental subdivisions below the central government level in an OECD country. In the United States, this definition encompasses a state, county, city, town, or other municipal corporation, a public authority, and generally any publicly-owned entity that is an instrumentality of a state or municipal corporation. This definition does not include commercial companies owned by the public sector. (See "central government" definition for further explanation of commercial companies owned by the public sector.)
28. "Reciprocal holdings of bank capital instruments" means cross-holdings or other formal or informal arrangements in which two or more banking organizations swap, exchange, or otherwise agree to hold each other's capital instruments. This definition does not include holdings of capital instruments issued by other banking organizations that were

taken in satisfaction of debts previously contracted, provided that the reporting institution has not held such instruments for more than five (5) years or a longer period approved by the Banking Board.

29. "Replacement cost" means, with respect to interest rate and exchange rate contracts, the loss that would be incurred in the event of a counterparty default, as measured by the net cost of replacing the contract at the current market value. If default would result in a theoretical profit, the replacement value is considered to be zero. The mark-to-market process should incorporate changes in both interest rates and counterparty credit quality.
30. "Residential properties" means houses, condominiums, cooperative units, and manufactured homes. This definition does not include boats or motor homes, even if used as a primary residence.
31. "Risk-weighted assets" means the sum of total risk-weighted balance sheet assets and the total of risk-weighted off-balance sheet credit equivalent amounts. Risk-weighted balance sheet and off-balance sheet assets are calculated pursuant to Paragraph (D) of this Rule.
32. "Subsidiary" means any corporation, partnership, business trust, joint venture, association or similar organization in which an institution directly or indirectly holds more than a 50 percent ownership interest. This definition does not include ownership interests that were taken in satisfaction of debts previously contracted, provided that the reporting institution has not held the interest for more than five years or a longer period approved by the Banking Board.
33. "Total capital" means the sum of an institution's core (Tier 1) and qualifying supplementary (Tier 2) capital elements.
34. "Unconditionally cancelable" means, with respect to a commitment-type lending arrangement, that the institution may, at any time, with or without cause, refuse to advance funds or extend credit under the facility. In the case of home equity lines of credit, the institution is deemed able to unconditionally cancel the commitment if it can, at its option, prohibit additional extensions of credit, reduce the line, and terminate the commitment to the full extent permitted by relevant state and Federal law.
35. "United States Government or its agencies" means an instrumentality of the United States Government whose debt obligations are fully and explicitly guaranteed as to the timely payment of principal and interest by the full faith and credit of the United States Government.
36. "United States Government-sponsored agency" means an agency originally established or chartered to serve public purposes specified by the United States Congress, but whose obligations are not explicitly guaranteed by the full faith and credit of the United States Government.
37. "Walkaway clause" means a provision in a bilateral netting contract that permits a nondefaulting counterparty to make a lower payment than it would make otherwise under the bilateral netting contract, or no payment at all, to a defaulter or the estate of a defaulter, even if the defaulter or the estate of the defaulter is a net creditor under the bilateral netting contract.

C. Components of Capital. An institution's qualifying capital base consists of two types of capital--core (Tier 1) and supplementary (Tier 2).

1. Tier 1 Capital. The following elements comprise an institution's Tier 1 capital:
 - a. Common stockholders' equity;
 - b. Noncumulative perpetual preferred stock and related surplus (Preferred stock issues where the dividend is reset periodically based upon current market conditions and the institution's current credit rating, including but not limited to, auction rate, money market or remarketable preferred stock, are assigned to Tier 2 capital, regardless of whether the dividends are cumulative or noncumulative.); and
 - c. Minority interests in the equity accounts of consolidated subsidiaries, except that the following are not included in Tier 1 capital or total capital:

- (1) Minority interests in a small business investment company or investment fund that holds nonfinancial equity investments, and minority interests in a subsidiary that is engaged in nonfinancial activities and is held under one of the legal authorities listed in Paragraph (B)(23) of this Rule.
 - (2) Minority interests in consolidated asset-backed commercial paper programs sponsored by an institution if the consolidated assets are excluded from risk-weighted assets pursuant to Paragraph (D)(7)(e)(1) of this Rule.
- d. Less: Goodwill;
- e. Less: Other intangible assets, except mortgage servicing assets, purchased credit card relationships, and nonmortgage servicing assets subject to the following conditions. (Intangible assets are defined to exclude IO strips receivable related to these mortgage and non-mortgage servicing assets. See Paragraph (B)(18) of this Rule. Consequently, IO strips receivable related to mortgage and non-mortgage servicing assets are not required to be deducted under this Paragraph. However, credit-enhancing IO strips as defined in Paragraph (E)(1)(b) of this Rule are deducted from Tier 1 capital pursuant to Paragraph (C)(1)(g) of this Rule. Any noncredit-enhancing IO strips receivable are subject to a 100 percent risk weight under Paragraph (D)(7)(d) of this Rule.) For the purpose of determining Tier 1 capital, mortgage servicing assets, purchased credit card relationships, and nonmortgage servicing assets will be deducted from assets and from common stockholders' equity to the extent that these items do not meet the conditions, limitations, and restrictions described in this section. Institutions 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.
- (1) Valuation. The fair value of mortgage servicing assets, purchased credit card relationships, and nonmortgage servicing assets shall be estimated at least quarterly. The quarterly determination of the current fair value of the intangible asset must include adjustments for any significant changes in the original valuation assumptions, including changes in prepayment estimates. The Banking Board in its discretion may require independent fair value estimates on a case-by-case basis where it is deemed appropriate for safety and soundness purposes.
 - (2) Fair value limitation. For the purpose of calculating Tier 1 capital for minimum capital requirements (not for financial statement purposes), the balance sheet assets for mortgage servicing assets, purchased credit card relationships, and nonmortgage servicing assets will each be reduced to an amount equal to the lesser of:
 - (a) Ninety percent of the fair value of each intangible asset, determined pursuant to Paragraph (C)(1)(e)(1) of this Rule; or
 - (b) One hundred percent of the remaining unamortized book value.
 - (3) Tier 1 capital limitation. The total of all intangible assets that are included in Tier 1 capital is limited to 100 percent of Tier 1 capital, of which no more than 25 percent of Tier 1 capital can consist of purchased credit card relationships and non-mortgage servicing assets in the aggregate. Calculation of these limitations must be based on Tier 1 capital net of goodwill and all other identifiable intangibles, other than purchased credit card relationships, mortgage servicing assets and nonmortgage servicing assets.
- f. Less: Certain deferred tax assets.
- (1) Tier 1 capital limitations. The maximum allowable amount of deferred tax assets that are dependent upon future taxable income will be limited to the lesser of:

- (a) The amount of deferred tax assets that the institution could reasonably expect to realize within one year of the quarter-end Call Report, based on its estimate of future taxable income for that year; or
 - (b) Ten percent of Tier 1 capital, net of goodwill and all intangible assets other than purchased credit card relationships, mortgage servicing assets, and non-mortgage servicing assets.
 - (2) Net unrealized holding gains and losses on available-for-sale securities. An institution may eliminate the deferred tax effects of any net unrealized holding gains and losses on available-for-sale debt securities before calculating the amount of deferred tax assets subject to the limit in Paragraph (C)(1)(f)(1) of this Rule. Institutions report these net unrealized holding gains and losses in their Call Reports as a separate component of equity capital, but exclude them from the definition of common stockholders' equity for regulatory capital purposes. An institution that adopts a policy to deduct these amounts must apply that approach consistently in all future calculations of the amount of disallowed deferred tax assets under Paragraph (C)(1)(f)(1) of this Rule.
 - (3) Consolidated groups. The amount of deferred tax assets that an institution can realize from taxes paid in prior carryback years and from reversals of existing taxable temporary differences generally would not be deducted from capital. However, for an institution that is a member of a consolidated group (for tax purposes), the amount of carryback potential an institution may consider in calculating the limit on deferred tax assets under Paragraph (C)(1)(f)(1) of this Rule may not exceed the amount that the institution could reasonably expect to have refunded by its parent company.
 - (4) Nontaxable purchase business combination. A deferred tax liability that is specifically associated with an intangible asset (other than purchased mortgage servicing rights and purchased credit card relationships) due to a nontaxable purchase business combination may be netted against that intangible asset in calculating the amount of net deferred tax assets under Paragraph (C)(1)(f)(1) of this Rule. Only the net amount of the intangible asset must be deducted from Tier 1 capital. Deferred tax liabilities netted in this manner cannot also be netted against deferred tax assets when determining the amount of net deferred tax assets that are dependent upon future taxable income.
 - (5) Estimated future taxable income. Estimated future taxable income does not include net operating loss carryforwards to be used during that year or the amount of existing temporary differences expected to reverse within the year. An institution may use future taxable income projections for their closest fiscal year, provided it adjusts the projections for any significant changes that occur or that it expects to occur. Such projections must include the estimated effect of tax planning strategies that the institution expects to implement to realize net operating loss or tax credit carryforwards that will otherwise expire during the year.
- g. Less: Credit-enhancing IO strips (as defined in Paragraph (E)(1)(b) of this Rule). Credit-enhancing IO strips, whether purchased or retained, that exceed 25 percent of Tier 1 capital must be deducted from Tier 1 capital. Purchased and retained credit-enhancing IO strips, on a non-tax adjusted basis, are included in the total amount that is used for purposes of determining whether an institution exceeds its Tier 1 capital.
- (1) The 25 percent limitation on credit-enhancing IO strips will be based on Tier 1 capital net of goodwill and all identifiable intangibles, other than purchased credit card relationships, mortgage servicing assets and non-mortgage servicing assets.

- (2) Institutions must value each credit-enhancing IO strip included in Tier 1 capital at least quarterly. The quarterly determination of the current fair value of the credit-enhancing IO strip must include adjustments for any significant changes in original valuation assumptions, including changes in prepayment estimates.
 - (3) Institutions may elect to deduct disallowed credit-enhancing IO strips 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.
- h. Less: Nonfinancial equity investments as provided by this section.
- (1) General.
 - (a) An institution must deduct from its Tier 1 capital the appropriate percentage, as determined pursuant to Table A, of the adjusted carrying value of all nonfinancial equity investments held by the institution and its subsidiaries.

TABLE A	
Deduction for Nonfinancial Equity Investments	
Aggregate adjusted carrying value of all nonfinancial equity investments held directly or indirectly by institutions (as a percentage of the Tier 1 capital of the institution)¹	Deduction from Tier 1 capital (as a percentage of the adjusted carrying value of the investment)
Less than 15 percent	8.0 percent
Greater than or equal to 15 percent but less than 25 percent	12.0 percent
Greater than or equal to 25 percent	25.0 percent

¹For purposes of calculating the adjusted carrying value of nonfinancial equity investments as a percentage of Tier 1 capital, Tier 1 capital is defined as the sum of the Tier 1 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, but prior to the deduction for disallowed mortgage servicing assets, disallowed nonmortgage servicing assets, disallowed purchased credit card relationships, disallowed credit-enhancing IO strips (both purchased and retained), disallowed deferred tax assets, and nonfinancial equity investments.

- (b) Deductions for nonfinancial equity investments must be applied on a marginal basis to the portions of the adjusted carrying value of nonfinancial equity investments that fall within the specified ranges of the institution's Tier 1 capital. For example, if the adjusted carrying value of all nonfinancial equity investments held by an institution equals 20 percent of the Tier 1 capital of the institution, then the amount of the deduction would be 8 percent of the adjusted carrying value of all investments up to 15 percent of the institution's Tier 1 capital, and 12 percent of the adjusted carrying value of all investments equal to, or in excess of, 15 percent of the institution's Tier 1 capital.
- (c) The total adjusted carrying value of any nonfinancial equity investment that is subject to deduction under Paragraph (C)(1)(h) of this Rule is excluded from the institution's weighted risk assets for purposes of computing the denominator of the institution's risk-based capital ratio. For example, if 8 percent of the adjusted carrying value of a nonfinancial equity investment is deducted from Tier 1 capital, the entire adjusted carrying value of the investment will be excluded from risk-weighted assets in calculating the denominator of the risk-based capital ratio.
- (d) Institutions engaged in equity investment activities, including those institutions with a high concentration in nonfinancial equity investments (e.g., in excess of 50 percent of Tier 1 capital), will

be monitored and may be subject to heightened supervision, as appropriate, by the Division of Banking to ensure that such institutions maintain capital levels that are appropriate in light of their equity investment activities, and the Banking Board may impose a higher capital charge in any case where the circumstances, such as the level of risk of the particular investment or portfolio of investments, the risk management systems of the institution, or other information, indicate that a higher minimum capital requirement is appropriate.

- (2) Small business investment company investments (SBIC).
- (a) Notwithstanding Paragraph (C)(1)(h)(1)(a) of this Rule, no deduction is required for nonfinancial equity investments that are made by an institution or its subsidiary through a SBIC that is consolidated with the institution, or in a SBIC that is not consolidated with the institution, to the extent that such investments, in the aggregate, do not exceed 15 percent of the Tier 1 capital of the institution. Except as provided in Paragraph (C)(1)(h)(2)(b) of this Rule, any nonfinancial equity investment that is held through or in a SBIC and not deducted from Tier 1 capital will be assigned to the 100 percent risk-weight category and included in the institution's consolidated risk-weighted assets.
 - (b) If an institution has an investment in a SBIC that is consolidated for accounting purposes but the SBIC is not wholly owned by the institution, the adjusted carrying value of the institution's nonfinancial equity investments held through the SBIC is equal to the institution's proportionate share of the SBIC's adjusted carrying value of its equity investments in nonfinancial companies. The remainder of the SBIC's adjusted carrying value (i.e., the minority interest holders' proportionate share) is excluded from the risk-weighted assets of the institution.
 - (c) If an institution has an investment in a SBIC that is not consolidated for accounting purposes and has current information that identifies the percentage of the SBIC's assets that are equity investments in nonfinancial companies, the institution may reduce the adjusted carrying value of its investment in the SBIC proportionately to reflect the percentage of the adjusted carrying value of the SBIC's assets that are not equity investments in nonfinancial companies. The amount by which the adjusted carrying value of the institution's investment in the SBIC is reduced under this Paragraph will be risk weighted at 100 percent and included in the institution's risk-weighted assets.
 - (d) To the extent the adjusted carrying value of all nonfinancial equity investments that the institution holds through a consolidated SBIC or in a nonconsolidated SBIC equals or exceeds, in the aggregate, 15 percent of the Tier 1 capital of the institution, the appropriate percentage of such amounts, as set forth in Table A of this Rule, must be deducted from the institution's Tier 1 capital. In addition, the aggregate adjusted carrying value of all nonfinancial equity investments held through a consolidated SBIC and in a nonconsolidated SBIC (including any nonfinancial equity investments for which no deduction is required) must be included in determining, for the purposes of Table A of this Rule, the total amount of nonfinancial equity investments held by the institution in relation to its Tier 1 capital.

- (3) Nonfinancial equity investments excluded.
 - (a) Notwithstanding Paragraphs (C)(1)(h)(1) and (2) of this Rule, no deduction from Tier 1 capital is required for the following:
 - (i) Nonfinancial equity investments (or portion of such investments) made by the institution prior to March 13, 2000, and continuously held by the institution since March 13, 2000.
 - (ii) Nonfinancial equity investments made on or after March 13, 2000, pursuant to a legally binding written commitment that was entered into by the institution prior to March 13, 2000, and that required the institution to make the investment, if the institution has continuously held the investment since the date the investment was acquired.
 - (iii) Nonfinancial equity investments received by the institution through a stock split or stock dividend on a nonfinancial equity investment made prior to March 13, 2000, provided that the institution provides no consideration for the shares or interests received, and the transaction does not materially increase the institution's proportional interest in the nonfinancial company.
 - (iv) Nonfinancial equity investments received by the institution through the exercise on or after March 13, 2000, of an option, warrant, or other agreement that provides the institution with the right, but not the obligation, to acquire equity or make an investment in a nonfinancial company, if the option, warrant, or other agreement was acquired by the institution prior to March 13, 2000, and the institution provides no consideration for the nonfinancial equity investments.
 - (b) Any excluded nonfinancial equity investments described in Paragraph (C)(1)(h)(3)(a) of this Rule must be included in determining the total amount of nonfinancial equity investments held by the institution in relation to its Tier 1 capital for the purposes of Table A of this Rule. In addition, any excluded nonfinancial equity investments will be risk weighted at 100 percent and included in the institution's risk-weighted assets.
2. Tier 2 Capital. Tier 2 capital is limited to 100 percent of Tier 1 capital. The following elements comprise an institution's Tier 2 capital:
 - a. Allowance for loan and lease losses, up to a maximum of 1.25 percent of risk-weighted assets. (The amount of the allowance for loan and lease losses that may be included in capital is based on a percentage of risk-weighted assets. The gross sum of risk-weighted assets used in this calculation includes all risk-weighted assets, with the exception of the assets required to be deducted from capital under Paragraph (D) of this Rule in establishing risk-weighted assets (i.e., the assets required to be deducted from capital under Paragraph (C) of this Rule. An institution may deduct reserves for loan and lease losses in excess of the amount permitted to be included as capital, as well as allocated transfer risk reserves and reserves held against other real estate owned, from the gross sum of risk-weighted assets in computing the denominator of the risk-based capital ratio.)
 - b. Cumulative perpetual preferred stock, long-term preferred stock, convertible preferred stock, and any related surplus, without limit, if the issuing institution has the option to defer payment of dividends on these instruments. For long-term preferred stock, the amount that is eligible to be included as Tier 2 capital is

reduced by 20 percent of the original amount of the instrument (net of redemptions) at the beginning of each of the last five years of the life of the instrument.

c. Hybrid capital instruments, without limit. Hybrid capital instruments are those instruments that combine certain characteristics of debt and equity, such as perpetual debt. To be included as Tier 2 capital, these instruments must meet the following criteria:

- (1) The instrument must be unsecured, subordinated to the claims of depositors and general creditors, and fully paid up;
- (2) The instrument must not be redeemable at the option of the holder prior to maturity, except with the prior approval of the Banking Board;
- (3) The instrument must be available to participate in losses while the issuer is operating as a going concern (in this regard, the instrument must automatically convert to common stock or perpetual preferred stock, if the sum of the retained earnings and capital surplus accounts of the issuer shows a negative balance); and
- (4) The instrument must provide the option for the issuer to defer principal and interest payments, if
 - (a) The issuer does not report a net profit for the most recent combined four quarters; and
 - (b) The issuer eliminates cash dividends on its common and preferred stock.

(Mandatory convertible debt instruments that meet the requirements of Paragraphs (C)(2)(d)(1) through (7) and that unqualifiedly require the issuer to exchange either common or perpetual preferred stock for such instruments by a date at or before the maturity of the instrument (the maturity of these instruments must be 12 years or less), or that have been previously approved as capital by the Banking Board, are treated as qualifying hybrid capital instruments.)

d. Term subordinated debt instruments and intermediate-term preferred stock and related surplus are included in Tier 2 capital, but only to a maximum of 50 percent of Tier 1 capital as calculated after deductions pursuant to Paragraphs (C)(1)(d) through (h) and Paragraph (C)(3) of this Rule. To be considered capital, term subordinated debt instruments must meet the following requirements:

- (1) Have original weighted average maturities of at least five years;
- (2) Be subordinated to the claims of depositors;
- (3) State on the instrument that it is not a deposit and is not insured by the Federal Deposit Insurance Corporation (FDIC);
- (4) Be approved as capital by the Banking Board;
- (5) Be unsecured;
- (6) Be ineligible as collateral for a loan by the issuing institution;
- (7) Provide that once any scheduled payments of principal begin, all scheduled payments shall be made at least annually and the amount repaid in each year shall be no less than in the prior year; and
- (8) Provide that no prepayment (including payment pursuant to an acceleration clause or redemption prior to maturity) shall be made without the prior written approval of the Banking Board.

Also, at the beginning of each of the last five years for the life of either type of instrument, the amount that is eligible to be included as Tier 2 capital is reduced by 20 percent of the original amount of that instrument (net of redemptions). (Capital instruments may be redeemed prior to maturity with the prior approval of the Banking Board. The Banking Board typically will consider requests for the redemption of capital

instruments when the instruments are to be redeemed with the proceeds of, or replaced by, a like amount of a similar or higher quality capital instrument. However, the Banking Board reserves the authority to deny redemption in such circumstances or to allow redemption in other circumstances, based upon its evaluation of the circumstances of each case. The Banking Board must be notified in writing of any request for redemption at least thirty (30) days in advance of such redemption.)

- e. 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. However, the Banking Board may exclude all or a portion of these unrealized gains from Tier 2 capital if the Banking Board determines that the equity securities are not prudently valued. Unrealized gains (losses) on other types of assets, such as institution premises and available-for-sale debt securities, are not included in Tier 2 capital, but the Banking Board may take these unrealized gains (losses) into account as additional factors when assessing an institution's overall capital adequacy.
3. Deductions From Total Capital (the sum of Tier 1 capital plus Tier 2 capital). The following items are deducted from total capital:
 - a. Investments, both equity and debt, in unconsolidated banking and finance subsidiaries that are deemed to be capital of the subsidiary. The Banking Board may require deduction of investments in other subsidiaries and associated companies on a case-by-case basis.
 - b. Reciprocal holdings of capital instruments issued by banks.

D. Risk Categories/Weights for On-Balance Sheet Assets and Off-Balance Sheet Items

1. The denominator of the risk-based capital ratio, i.e., an institution's risk-weighted assets, is derived by assigning that institution's assets and off-balance sheet items to one of the four risk categories detailed in Paragraph (D)(7) of this Rule. Each category has a specific risk weight.
2. Before an off-balance sheet item is assigned a risk weight, it is converted to an on-balance sheet credit equivalent amount pursuant to Paragraph (D)(8) of this Rule.
3. The risk weight assigned to a particular asset or on-balance sheet credit equivalent amount determines the percentages of that asset/credit equivalent that is included in the denominator of the institution's risk-based capital ratio. Any asset deducted from an institution's capital in computing the numerator of the risk-based capital ratio is not included as part of the institution's risk-weighted assets.
4. The Banking Board reserves the right to require an institution to compute its risk-based capital ratio on the basis of average, rather than period-end, risk-weighted assets when necessary to carry out the purposes of these guidelines.
5. Some of the assets on an institution's balance sheet may represent an indirect holding of a pool of assets, e.g., mutual funds, that encompasses more than one risk weight within the pool. In those situations, the institution may assign the asset to the risk category applicable to the highest risk-weighted asset that pool is permitted to hold pursuant to its stated investment objectives in the fund's prospectus. Alternatively, the institution may assign the asset on a pro rata basis to different risk categories according to the investment limits in the fund's prospectus. In either case, the minimum risk weight that may be assigned to such a pool is 20 percent. If an institution assigns the asset on a pro rata basis, and the sum of the investment limits in the fund's prospectus exceeds 100 percent, the institution must assign the highest pro rata amounts of its total investment to the higher risk category. If, in order to maintain a necessary degree of liquidity, the 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 generally will not be taken into account in determining the risk category into which the institution's holding in the overall pool should be assigned. The prudent use of hedging instruments by a fund to reduce the risk of its assets will not increase the risk-

weighting of the investment in that fund above the 20 percent category. However, if a fund engages in any activities that are deemed to be speculative in nature or has any other characteristics that are inconsistent with the preferential risk weighting assigned to the fund's assets, the institution's investment in the fund will be assigned to the 100 percent risk category. More detail on the treatment of mortgage-backed securities is provided in Paragraph (D)(7)(c)(6) of this Rule.

6. In addition, when certain institutions that are engaged in trading activities calculate the risk-based capital ratio under this Rule, the institution must also refer to Appendix B, which incorporates capital charges for certain market risk into the risk-based capital ratio. When calculating the risk-based capital ratio, such institutions are required to refer to Appendix B for supplemental rules to determine qualifying and excess capital, calculate risk-weighted assets, calculate market risk equivalent assets and add them to risk-weighted assets, and calculate risk-based capital ratios as adjusted for market risk. (Trading activity means the gross sum of trading assets and liabilities as reported in the institution's most recent Call Report.
7. On-Balance Sheet Assets. The following are the risk categories/weights for on-balance sheet assets:
 - a. Zero percent risk weight.
 - (1) Cash, including domestic and foreign currency owned and held in all offices of an institution or in transit. Any foreign currency held by an institution should be converted into U.S. dollar equivalents.
 - (2) Deposit reserves and other balances at Federal Reserve banks.
 - (3) Securities issued by, and other direct claims on, the United States Government or its agencies, or the central governments of an OECD country.
 - (4) That portion of assets directly and unconditionally guaranteed by the United States Government or its agencies, or the central government of an OECD country. (For the treatment of privately-issued mortgage-backed securities where the underlying pool is comprised solely of mortgage-related securities issued by GNMA (see Paragraph (D)(7)(b)(7) of this Rule)).
 - (5) That portion of local currency claims on, or unconditionally guaranteed by central governments of non-OECD countries, to the extent the institution has local currency liabilities in that country. Any amount of such claims that exceeds the amount of the institution's local currency liabilities is assigned to the 100 percent risk category of Paragraph (D)(7)(d) of this Rule.
 - (6) Gold bullion held in the institution's own vaults or in another institution's vaults on an allocated basis, to the extent it is backed by gold bullion liabilities.
 - (7) The book value of paid-in Federal Reserve Bank stock.
 - (8) That portion of assets and off-balance sheet transactions collateralized by cash or securities issued or directly and unconditionally guaranteed by the United States Government or its agencies, or the central government of an OECD country provided that:
 - (a) The institution maintains control over the collateral:
 - (i) If the collateral consists of cash, the cash must be held on deposit by the institution or by a third party for the account of the institution;
 - (ii) If the collateral consists of OECD government securities, then the OECD government securities must be held by the institution or by a third party acting on behalf of the institution;
 - (b) The institution maintains a daily positive margin of collateral fully taking into account any change in the market value of the collateral held as security;

- (c) Where the institution is acting as a customer's agent in a transaction involving the loan or sale of securities that is collateralized by cash or OECD government securities delivered to the institution, any obligation by the institution to indemnify the customer is limited to no more than the difference between the market value of the securities lent and the market value of the collateral received, and any reinvestment risk associated with the collateral is borne by the customer; and
- (d) The transaction involves no more than minimal risk.

NOTE: Assets and off-balance sheet transactions collateralized by securities issued or guaranteed by the United States Government or its agencies, or the central government of an OECD country include, but are not limited to, securities lending transactions, repurchase agreements, collateralized letters of credit, such as reinsurance letters of credit, and other similar financial guarantees. Swaps, forwards, futures, and options transactions are also eligible, if they meet the collateral requirements. However, the Banking Board may, at its discretion, require that certain collateralized transactions be risk weighted at 20 percent if they involve more than a minimal risk.

b. Twenty percent risk weight.

- (1) All claims on depository institutions incorporated in an OECD country, and all assets backed by the full faith and credit of depository institutions incorporated in an OECD country. This includes the credit equivalent amount of participations in commitments and standby letters of credit sold to other depository institutions incorporated in an OECD country, but only if the originating institution remains liable to the customer or beneficiary for the full amount of the commitment or standby letter of credit. Also included in this category are the credit equivalent amounts of risk participations in bankers' acceptances conveyed to other depository institutions incorporated in an OECD country. However, institution-issued securities that qualify as capital of the issuing institution are not included in this risk category, but are assigned to the 100 percent risk category of Paragraph (D)(7)(d) of this Rule.
- (2) Claims on or guaranteed by depository institutions, other than the central bank, incorporated in a non-OECD country, with a residual maturity of one year or less.
- (3) Cash items in the process of collection.
- (4) That portion of assets collateralized by cash or securities issued or directly and unconditionally guaranteed by the United States Government or its agencies, or the central government of an OECD country, that does not qualify for the zero percent risk-weight category.
- (5) That portion of assets conditionally guaranteed by the United States Government or its agencies, or the central government of an OECD country.
- (6) Securities issued by, or other claims on, United States Government-sponsored agencies.
- (7) That portion of assets guaranteed by United States Government-sponsored agencies. Privately issued mortgage-backed securities, e.g., CMOs and REMICs, where the underlying pool is comprised solely of mortgage-related securities issued by GNMA, FNMA, and FHLMC, will be treated as an indirect holding of the underlying assets and assigned to the 20 percent risk category of this Paragraph (D)(7)(b). If the underlying pool is comprised of assets that attract different risk weights, e.g., FNMA securities and conventional mortgages, the institution should

generally assign the security to the highest risk category appropriate for any asset in the pool. However, on a case-by-case basis, the Banking Board may allow the institution to assign the security proportionately to the various risk categories based on the proportion in which the risk categories are represented by the composition cash flows of the underlying pool of assets. Before the Banking Board will consider a request to proportionately risk-weight such a security, the institution must have current information for the reporting date that details the composition and cash flows of the underlying pool of assets. Furthermore, before a mortgage-related security will receive a risk weight lower than 100 percent, it must meet the criteria set forth in Paragraph (D)(7)(c)(6) of this Rule.

- (8) That portion of assets collateralized by the current market value of securities issued or guaranteed by United States Government-sponsored agencies.
- (9) Claims representing general obligations of any public-sector entity in an OECD country, and that portion of any claims guaranteed by any such public-sector entity.
- (10) Claims on, or guaranteed by, official multilateral lending institutions or regional development institutions in which the United States Government is a shareholder or contributing member. These institutions include, but are not limited to, the International Bank for Reconstruction and Development (World Bank), the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, the European Investments Bank, the International Monetary Fund and the Bank for International Settlements.
- (11) That portion of assets collateralized by the current market value of securities issued by official multilateral lending institutions or regional development institutions in which the United States Government is a shareholder or contributing member.
- (12) That portion of local currency claims conditionally guaranteed by central governments of non-OECD countries, to the extent the institution has local currency liabilities in that country. Any amount of such claims that exceeds the amount of the institution's local currency liabilities is assigned to the 100 percent risk category of Paragraph (D)(7)(d) of this Rule.
- (13) Claims on, or guaranteed by, a securities firm incorporated in an OECD country, that satisfies the following conditions:
 - (a) If the securities firm is incorporated in the United States, then the firm must be a broker-dealer that is registered with the SEC and must be in compliance with the SEC's net capital regulation.
 - (b) If the securities firm is incorporated in any other OECD country, then the institution must be able to demonstrate that the firm is subject to consolidated supervision and regulation, including its subsidiaries, comparable to that imposed on depository institutions in OECD countries; such regulation must include risk-based capital standards comparable to those applied to depository institutions under the Basel Capital Accord.
 - (c) The securities firm, whether incorporated in the United States or another OECD country, must also have a long-term credit rating pursuant to Paragraph (D)(7)(b)(13)(c)(i) of this Rule; a parent company guarantee pursuant to Paragraph (D)(7)(b)(13)(c)(ii) of this Rule; or a collateralized claim pursuant to Paragraph (D)(7)(b)(13)(c)(iii) of this Rule. Claims representing capital of a securities firm must be risk-weighted at 100 percent pursuant to Paragraph (D)(7)(d) of this Rule.

- (i) Credit Rating. The securities firm must have either a long-term issuer credit rating or a credit rating on at least one issue of long-term unsecured debt, from a NRSRO that is in one of the three highest investment-grade categories used by the NRSRO. If the securities firm has a credit rating from more than one NRSRO, the lowest credit rating must be used to determine the credit rating under this Paragraph.
 - (ii) Parent company guarantee. The claim on, or guarantee by, the securities firm must be guaranteed by the firm's parent company, and the parent company must have either a long-term issuer credit rating or a credit rating on at least one issue of long-term unsecured debt, from a NRSRO that is in one of the three highest investment-grade categories used by the NRSRO.
 - (iii) Collateralized claim. The claim on the securities firm must be collateralized subject to all of the following requirements:
 - a) The claim must arise from a reverse repurchase/repurchase agreement or securities lending/borrowing contract executed using standard industry documentation.
 - b) The collateral must consist of debt or equity securities that are liquid and readily marketable.
 - c) The claim and collateral must be marked-to-market daily.
 - d) The claim must be subject to daily margin maintenance requirements under standard industry documentation.
 - e) The contract from which the claim arises can be liquidated, terminated, or accelerated immediately in bankruptcy or similar proceedings, and the security or collateral agreement will not be stayed or avoided under the applicable law of the relevant jurisdiction. To be exempt from the automatic stay in bankruptcy in the United States, the claim must arise from a securities contract or a repurchase agreement under section 555 or 559, respectively, of the Bankruptcy Code, a qualified financial contract under section 11(e)(8) of the Federal Deposit Insurance Act, or a netting contract between or among financial institutions under section 401-407 of the Federal Deposit Insurance Corporation Improvement Act of 1991, or the Regulation EE.
- c. Fifty percent risk weight.
 - (1) Revenue obligations of any public-sector entity in an OECD country for which the underlying obligor is the public-sector entity, but which are repayable solely from the revenues generated by the project financed through the issuance of the obligations.
 - (2) The credit equivalent amount of derivative contracts, calculated pursuant to Paragraph (D)(8)(g) of this Rule, that do not qualify for inclusion in a lower risk category.
 - (3) Loans secured by first mortgages on one-to-four family residential properties, either owner-occupied or rented, provided that such loans are

not otherwise ninety (90) days or more past due, or on nonaccrual or restructured. If an institution holds the first and junior lien on a one-to-four family residential property and no other party holds an intervening lien, the transaction is treated as a single loan secured by a first lien for purposes of both determining the loan-to-value ratio and assigning a risk weight to the transaction. It is presumed that such loans will meet prudent underwriting standards. Furthermore, residential property loans made for the purpose of construction financing are assigned to the 100 percent risk category of Paragraph (D)(7)(d) of this Rule; however, these loans may be included in the 50 percent category of this Paragraph (D) if they are subject to a legally binding sales contract and satisfy the requirements of Paragraph (D)(7)(c)(4) of this Rule.

- (4) Loans to residential real estate builders for one-to-four family residential property construction, if the institution obtains sufficient documentation demonstrating that the buyer of the home intends to purchase the home (i.e., a legally binding written sales contract) and has the ability to obtain a mortgage loan sufficient to purchase the home (i.e., a firm written commitment for permanent financing of the home upon completion), subject to the following additional criteria:
- (a) The builder must incur at least the first 10 percent of the direct costs (i.e., actual costs of the land, labor, and material) before any drawdown is made under the construction loan, and the construction loan may not exceed 80 percent of the sales price of the presold home;
 - (b) The individual purchaser has made a substantial “earnest money deposit” of no less than 3 percent of the sales price of the home that must be subject to forfeiture by the individual purchaser if the sales contract is terminated by the individual purchaser; however, the earnest money deposit shall not be subject to forfeiture by reason of breach or termination of the sales contract on the part of the builder;
 - (c) The earnest money deposit must be held in escrow by the institution financing the builder or by an independent party in a fiduciary capacity; the escrow agreement must provide that in the event of default the escrow funds must be used to defray any cost incurred relating to any cancellation of the sales contract by the buyer;
 - (d) If the individual purchaser terminates the contract, or if the loan fails to satisfy any other criterion under this section, then the institution must immediately recategorize the loan at a 100 percent risk weight and must accurately report the loan in the institution’s next quarterly Call Report;
 - (e) The individual purchaser must intend that the home will be owner-occupied;
 - (f) The loan is made by the institution pursuant to prudent underwriting standards;
 - (g) The loan is not more than ninety (90) days past due, or on nonaccrual; and
 - (h) The purchaser is an individual(s) and not a partnership, joint venture, trust, corporation, or any other entity (including an entity acting as a sole proprietorship) that is purchasing one or more of the homes for speculative purposes.
- (5) Loans secured by a first mortgage on multifamily residential properties. The portion of multifamily residential property loans that is sold subject to a pro rata loss sharing arrangement may be treated by the selling institution as sold 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 institution. The portion of multifamily residential property loans sold subject to any loss sharing arrangement, other than pro rata sharing of the loss, shall be accorded the same treatment as any other asset sold under an agreement to repurchase or sold with recourse under Paragraph (E)(2) of this Rule. For a multifamily residential property to be included in the 50 percent risk weight category it must comply with the following:

- (a) The amortization of principal and interest occurs in not more than thirty (30) years;
- (b) The minimum original maturity for repayment of principal is not less than seven (7) years;
- (c) All principal and interest payments have been made on a timely basis pursuant to the terms of the loan for at least one year immediately preceding the risk-weighting of the loan in the 50 percent risk weight category, and the loan is not otherwise ninety (90) days or more past due, or on nonaccrual status;
- (d) The loan is made pursuant to all applicable requirements and prudent underwriting standards;
- (e) If the rate of interest does not change over the term of the loan:
 - (i) The current loan amount outstanding does not exceed 80 percent of the current value of the property, as measured by either the value of the property at origination of the loan (which is the lower of the purchase price or the value as determined by the initial appraisal, or if appropriate, the initial evaluation) or the most current appraisal, or if appropriate, the most current evaluation; and
 - (ii) In the most recent fiscal year, the ratio of annual net operating income generated by the property (before payment of any debt service on the loan) to annual debt service of the loan is not less than 120 percent;
- (f) If the rate of interest changes over the term of the loan:
 - (i) The current loan amount outstanding does not exceed 75 percent of the current value of the property, as measured by either the value of the property at origination of the loan (which is the lower of the purchase price or the value as determined by the initial appraisal, or if appropriate, the initial evaluation) or the most current appraisal, or if appropriate, the most current evaluation; and
 - (ii) In the most recent fiscal year, the ratio of annual net operating income generated by the property (before payment of any debt service on the loan) to annual debt service on the loan is not less than 115 percent; and
- (g) If the loan was refinanced by the borrower:
 - (i) All principal and interest payments on the loan being refinanced that were made in the preceding year prior to refinancing shall apply in determining the one-year timely payment requirement under Paragraph (D)(7)(c)(5)(c) of this Rule; and
 - (ii) The net operating income generated by the property in the preceding year prior to refinancing shall apply in determining the applicable debt service requirements under Paragraphs (D)(7)(c)(5)(e) and (f) of this Rule.

NOTE: For the purposes of the debt service requirements in Paragraphs (D)(7)(c)(5)(e)(ii) and (f)(ii) of this Rule, other forms of debt service coverage that generate sufficient cash flows to provide comparable protection to the institution may be considered for: (a) a loan secured by cooperative housing; or (b) a multifamily residential property loan if the purpose of the loan is for the development or purchase of multifamily residential property primarily intended to provide low- to moderate-income housing, including special operating reserve accounts or special operating subsidies provided by federal, state, local or private sources. However, the Banking Board reserves the right, on a case-by-case basis, to review the adequacy of any other forms of comparable debt service coverage relied on by the institution.

- (6) Privately-issued mortgage-backed securities, i.e., those that do not carry the guarantee of a government or government-sponsored agency, if the privately-issued mortgage-backed securities are, at the time the mortgage-backed securities are originated, fully secured by, or otherwise represent, a sufficiently secure interest in mortgages that qualify for the 50 percent risk weight under Paragraph (D)(7)(c)(3) through (5) of this Rule, provided they meet the following criteria:
- (a) The underlying assets must be held by an independent trustee that has a first priority, perfected security interest in the underlying assets for the benefit of the holders of the security;
 - (b) The holder of the security must have an undivided pro rata ownership interest in the underlying assets or the trust that issues the security must have no liabilities unrelated to the issued securities;
 - (c) The trust that issues the security must be structured such that the cash flows from the underlying assets fully meet the cash flow requirements of the security without undue reliance on any reinvestment income; and
 - (d) There must not be any material reinvestment risk associated with any funds awaiting distribution to the holder of the security.

NOTE: If all of the underlying mortgages in the pool do not qualify for the 50 percent risk weight, the institution should generally assign the entire value of the security to the 100 percent risk category of Paragraph (D)(7)(d) of this Rule; however, on a case-by-case basis, the Banking Board may allow the institution to assign only the portion of the security which represents an interest in, and the cash flows of, nonqualifying mortgages to the 100 percent risk category, with the remainder being assigned a risk weight of 50 percent. Before the Banking Board will consider a request to risk weight a mortgage-backed security on a proportionate basis, the institution must have current information for the reporting date that details the composition and cash flows of the underlying pool of mortgages.

- d. One hundred percent risk weight. All other assets not specified above, including, but not limited to:
- (1) Claims on or guaranteed by depository institutions incorporated in a non-OECD country, as well as claims on the central bank of a non-OECD country, with a residual maturity exceeding one year;
 - (2) All non-local currency claims on non-OECD central governments, as well as local currency claims on non-OECD central governments that are not included in Paragraph (D)(7)(a)(5) of this Rule;
 - (3) Asset- or mortgage-backed securities that are externally rated are risk-weighted pursuant to Paragraph (E)(4) of this Rule;

- (4) All stripped mortgage-backed securities, including IO portions, principal only portions (POs), and other similar instruments, regardless of the issuer or guarantor;
- (5) Obligations issued by any state or any political subdivision thereof for the benefit of a private party or enterprise where that party or enterprise, rather than the issuing state or political subdivision, is responsible for the timely payment of principal and interest on the obligation, e.g., industrial development bonds;
- (6) Claims on commercial enterprises owned by non-OECD and OECD central governments;
- (7) Any investment in an unconsolidated subsidiary that is not required to be deducted from total capital;
- (8) Instruments issued by depository institutions incorporated in OECD and non-OECD countries that qualify as capital of the issuer;
- (9) Investments in fixed assets, premises, and other real estate owned;
- (10) Claims representing capital of a securities firm notwithstanding Paragraph (D)(7)(b)(13) of this Rule.

NOTE: An institution subject to the market risk capital requirements pursuant to Appendix B of this Rule may calculate the capital requirement for qualifying securities borrowing transactions pursuant to Paragraph (C)(1)(a)(2) of Appendix B of this Rule.

- e. Asset-backed commercial paper programs subject to consolidation.
 - (1) An institution that qualifies as a primary beneficiary and must consolidate an asset-backed commercial paper program as a variable interest entity under generally accepted accounting principles may exclude the consolidated asset-backed commercial paper program assets from risk-weighted assets if the institution is the sponsor of the consolidated asset-backed commercial paper program.
 - (2) If an institution excludes such consolidated asset-backed commercial paper program assets from risk-weighted assets, the institution must assess the appropriate risk-based capital charge against any risk exposures of the institution arising in connection with such asset-backed commercial paper program, including direct credit substitutes, recourse obligations, residual interests, asset-backed commercial paper liquidity facilities, and loans pursuant to Paragraphs (D) and (E) of this Rule.
 - (3) If an institution is either not permitted to exclude consolidated asset-backed commercial paper program assets or elects not to exclude consolidated asset-backed commercial paper program assets from its risk-weighted assets, the institution must assess a risk-based capital charge based on the appropriate risk weight of the consolidated asset-backed commercial paper program assets pursuant to Paragraphs (D)(7) and (E) of this Rule. Any direct credit substitutes and recourse obligations (including residual interests and asset-backed commercial paper liquidity facilities), and loans that sponsoring institutions provide to such asset-backed commercial paper programs are not subject to a capital charge under Paragraph (E) of this Rule.
 - (4) If an institution has multiple overlapping exposures (such as a program-wide credit enhancement and an asset-backed commercial paper liquidity facility) to an asset-backed commercial paper program that is not consolidated for risk-based capital purposes, the institution must apply the highest capital charge applicable to the exposures but is not required to hold capital multiple times for the overlapping exposures under Paragraph (E) of this Rule.
- f. Other variable interest entities subject to consolidation. If an institution is required to consolidate the assets of a variable interest entity other than an

asset-backed commercial paper program under generally accepted accounting principles, the institution must assess a risk-based capital charge based on the appropriate risk weight of the consolidated assets pursuant to Paragraphs (D)(7) and (E) of this Rule. Any direct credit substitutes and recourse obligations (including residual interests), and loans that an institution may provide to such a variable interest entity are not subject to any capital charge under Paragraph (E) of this Rule.

8. Off-Balance Sheet Activities. The risk weight assigned to an off-balance sheet item is determined by a two-step process. First, the face amount of the off-balance sheet item is multiplied by the appropriate credit conversion factor specified in this Paragraph (D)(8). This calculation translates the face amount of an off-balance sheet item into an on-balance sheet credit equivalent amount. Second, the resulting credit equivalent amount is then assigned to the proper risk category using the criteria regarding obligors, guarantors and collateral listed in Paragraph (D)(7) of this Rule, or external credit rating pursuant to Paragraph (E)(4) of this Rule, if applicable. Collateral and guarantees are applied to the face amount of an off-balance sheet item; however, with respect to derivative contracts under Paragraph (D)(8)(g) of this Rule, collateral and guarantees are applied to the credit equivalent amounts of such derivative contracts. The following are the credit conversion factors and the off-balance sheet items to which they apply. However, direct credit substitutes, recourse obligations, and securities issued in connection with asset securitizations are treated as described in Paragraph (E) of this Rule.
- a. One hundred percent credit conversion factor.
 - (1) Risk participations purchased in bankers' acceptances.
 - (2) Contingent obligations with a certain draw down, e.g., legally binding agreements to purchase assets at a specified future date.
 - (3) Indemnification of customers whose securities the institution has lent as agent. If the customer is not indemnified against loss by the institution, the transaction is excluded from the risk-based capital calculation. When an institution lends its own securities, the transaction is treated as a loan. When an institution lends its own securities or, acting as agent, agrees to indemnify a customer, the transaction is assigned to the risk weight appropriate to the obligor or collateral that is delivered to the lending or indemnifying institution or to an independent custodian acting on their behalf.
 - b. Fifty percent credit conversion factor.
 - (1) Transaction-related contingencies including, among other things, performance bonds and performance-based standby letters of credit related to a particular transaction. A "performance-based standby letter of credit" is any letter of credit, or similar arrangement, however named or described, that represents an irrevocable obligation to the beneficiary on the part of the issuer to make payment on account of any default by the account party in the performance of a non-financial or commercial obligation. Participations in performance-based standby letters of credit are treated pursuant to Paragraph (E) of this Rule. To the extent permitted by law or regulation, performance-based standby letters of credit include such things as arrangements backing subcontractors' and suppliers' performance, labor and materials contracts, and construction bids.
 - (2) Unused portion of commitments with an original maturity exceeding one year; however, commitments that are asset-backed commercial paper liquidity facilities must satisfy the eligibility requirements under Paragraph (D)(8)(f)(2) of this Rule. Participations in commitments are treated pursuant to Paragraph (E) of this Rule.
 - (3) Revolving underwriting facilities, note issuance facilities, and similar arrangements pursuant to which the institution's customer can issue

short-term debt obligations in its own name, but for which the institution has a legally binding commitment to either:

- (a) Purchase the obligations the customer is unable to sell by a stated date; or
 - (b) Advance funds to its customer, if the obligations cannot be sold.
- c. Twenty percent credit conversion factor.
- (1) Trade-related contingencies. These are short-term, self-liquidating instruments used to finance the movement of goods and are collateralized by the underlying shipment. A commercial letter of credit is an example of such an instrument.
- d. Ten percent credit conversion factor.
- (1) Unused portion of asset-backed commercial paper liquidity facilities with an original maturity of one year or less that satisfy the eligibility requirements under Paragraph (D)(8)(f)(2) of this Rule.
- e. Zero percent credit conversion factor.
- (1) Unused portion of commitments with an original maturity of one year or less, but excluding any asset-backed commercial paper liquidity facilities.
 - (2) Unused portion of commitments with an original maturity of greater than one year, if they are unconditionally cancelable (see Paragraph (B)(34) of this Rule) at any time at the option of the institution and the institution has the contractual right to make, and in fact does make, either:
 - (a) A separate credit decision based upon the borrower's current financial condition, before each drawing under the lending facility; or
 - (b) An annual (or more frequent) credit review based upon the borrower's current financial condition to determine whether or not the lending facility should be continued.
 - (3) The unused portion of retail credit card lines or other related plans that are unconditionally cancelable by the institution pursuant to applicable law.
- f. Liquidity facility provided to asset-backed commercial paper.
- (1) Noneligible asset-backed commercial paper liquidity facilities treated as recourse or direct credit substitute. Unused portion of asset-backed commercial paper liquidity facilities that do not meet the criteria for an eligible liquidity facility provided to asset-backed commercial paper pursuant to Paragraph (D)(8)(f)(2) of this Rule must be treated as recourse or as a direct credit substitute, and assessed the appropriate risk-based capital charge pursuant to Paragraph (E) of this Rule.
 - (2) Eligible asset-backed commercial paper liquidity facility. Except as provided in Paragraph (D)(8)(f)(3) of this Rule, in order for the unused portion of an asset-backed commercial paper liquidity facility to be eligible for either the 50 percent or 10 percent credit conversion factors under Paragraph (D)(8)(b)(2) or (D)(8)(d) of this Rule, the asset-backed commercial paper liquidity facility must satisfy the following criteria:
 - (a) At the time of draw, the asset-backed commercial paper liquidity facility must be subject to an asset quality test that:
 - (i) Precludes funding of assets that are ninety (90) days or more past due or in default; and
 - (ii) If the assets that an asset-backed commercial paper liquidity facility is required to fund are externally rated securities at the time they are transferred into the program, the asset-backed commercial paper liquidity facility must be used to fund only securities that are externally rated investment grade at the time of funding. If the assets are not externally rated at the time they are

transferred into the program, then they are not subject to this investment grade requirement.

- (b) The asset-backed commercial paper liquidity facility must provide that, prior to any draws, the institution's funding obligation is reduced to cover only those assets that satisfy the funding criteria under the asset quality test as provided in Paragraph (D)(8)(f)(2)(a) of this Rule.
 - (3) Exception to eligibility requirements for assets guaranteed by the United States Government or its agencies, or the central government of an OECD country. Notwithstanding the eligibility requirements for asset-backed commercial paper program liquidity facilities in Paragraph (D)(8)(f)(2), the unused portion of an asset-backed commercial paper liquidity facility may still qualify for either the 50 percent or 10 percent credit conversion factors under Paragraph (D)(8)(b)(2) or (D)(8)(d) of this Rule, if the assets required to be funded by the asset-backed commercial paper liquidity facility are guaranteed, either conditionally or unconditionally, by the United States Government or its agencies, or the central government of an OECD country.
 - (4) Transition period for asset-backed commercial paper liquidity facilities. Notwithstanding the eligibility requirements for asset-backed commercial paper program liquidity facilities in Paragraph (D)(8)(f)(1) of this Rule, the unused portion of an asset-backed commercial paper liquidity facility will be treated as eligible liquidity facilities pursuant to Paragraph (D)(8)(f)(2) of this Rule, regardless of their compliance with the definition of eligible liquidity facilities, until September 30, 2005. On that date and thereafter, the unused portions of asset-backed commercial paper liquidity facilities that do not meet the eligibility requirements in Paragraph (D)(8)(f)(1) of this Rule will be treated as recourse obligations or direct credit substitutes.
- g. Derivative Contracts.
- (1) Calculation of Credit Equivalent Amounts. The credit equivalent amount of a derivative contract equals the sum of the current credit exposure and the potential future credit exposure of the derivative contract. The calculation of credit equivalent amounts must be measured in U.S. dollars, regardless of the currency or currencies specified in the derivative contract.
 - (a) Current credit exposure. The current credit exposure for a single derivative contract is determined by the mark-to-market value of the derivative contract. If the mark-to-market value is positive, then the current exposure equals that mark-to-market value. If the mark-to-market value is zero or negative, then the current exposure is zero. The current credit exposure for multiple derivative contracts executed with a single counterparty and subject to a qualifying bilateral netting contract is determined as provided by Paragraph (D)(8)(g)(2)(a) of this Rule.
 - (b) Potential future credit exposure. The potential future credit exposure for a single derivative contract, including a derivative contract with a negative mark-to-market value, is calculated by multiplying the notional principal of the derivative contract by one of the credit conversion factors in Table B for the appropriate category. The potential future credit exposure for gold contracts shall be calculated using the foreign exchange rate conversion factors. For any derivative contract that does not fall within one of the specified categories in Table B, the potential future credit exposure shall be calculated using the other commodity conversion factors. Subject to examiner review, institutions

should use the effective rather than the apparent or stated notional amount in calculating the potential future credit exposure. The potential future credit exposure for multiple derivative contracts executed with a single counterparty and subject to a qualifying bilateral netting contract is determined as provided by Paragraph (D)(8)(g)(2)(a) of this Rule.

TABLE B Conversion Factor Matrix¹					
Remaining Maturity²	Interest Rate	Foreign Exchange Rate and Gold	Equity²	Precious Metals	Other Commodities
One Year or Less	0.0%	1.0%	6.0%	7.0%	10.0%
More Than One Year to Five Years	0.5%	5.0%	8.0%	7.0%	12.0%
More Than Five Years	1.5%	7.5%	10.0%	8.0%	15.0%

¹For derivative contracts with multiple exchanges of principal, the conversion factors are multiplied by the number of remaining payments in the derivative contract.

²For derivative contracts that automatically reset to zero value following a payment, the remaining maturity equals the time until the next payment. However, interest rate contracts with remaining maturities of greater than one year shall be subject to a minimum conversion factor of 0.5 percent

NOTE: For purposes of calculating either the potential future credit exposure under Paragraph (D)(8)(g)(1)(b) of this Rule or the gross potential future credit exposure under Paragraph (D)(8)(g)(2)(a)(2) of this Rule for foreign exchange contracts and other similar contracts in which the notional principal is equivalent to the cash flows, total notional principal is the net receipts to each party falling due on each value date in each currency. No potential future credit exposure is calculated for single currency interest rate swaps in which payments are made based upon two floating rate indices (so-called floating/floating or basis swaps); the credit equivalent amount is measured solely on the basis of the current credit exposure.

- (2) Derivative contracts subject to a qualifying bilateral netting contract.
- (a) Netting calculation. The credit equivalent amount for multiple derivative contracts executed with a single counterparty and subject to a qualifying bilateral netting contract pursuant to Paragraph (D)(8)(g)(2)(b) of this Rule is calculated by adding the net current credit exposure and the adjusted sum of the potential future credit exposure for all derivative contracts subject to the qualifying bilateral netting contract.
- (i) Net current credit exposure. The net current exposure is the net sum of all positive and negative mark-to-market values of the individual derivative contracts subject to a qualifying bilateral netting contract. If the net sum of the mark-to-market value is positive, then the net current credit exposure is equal to the net sum of the mark-to-market value. If the net sum of the mark-to-market values is zero or negative, then the net current credit exposure is zero.
- (ii) Adjusted sum of the potential future credit exposure. The adjusted sum of the potential future credit exposure is calculated as:

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

A_{net} is the adjusted sum of the potential future credit exposure, A_{gross} is the gross potential future credit exposure, and NGR is the net to gross ratio. A_{gross} is the sum of the potential future credit exposure (as determined pursuant to Paragraph (D)(8)(g)(1)(b) of this Rule) for each individual derivative contract subject to the qualifying bilateral netting contract. The NGR is the ratio of the net current credit exposure to the gross current credit exposure. In calculating the NGR, the gross current credit exposure equals the sum of the positive current credit exposures (as determined pursuant to Paragraph (D)(8)(g)(1)(a) of this Rule) of all individual derivative contracts subject to the qualifying bilateral netting contract.

- (b) Qualifying bilateral netting contract. In determining the current credit exposure for multiple derivative contracts executed with a single counterparty, an institution may net derivative contracts subject to a qualifying bilateral netting contract by offsetting positive and negative mark-to-market values, provided that:
- (i) The qualifying bilateral netting contract is in writing.
 - (ii) The qualifying bilateral netting contract is not subject to a walkaway clause.
 - (iii) The qualifying bilateral netting contract creates a single legal obligation for all individual derivative contracts covered by the qualifying bilateral netting contract. In effect, the qualifying bilateral netting contract must provide that the institution would have a single claim or obligation either to receive or to pay only the net amount of the sum of the positive and negative mark-to-market values on the individual derivative contracts covered by the qualifying bilateral netting contract. The single legal obligation for the net amount is operative in the event that a counterparty, or a counterparty to whom the qualifying bilateral netting contract has been assigned, fails to perform due to any of the following events: default, insolvency, bankruptcy, or other similar circumstances.
 - (iv) The institution obtains a written and reasoned legal opinion(s) that represents, with a high degree of certainty, that in the event of a legal challenge, including one resulting from default, insolvency, bankruptcy, or similar circumstances, the relevant court and administrative authorities would find the institution's exposure to be the net amount under:
 - a) 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;
 - b) The law of the jurisdiction that governs the individual derivative contracts covered by the bilateral netting contract; and

- (2) Exposes the institution to credit risk directly or indirectly associated with the transferred assets that exceeds its pro rata claim on the assets whether through subordination provisions or other credit enhancing techniques.
- c. "Credit-enhancing representations and warranties" means representations and warranties that are made or assumed in connection with a transfer of assets (including loan servicing assets) and that obligate an institution to protect investors from losses arising from credit risk in the assets transferred or the loans serviced. Credit-enhancing representations and warranties include promises to protect a party from losses resulting from the default or nonperformance of another party or from an insufficiency in the value of the collateral. Credit-enhancing representations and warranties do not include:
- (1) Early-default clauses and similar warranties that permit the return of, or premium refund clauses covering, one-to-four family residential first mortgage loans (as described in Paragraph (D)(7)(c)(3) of this Rule) for a period not to exceed one hundred twenty (120) days from the date of transfer. These warranties may cover only those loans that were originated within one year of the date of transfer;
 - (2) Premium refund clauses that cover assets guaranteed, in whole or in part, by the U.S. Government, a U.S. Government agency, or a U.S. Government-sponsored enterprise, provided the premium refund clauses are for a period not to exceed one hundred twenty (120) days from the date of transfer; or
 - (3) Warranties that permit the return of assets in instances of fraud, misrepresentation or incomplete documentation.
- d. "Direct credit substitute" means an arrangement in which an institution assumes, in form or in substance, credit risk associated with an on- or off-balance sheet asset or exposure that was not previously owned by the institution (third-party asset), and the risk assumed by the institution exceeds the pro rata share of the institution's interest in the third-party asset. If an institution has no claim on the third-party asset, then the institution's assumption of any credit risk is a direct credit substitute. Direct credit substitutes include:
- (1) Financial standby letters of credit that support financial claims on a third party that exceed an institution's pro rata share in the financial claim;
 - (2) Guarantees, surety arrangements, credit derivatives and similar instruments backing financial claims that exceed an institution's pro rata share in the financial claim;
 - (3) Purchased subordinated interests that absorb more than their pro rata share of losses from the underlying assets;
 - (4) Credit derivative contracts under which the institution assumes more than its pro rata share of credit risk on a third-party asset or exposure;
 - (5) Loans of lines of credit that provide credit enhancement for the financial obligations of a third party;
 - (6) Purchased loan servicing assets if the servicer is responsible for credit losses or if the servicer makes or assumes credit-enhancing representations and warranties with respect to the loans serviced. Mortgage servicer cash advances that meet the conditions of Paragraph (E)(1)(i)(1) and (2) of this Rule, are not direct credit substitutes;
 - (7) Clean-up calls on third-party assets. Clean-up calls that are 10 percent or less of the original pool balance and that are exercisable at the option of the institution are not direct credit substitutes; and
 - (8) Unused portion of noneligible asset-backed commercial paper liquidity facilities.
- e. "Externally rated" means that an instrument or obligation has received a credit rating from at least one nationally recognized statistical rating organization.

- f. "Face amount" means the notional principal, or face value, amount of an off-balance sheet item; the amortized cost of an asset not held for trading purposes; and the fair value of a trading asset.
- g. "Financial asset" means cash or other monetary instrument, evidence of debt, evidence of an ownership interest in an entity, or a contract that conveys a right to receive or exchange cash or another financial instrument from another party.
- h. "Financial standby letter of credit" means a letter of credit or similar arrangement that represents an irrevocable obligation to a third-party beneficiary:
 - (1) To repay money borrowed by, or advanced to, or for the account of, a second party (the account party); or
 - (2) To make payment on behalf of the account party, in the event that the account party fails to fulfill its obligation to the beneficiary.
- i. "Mortgage servicer cash advance" means funds that a residential mortgage servicer advances to ensure an uninterrupted flow of payments, including advances made to cover foreclosure costs or other expenses to facilitate the timely collection of the loan. A mortgage servicer cash advance is not a recourse obligation or a direct credit substitute if:
 - (1) The servicer is entitled to full reimbursement and this right is not subordinated to other claims on the cash flows from the underlying asset pool; or
 - (2) For any one loan, the servicer's obligation to make nonreimbursable advances is contractually limited to an insignificant amount of the outstanding principal amount of that loan.
- j. "Nationally recognized statistical rating organization (NRSRO)" means an entity recognized by the Division of Market Regulation of the Securities and Exchange Commission (or any successor Division) (Commission) as a nationally recognized statistical rating organization for various purposes, including the Commission's uniform net capital requirements for brokers and dealers.
- k. "Recourse" means an institution's retention, in form or in substance, of any credit risk directly or indirectly associated with an asset it has sold that exceeds a pro rata share of that institution's claim on the asset. If an institution has no claim on a sold asset, then the retention of any credit risk is recourse. A recourse obligation typically arises when an institution transfers assets and retains an explicit obligation to repurchase assets or to absorb losses due to a default on the payment of principal or interest or any other deficiency in the performance of the underlying obligor or some other party. Recourse may also exist implicitly if an institution provides credit enhancement beyond any contractual obligation to support assets it has sold. The following are examples of recourse arrangements:
 - (1) Credit-enhancing representations and warranties made on transferred assets;
 - (2) Loans servicing assets retained pursuant to an agreement under which the institution will be responsible for losses associated with the loans serviced. Mortgage servicer cash advances that meet the conditions of Paragraph (E)(1)(i)(1) and (2) of this Rule, are not recourse agreements;
 - (3) Retained subordinated interests that absorb more than their pro rata share of losses from the underlying assets;
 - (4) Assets sold under an agreement to repurchase, if the assets are not already included on the balance sheet;
 - (5) Loan strips sold without contractual recourse where the maturity of the transferred portion of the loan is shorter than the maturity of the commitment under which the loan is drawn;
 - (6) Credit derivatives issued that absorb more than the institution's pro rata share of losses from the transferred assets;

- (7) Clean-up calls. Clean-up calls that are 10 percent or less of the original pool balance and that are exercisable at the option of the institution are not recourse arrangements; and
 - (8) Noneligible asset-backed commercial paper liquidity facilities.
 - l. "Residual interest" means any on-balance sheet asset that represents an interest (including a beneficial interest) created by a transfer that qualifies as a sale (pursuant to generally accepted accounting principles) of financial assets, whether through a securitization or otherwise, and that exposes an institution to any credit risk directly or indirectly associated with the transferred asset that exceeds a pro rata share of that institution's claim on the asset, whether through subordination provisions or other credit enhancement techniques. Residual interests generally include credit-enhancing IO strips, spread accounts, cash collateral accounts, retained subordinated interests (and other forms of overcollateralization) and similar assets that function as a credit enhancement. Residual interests further include those exposures that, in substance, cause the institution to retain the credit risk of an asset or exposure that had qualified as a residual interest before it was sold. Residual interests generally do not include interests purchased from a third party.
 - m. "Risk participation" means a participation in which the originating party remains liable to the beneficiary for the full amount of an obligation (e.g., a direct credit substitute) notwithstanding that another party has acquired a participation in that obligation.
 - n. "Securitization" means the pooling and repackaging by a special purpose entity of assets or other credit exposures that can be sold to investors. Securitization includes transactions that create stratified credit risk positions whose performance is dependent upon an underlying pool of credit exposures, including loans and commitments.
 - o. "Structured finance program" means a program where receivable interests and asset-backed securities issued by multiple participants are purchased by a special purpose entity that repackages those exposures into securities that can be sold to investors. Structured finance programs allocate credit risks, generally, between the participants and credit enhancement provided to the program.
 - p. "Traded position" means a position retained, assumed or issued in connection with a securitization that is externally rated, where there is a reasonable expectation that, in the near future, the rating will be relied upon by:
 - (1) Unaffiliated investors to purchase the position; or
 - (2) An unaffiliated third party to enter into a transaction involving the position, such as a purchase, loan or repurchase agreement.
- 2. Credit equivalent amounts and risk weights of recourse obligations and direct credit substitutes.
 - a. Credit-equivalent amount. Except as otherwise provided, the credit-equivalent amount for a recourse obligation or direct credit substitute is the full amount of the credit-enhanced assets for which the institution directly or indirectly retains or assumes credit risk multiplied by a 100 percent conversion factor.
 - b. Risk-weight factor. To determine the institution's risk-weighted assets for off-balance sheet recourse obligations and direct credit substitutes, the credit equivalent amount is assigned to the risk category appropriate to the obligor in the underlying transaction, after considering any associated guarantees or collateral. For a direct credit substitute that is an on-balance sheet asset (e.g., a purchased subordinated security), an institution must calculate risk-weighted assets using the amount of the direct credit substitute and the full amount of the assets it supports, i.e., all the more senior positions in the structure.
- 3. Credit equivalent amount and risk weight of participations in, and syndications of, direct credit substitutes. The credit equivalent amount for a participation interest in, or syndication of, a direct credit substitute is calculated and risk weighted as follows:

- a. In the case of a direct credit substitute in which an institution has conveyed a risk participation, the full amount of the assets that are supported by the direct credit substitute is converted to a credit equivalent amount using a 100 percent conversion factor. The pro rata share of the credit equivalent amount that has been conveyed through a risk participation is then assigned to whichever risk-weight category is lower: the risk-weight category appropriate to the obligor in the underlying transaction, after considering any associated guarantees or collateral, or the risk-weight category appropriate to the party acquiring the participation. The pro rata share of the credit equivalent amount that has not been participated out is assigned to the risk-weight category appropriate to the obligor after considering any associated guarantees or collateral.
 - b. In the case of a direct credit substitute in which the institution has acquired a risk participation, the acquiring institution's pro rata share of the direct credit substitute is multiplied by the full amount of the assets that are supported by the direct credit substitute and converted using a 100 percent credit conversion factor. The resulting credit equivalent amount is then assigned to the risk-weight category appropriate to the obligor in the underlying transaction, after considering any associated guarantees or collateral.
 - c. In the case of a direct credit substitute that takes the form of a syndication where each institution or participating entity is obligated only for its pro rata share of the risk and there is no recourse to the originating entity, each institution's credit equivalent amount will be calculated by multiplying only its pro rata share of the assets supported by the direct credit substitute by a 100 percent conversion factor. The resulting credit equivalent amount is then assigned to the risk-weight category appropriate to the obligor in the underlying transaction, after considering any associated guarantees or collateral.
4. Externally rated positions: credit-equivalent amounts and risk weights.
- a. Traded positions. With respect to a recourse obligation, direct credit substitute, residual interest (other than a credit-enhancing IO strip) or asset- or mortgage-backed security that is a "traded position" and that has received an external rating on a long-term position that is one grade below investment grade or better, or a short-term position that is investment grade, the institution may multiply the face amount of the position by the appropriate risk weight, determined pursuant to Tables C or D of this Rule (stripped mortgage-backed securities or other similar instruments, such as IO or PO strips, that are not credit enhancing must be assigned to the 100 percent risk category). If a traded position receives more than one external rating, the lowest single rating will apply.

TABLE C		
Long-Term Rating Category	Examples	Risk Weight (In Percent)
Highest or second highest investment grade	AAA, AA	20
Third highest investment grade	A	50
Lowest investment grade	BBB	100
One category below investment grade	BB	200

TABLE D		
Short-Term Rating Category	Examples	Risk Weight (In Percent)
Highest investment grade	A-1, P-1	20
Second highest investment grade	A-2, P-2	50
Lowest investment grade	A-3, P-3	100

- b. Non-traded positions. A recourse obligation, direct credit substitute, residual interest (but not a credit-enhancing IO strip) or asset- or mortgage-backed

security extended in connection with a securitization that is not a "traded position" may be assigned a risk weight pursuant to Paragraph (E)(4)(a) of this Rule if:

- (1) It has been externally rated by more than one NRSRO;
- (2) It has received an external rating on a long-term position that is one category below investment grade or better or a short-term position that is investment grade by all NRSROs providing a rating;
- (3) The ratings are publicly available, and
- (4) The ratings are based on the same criteria used to rate traded positions.

If the ratings are different, the lowest rating will determine the risk category to which the recourse obligation, residual interest or direct credit substitute will be assigned.

5. Senior positions not externally rated. For a recourse obligation, direct credit substitute, residual interest or asset- or mortgage-backed security that is not externally rated but is senior or preferred in all features to a traded position (including collateralization and maturity) an institution may apply a risk weight to the face amount of the senior position pursuant to Paragraph (E)(4)(a) of this Rule, based upon the traded position, subject to any current or prospective supervisory guidance and the institution satisfying the Banking Board that this treatment is appropriate. This Paragraph (E) will apply only if the traded position provides substantive credit support to the unrated position until the unrated position matures.
6. Residual Interests.
 - a. Concentration limit on credit-enhancing IO strips. In addition to the capital requirement provided by Paragraph (E)(6)(b) of this Rule, an institution must deduct from Tier 1 capital all credit-enhancing IO strips in excess of 25 percent of Tier 1 capital pursuant to Paragraph (C)(1)(e) of this Rule.
 - b. Credit-enhancing IO strip capital requirement. After applying the concentration limit to credit-enhancing IO strips pursuant to Paragraph (E)(6)(a) of this Rule, an institution must maintain risk-based capital for a credit-enhancing IO strip equal to the remaining amount of the credit-enhancing IO strip (net of any existing associated deferred tax liability), even if the amount of risk-based capital required to be maintained exceeds the full risk-based capital requirement for the assets transferred. Transactions that, in substance, result in the retention of credit risk associated with a transferred credit-enhancing IO strip will be treated as if the credit-enhancing IO strip was retained by the institution and not transferred.
 - c. Other residual interests capital requirement. Except as provided in Paragraphs (E)(4) or (5) of this Rule, an institution must maintain risk-based capital for a residual interest (excluding a credit-enhancing IO strip) equal to the face amount of the residual interest that is retained on the balance sheet (net of any existing associated deferred tax liability), even if the amount of risk-based capital required to be maintained exceeds the full risk-based capital requirement for the assets transferred. Transactions that, in substance, result in the retention of credit risk associated with a transferred residual interest will be treated as if the residual interest was retained by the institution and not transferred.
 - d. Residual interests and other recourse obligations. Where the aggregate capital requirement for residual interests (including credit-enhancing IO strips) and recourse obligations arising from the same transfer of assets exceed the full risk-based capital requirement for those assets, an institution must maintain risk-based capital equal to the greater of the risk-based capital requirement for the residual interest as calculated under Paragraphs (E)(6)(a) through (c) of this Rule or the full risk-based capital requirement for the assets transferred.
7. Positions that are not rated by an NRSRO. A position (but not a residual interest) extended in connection with a securitization and that is not rated by an NRSRO may be risk-weighted based on the institution's determination of the credit rating of the position, as specified in Table E of this Rule, multiplied by the face amount of the position. In

order to qualify for this treatment, the institution's system for determining the credit rating of the position must meet one of the three alternative standards set out in Paragraphs (E)(7)(a) through (c) of this Rule.

TABLE E		
Rating Category	Examples	Risk Weight (In Percent)
Investment grade	BBB, or Better	100
One category below investment grade	BB	200

- a. Internal risk rating used for asset-backed programs. A direct credit substitute (but not a purchased credit-enhancing IO strip) is assumed by an institution in connection with an asset-backed commercial paper program sponsored by the institution and the institution is able to demonstrate to the satisfaction of the Banking Board, prior to relying upon its use, that the institution's internal credit risk rating system is adequate. Adequate internal credit risk rating systems usually contain the following criteria:
- (1) The internal credit risk system is an integral part of the institution's risk management system that explicitly incorporates the full range of risks arising from an institution's participation in securitization activities;
 - (2) Internal credit ratings are linked to measurable outcomes, such as the probability that the position will experience any loss, the position's expected loss given default, and the degree of variance in losses given default on that position;
 - (3) The institution's internal credit risk system must separately consider the risk associated with the underlying loans or borrowers, and the risk associated with the structure of a particular securitization transaction;
 - (4) The institution's internal credit risk system must identify gradations of risk among "pass" assets and other risk positions;
 - (5) The institution must have clear, explicit criteria that are used to classify assets into each internal risk grade, including subjective factors;
 - (6) The institution must have independent credit risk management or loan review personnel assigning or reviewing the credit risk ratings;
 - (7) An internal audit procedure should periodically verify that internal risk ratings are assigned pursuant to the institution's established criteria;
 - (8) The institution must monitor the performance of the internal credit risk ratings assigned to nonrated, nontraded direct credit substitutes over time to determine the appropriateness of the initial credit risk rating assignment and adjust individual credit risk ratings, or the overall internal credit risk ratings system, as needed; and
 - (9) The internal credit risk system must make credit risk rating assumptions that are consistent with, or more conservative than, the credit risk rating assumptions and methodologies of NRSROs.
- b. Program Ratings. A direct credit substitute or recourse obligation (but not a residual interest) is assumed or retained by an institution in connection with a structured finance program and a NRSRO has reviewed the terms of the program and stated a rating for positions associated with the program. If the program has options for different combinations of assets, standards, internal credit enhancements and other relevant factors, and the NRSRO specifies ranges of rating categories to them, the institution may apply the rating category applicable to the option that corresponds to the institution's position. In order to rely on a program rating, the institution must demonstrate to the Banking Board's satisfaction that the credit risk rating assigned to the program meets the same standards generally used by NRSROs for rating traded positions. The institution must also demonstrate to the Banking Board's satisfaction that the criteria

underlying the NRSRO's assignment of ratings for the program are satisfied for the particular position. If an institution participates in a securitization sponsored by another party the Banking Board may authorize the institution to use this approach based on a program rating obtained by the sponsor of the program.

- c. Computer Program. The institution is using an acceptable credit assessment computer program to determine the rating of a direct credit substitute or recourse obligation (but not a residual interest) extended in connection with a structured finance program. A NRSRO must have developed the computer program and the institution must demonstrate to the Banking Board's satisfaction that ratings under the program correspond credibly and reliably with the rating of traded positions.
8. Limitations on risk-based capital requirements.
- a. Low-level exposure rule. If the maximum contractual exposure to loss retained or assumed by an institution is less than the effective risk-based capital requirement, as determined pursuant to Paragraph (E)(2) of this Rule, for the asset supported by the institution's position, the risk-based capital required under this Rule is limited to the institution's contractual exposure, less any recourse liability account established pursuant to generally accepted accounting principles. This limitation does not apply when an institution provides credit enhancement beyond any contractual obligation to support assets that it has sold.
 - b. Related on-balance sheet assets. If an asset is included in the calculation of the risk-based capital requirements under this Paragraph (E) of this Rule and also appears as an asset on an institution's balance sheet, the asset is risk-weighted only under this Paragraph (E) of this Rule, except in the case of loan servicing assets and similar arrangements with embedded recourse obligations or direct credit substitutes. In that case, both the on-balance sheet servicing assets and the related recourse obligations or direct credit substitutes must both be separately risk-weighted and incorporated into the risk-based capital calculation.
9. Alternative Capital Calculation for Small Business Obligations.
- a. Definitions. For purposes of this Paragraph (E)(9):
 - (1) "Qualified institution" means an institution that:
 - (a) Is well capitalized without applying the capital treatment described in this Paragraph (E)(9), or
 - (b) Is adequately capitalized without applying the capital treatment described in this Paragraph (E)(9) and has received written permission from the Banking Board to apply the capital treatment described in this Paragraph (E)(9).
 - (2) "Recourse" has the meaning given to such term under generally accepted accounting principles.
 - (3) "Small business" means a business that meets the criteria for a small business concern established by the Small Business Administration.
 - b. Capital and reserve requirements. Notwithstanding the risk-based capital treatment outlined in Paragraph (C)(1)(g) and any other subsection (other than subsection (9) of this Paragraph (E)), with respect to a transfer of a small business loan or a lease of personal property with recourse that is a sale under generally accepted accounting principles, a qualified institution may elect to apply the following treatment:
 - (1) The institution establishes and maintains a non-capital reserve under generally accepted accounting principles sufficient to meet the reasonable estimated liability of the institution under the recourse arrangement; and
 - (2) For purposes of calculating the institution's risk-based capital ratio, the institution includes only the face amount of its recourse in its risk-weighted assets.

- c. Limit on aggregate amount of recourse. The total outstanding amount of recourse retained by a qualified institution with respect to transfers of small business loans and leases of personal property and included in the risk-weighted assets of the institution as described in Paragraph (E)(9)(b) of this Rule may not exceed 15 percent of the institution's total capital after adjustments and deductions, unless the Banking Board specifies a greater amount by order.
- d. Institution that ceases to be qualified or that exceeds aggregate limit. If an institution ceases to be a qualified institution or exceeds the aggregate limit in Paragraph (E)(9)(c) of this Rule, the institution may continue to apply the capital treatment described in Paragraph (E)(9)(b) of this Rule to transfers of small business loans and leases of personal property that occurred when the institution was qualified and did not exceed the limit.

F. Target Ratios

- 1. As of December 31, 1992:
 - a. All institutions are expected to maintain a minimum ratio of total capital (after deductions) to risk-weighted assets of 8.0 percent.
 - b. Tier 2 capital elements qualify as part of an institution's total capital base up to a maximum of 100 percent of that institution's Tier 1 capital.
 - c. In addition to the standards established by these risk-based capital guidelines, all institutions must maintain a minimum capital-to-total asset ratio, pursuant to the provisions of Banking Board Rule CB101.51.

APPENDIX A

MARKET RISK

A. Purpose and Applicability.

- 1. The purpose of this Appendix is to ensure that institutions with significant exposure to market risk maintain adequate capital to support that exposure. This Appendix supplements and adjusts the risk-based capital ratio calculations under this Rule with respect to those institutions.
- 2. Applicability.
 - a. This Appendix applies to any institution whose trading activity (on a worldwide consolidated basis) equals:
 - (1) Ten percent of more of total assets as reported in the most recent Call Report; or
 - (2) One billion dollars or more.

NOTE: Trading activity means the gross sum of trading assets and liabilities as reported in the institution's most recent quarterly Call Report.

- b. The Banking Board may apply this Appendix to any institution if it deems it necessary or appropriate for safe and sound practices.
- c. The Banking Board may exclude any institution otherwise meeting the criteria from Paragraph (A)(2)(a) of this Appendix from coverage under this Appendix if it determines the institution meets such criteria as a consequence of accounting, operational, or similar considerations, and the Banking Board deems it consistent with safe and sound practices.

B. Definitions

1. "Covered position" means all positions in an institution's trading account, and all foreign exchange and commodity positions, whether or not in the trading account. 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. Asset-backed commercial paper liquidity facilities, in form or in substance, in an institution's trading account are excluded from covered positions, and instead, are subject to the risk-based capital requirements as provided in this Rule. (Subject to supervisory review, an institution may exclude structural positions in foreign currencies from its covered positions.)
2. "Market risk" means the risk of loss resulting from movements in market prices. Market risk consists of general market risk and specific risk components.
 - a. "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.
 - b. "Specific risk" means changes in the market value of specific positions due to factors other than broad market movements and includes default and event risk as well as idiosyncratic variations.
3. Tier 1 and Tier 2 capital are defined in Paragraph (C) of this Rule.
4. Tier 3 capital is subordinated debt that is unsecured; is fully paid up; has an original maturity of at least two years; is not redeemable before maturity without prior approval by the Banking Board; includes a lock-in clause precluding payment of either interest or principle (even at maturity) if the payment would cause the issuing institution's risk-based capital ratio to fall or remain below the minimum required under this Rule; and does not contain and is not covered by any covenants, terms, or restrictions that are inconsistent with safe and sound practices.
5. "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 pursuant to Paragraph (D) of this Appendix.

C. Adjustments to the Risk-Based Capital Ratio Calculations

1. Risk-based capital ratio denominator. An institution subject to this Appendix shall calculate its risk-based capital ratio denominator as follows:
 - a. Adjusted risk-weighted assets.
 - (1) Covered positions. Calculate adjusted risk-weighted assets, which equals risk-weighted assets (as calculated pursuant to this Rule), excluding the risk-weighted amounts of all covered positions (except foreign exchange positions outside the trading account and over-the-counter derivative positions). (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).
 - (2) Securities borrowing transactions. In calculating adjusted risk-weighted assets, an institution also may exclude a receivable that results from the institution's posting of cash collateral in a securities borrowing transaction to the extent that the receivable is collateralized by the market value of the borrowed securities and is subject to the following conditions:
 - (a) The borrowed securities must be includable in the trading account and must be liquid and readily marketable;
 - (b) The borrowed securities must be marked to market daily;
 - (c) The receivable must be subject to a daily margining requirement; and

- (d) The securities borrowing transaction must be a securities contract for purposes of section 555 of the Bankruptcy Code, a qualified financial contract for purposes of section 11(e)(8) of the Federal Deposit Insurance Act, or a netting contract between or among financial institutions, for purposes of section 401-407 of the Federal Deposit Insurance Corporation Improvement Act of 1991 or Regulation EE.
 - b. 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 minimus exposures (if any).
 - (1) 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 sixty (60) business days multiplied by three, except as provided in Paragraph (D)(5) of this Appendix;
 - (2) Specific risk add-on. The specific risk add-on is calculated pursuant to Paragraph (E) of this Appendix; and
 - (3) Capital charge for de minimus exposure. The capital charge for de minimus exposure is calculated pursuant to Paragraph (D)(1) of this Appendix.
 - c. Market risk equivalent assets. Calculate market risk equivalent assets by multiplying the measure for market risk (as calculated in Paragraph (C)(1)(b) of this Appendix) by 12.5.
 - d. Denominator calculation. Add market risk equivalent assets (as calculated in Paragraph (C)(1)(c) of this Appendix) to adjusted risk-weighted assets (as calculated in Paragraph (C)(1)(a) of this Appendix). The resulting sum is the institution's risk-based capital ratio denominator.
- 2. Risk-based capital ratio numerator. An institution subject to this Appendix shall calculate its risk-based capital ratio numerator by allocating capital as follows:
 - a. Credit risk allocation. Allocate Tier 1 and Tier 2 capital equal to 8.0 percent of adjusted risk-weighted assets (as calculated in Paragraph (C)(1)(a) of this Appendix).

(An institution may not allocate Tier 3 capital to support credit risk.)
 - b. Market risk allocation. Allocate Tier 1, Tier 2, and Tier 3 capital equal to the measure for market risk as calculated in Paragraph (C)(1)(b) of this Appendix. 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 must equal at least 28.6 percent of the measure for market risk.)
 - c. Restrictions.
 - (1) The sum of Tier 2 capital (both allocated and excess) and Tier 3 capital (allocated in Paragraph (C)(2)(b) of this Appendix) may not exceed 100 percent of Tier 1 capital (both allocated and excess).

(Excess Tier 1 capital means Tier 1 capital that has not been allocated in Paragraphs (C)(2)(a) and (b) of this Appendix. Excess Tier 2 capital means Tier 2 capital that has not been allocated in Paragraphs (C)(2)(a) and (b) of this Appendix, subject to the restrictions in Paragraph (C)(2)(c) of this Appendix.)
 - (2) 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).

- d. Numerator calculation. Add Tier 1 capital (both allocated and excess), Tier 2 capital (both allocated and excess), and Tier 3 capital (allocated under Paragraph (C)(2)(b) of this Appendix). The resulting sum is the institution's risk-based capital ratio numerator.

D. Internal Models

1. General. For risk-based capital purposes, an institution subject to this Appendix must use its internal model to measure its daily VAR, pursuant to the requirements of this Appendix. The Banking Board may permit an institution to use alternative techniques to measure the market risk of de minimus exposures so long as the techniques adequately measure associated market risk.

(An institution'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 an institution's internal model must be commensurate with the nature and size of its covered positions. An institution that modifies its 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.)

2. Qualitative requirements. An institution subject to this Appendix must have a risk management system that meets the following minimum qualitative requirements:
 - a. The institution must have a risk control unit that reports directly to senior management and is independent from business trading units.
 - b. The institution's internal risk measurement model must be integrated into the daily management process.
 - c. The institution's policies and procedures must identify, and the institution must conduct, appropriate stress tests and backtests. The institution's policies and procedures must identify the procedures to follow in response to the results of such tests.

(Stress tests provide information about the impact of adverse market events on an institution's covered positions. Backtests provide information about the accuracy of an internal model by comparing an institution's daily VAR measures to its corresponding daily trading profits and losses.)

- d. The institution must conduct independent reviews of its risk measurement and risk management systems at least annually.
3. Market risk factors. The institution'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, equity price risk, foreign exchange rate risk, and commodity price risk.

(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.)

4. Quantitative requirements. For regulatory capital purposes, VAR measures must meet the following quantitative requirements:
 - a. 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 (10) business day movement in rates and prices. In order to calculate VAR measures based on a ten (10) day price shock, the institution may either calculate ten (10) day figures directly or convert VAR figures based on holding periods other than ten (10) days

- to the equivalent of a ten (10) day holding period (for instance, by multiplying a one (1) day VAR measure by the square root of ten).
- b. The VAR measures must be based on an historical observation period (or effective observation period for an institution using a weighting scheme or other similar method) of at least one (1) year. The institution must update data sets at least once every three (3) months or more frequently as market conditions warrant.
 - c. The VAR measurements 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. An institution with a large or complex options portfolio must measure the volatility of options positions by different maturities.
 - d. The VAR measures may incorporate empirical correlations within and across risk categories, provided that the institution's process for measuring correlations is sound. In the event that the VAR measures do not incorporate empirical correlations across risk categories, then the institution must add the separate VAR measures for the four major risk categories to determine its aggregate VAR measure.
5. **Backtesting**
- a. Beginning one (1) year after an institution starts to comply with this Appendix, it must conduct backtesting by comparing each of its most recent two hundred fifty (250) business days' actual net trading profit or loss 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.

(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.)
 - b. Once each quarter, the institution 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 measures.
 - c. An institution must use the multiplication factor indicated in Table 1 of this Appendix in determining its capital charge for market risk under Paragraph (C)(1)(b)(1)(b) of this Appendix until it obtains the next quarter's backtesting results, unless the Banking Board determines that a different adjustment or other action is appropriate.

**TABLE 1
MULTIPLICATION FACTOR BASED ON RESULTS OF BACKTESTING**

Number of Exceptions	Multiplication Factor
4 or Fewer	3.00
5	3.40
6	3.50
7	3.65
8	3.75
9	3.85
10 or More	4.00

E. Specific Risk

1. Specific risk surcharge. For the purposes of this Paragraph (C)(1)(b)(2) of this Appendix, an institution shall calculate its specific risk surcharge as follows:
 - a. Internal models that incorporate specific risk.
 - (1) No specific risk surcharge required for qualifying internal models. An institution that incorporates specific risk in its internal model has no specific risk surcharge for purposes of Paragraph (C)(1)(b)(2) of this Appendix if the institution demonstrates to the Banking Board that its internal model adequately measures all aspects of specific risk, including default and event risk, of covered debt and equity positions. In evaluating an institution's internal model, the Banking Board will take into account the extent to which the internal model:
 - (a) Explains the historical price variation in the trading portfolio; and
 - (b) Captures concentrations.
 - (2) Specific risk surcharge for modeled specific risk that fails to adequately measure default or event risk. An institution that incorporates specific risk in its internal model but fails to demonstrate that its internal model adequately measures all aspects of specific risk, including default and event risk, as provided by Paragraph (E)(1)(a) of this Appendix, must calculate its specific risk surcharge pursuant to one of the following methods:
 - (a) If the institution's internal model separates the VAR measure into a specific risk portion and a general market risk portion, then the specific risk surcharge equals the previous day's specific risk portion.
 - (b) If the institution's internal model does not separate the VAR measure into a specific risk portion and a general market risk portion, then the specific risk surcharge equals the sum of the previous day's VAR measure for subportfolios of covered debt and equity positions.
 - b. Specific risk surcharge for specific risk not modeled. If an institution does not model specific risk pursuant to Paragraph (E)(1)(a) of this Appendix, then the institution shall calculate its specific risk surcharge using the standard specific risk capital charge pursuant to Paragraph (E)(3) of this Appendix.
2. Covered debt and equity position. If a model includes the specific risk of covered debt positions but not covered equity positions (or vice versa), then the institution may reduce its specific risk charge for the included positions under Paragraph (E)(1)(a)(2) of this Appendix. The specific risk charge for the positions not included equals the standard specific risk capital charge under Paragraph (E)(3) of this Appendix.
3. Standard specific risk capital charge. The standard specific risk capital charge equals the sum of the components for covered debt and equity positions as follows:
 - a. Covered debt positions
 - (1) For the purposes of Paragraph (E) of this Appendix, 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 lending 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, an institution must risk-weight (as described in Paragraph (E)(3)(a)(3) of this Appendix) 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, an institution must risk-weight (as described in Paragraph (E)(3)(a)(3) of this Appendix) the market value of the effective notional amount of the underlying debt instrument or index multiplied by the option's delta.
- (2) An institution may net long and short covered debt positions (including derivatives) in identical debt issues or indices.
- (3) An institution 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 ¹	N/A	0.00
Qualifying ²	6 Months or Less	0.25
	Over 6 Months to 24 Months	1.00
	Over 24 Months	1.60
Other ³	N/A	8.00

¹The "government" category includes all debt instruments of central governments of OECD countries (as defined in Paragraph (B)(24) of this Rule) including bonds, Treasury bills, and other short-term instruments, as well as local currency instruments of non-OECD central governments to the extent the institution has liabilities booked in that currency.

²The "qualifying" category includes debt instruments of United States Government-sponsored agencies (as defined in Paragraph (B)(36) of this Rule), general obligation debt instruments issued by states and other political subdivisions of OECD countries, multilateral development banks, and debt instruments issued by United States depository institutions or OECD-banks that do not qualify as capital of the issuing institution. 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:

- a. Rated investment grade by at least two nationally recognized credit rating services;
- b. Rated investment grade by one nationally recognized credit rating agency and not rated less than investment-grade by any other credit rating agency; or
- c. Unrated, but deemed to be of comparable investment quality by the reporting institution and the issuer has instruments listed on a recognized stock exchange, subject to review by the Banking Board.

³The "other" category includes debt instruments that are not included in the government or qualifying categories.

b. Covered equity positions

- (1) For the purposes of this Paragraph (E) of this Appendix, 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, an institution must risk weight (as described in Paragraph (E)(3)(b)(3) of this Appendix) 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, an institution must risk weight (as described in Paragraph (E)(3)(b)(3) of this Appendix) the market value of the effective notional amount of the underlying equity instrument or index multiplied by the option's delta.
- (2) An institution may net long and short covered equity positions (including derivatives) in identical equity issues or equity indices in the same market.

(An institution may also net positions in depository receipts against an opposite position in the underlying equity or identical equity in different markets, provided that the institution includes the costs of conversion.)

- (3)
 - (a) An institution must multiply the absolute value of the current market value of each net long or short covered equity position by a risk weighting factor of 8.0 percent, or by 4.0 percent if the equity is held in a portfolio that is both liquid and well-diversified. 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.

(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.)

- (b) For covered equity positions from the following futures-related arbitrage strategies, an institution 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:
 - (i) Long and short positions in exactly the same index at different dates or in different market centers; or
 - (ii) Long and short positions in index contracts at the same date in different but similar indices.
 - (c) For futures contracts on broadly-based indices that are matched by offsetting positions in a basket of stocks comprising the index, an institution 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.
 - (4) The specific risk capital charge component for covered equity positions is the sum of the weighted values.

F. The Banking Board reserves the authority to modify the application of any provisions in this Appendix to any institution, upon reasonable justification.

Amendment necessary in order to maintain parity with the federal regulatory agencies. Allows sponsoring banking organizations to remove consolidated asset-backed commercial paper program assets from risk-weighted assets for the purpose of calculating risk-based capital ratios; however, sponsoring banking organizations are still required to hold risk-based capital against all other risk exposures arising in connection with asset-backed commercial paper programs. Appendix A removed a material is included in the text of the Rule.

Amended Effective March 1, 2004

Statutory reference amendment to conform Rule to recodified statutes; update terminology to conform to recodified statutes; formatting changes to comply with Colorado Secretary of State guidelines.

Amended Effective October 30, 2002

To maintain parity with the federal regulatory agencies and incorporate rule changes pertaining to the capital treatment of recourse, direct credit substitutes and residual interests in asset securitizations; capital treatment for equity investments in nonfinancial companies; and risk-weighting for claims on securities firms.

Amended Effective November 1, 1999

To maintain parity with federally regulated institutions to address the regulatory capital treatment of construction loans on presold residential properties, junior liens on one-to-four family residential properties, and investments in mutual funds.

Amended Effective January 30, 1999

To maintain parity with federally regulated financial institutions, amendment to Paragraphs (B)(12) and (14); (C)(1)(d)(1), (2), (3), and (4)(a) and (b); (C)(1)(e)(2)(b); (C)(1)(e)(5); (C)(2)(e); and Appendix A, Table 4, Tier 2(5).

Amended Effective March 30, 1998

To establish the Banking Board requirements as being parallel with the federal requirements of Part 325 Capital Maintenance of the Federal Deposit Insurance Act.