summed to determine the aggregate value-at-risk for the bank.

b. The standardized approach uses a set of standardized calculations and assumptions to measure market risk exposure depending on its source; debt instruments, equities, foreign currencies, and commodities, including volatilities of related options.

5. The Board generally expects any bank that is subject to the market risk measure, especially those with large trading accounts, to comply with the measure by using internal risk-measurement models. A bank may not change its measurement approach for the purpose of minimizing capital requirements. In limited instances, on a case-by-case basis, the Federal Reserve may permit a bank that has internal models to incorporate risk measures of negligible exposures, for example, *de minimis* positions, activities in remote locations, minor exposures in a currency, or activities that present negligible risk to the bank, in an alternative manner, so long as it adequately captures the risk.

6. The risk-based capital ratios adjusted for market risk determined in accordance with this appendix E are *minimum* supervisory ratios. Banks generally are expected to operate with capital positions well above the minimum ratios. In all cases, banks should hold capital commensurate with the level and nature of the risks to which they are exposed.

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

B. Market Risks Subject to a Capital Requirement

1. *General Market Risk and Specific Risk.* A bank must hold capital against exposure to general market risk and specific risk arising from its trading and other foreign exchange and commodity activities. For this purpose, general market risk refers to changes in the market value of covered transactions resulting from market movements, such as changing levels of market interest rates, broad equity indices, or currency exchange rates. Specific risk refers to credit risk, that is, the risk that the issuer of a debt or equity instrument might default, as well as to other factors that affect the market value of specific instruments but that do not materially alter market conditions.[5]

2. *Trading Activities.* a. The general market risk and specific risk capital requirements for trading activities are based on on- and off-balance-sheet positions in a bank's trading account. For this purpose, trading account means positions in financial instruments acquired with the intent to resell in order to profit from short-term price movements (or other price or interest-rate variations), including, but not limited to:

i. Assets acquired with the intent to resell to customers;

ii. Positions in financial instruments arising from matched principal brokering and market making; or

iii. Positions taken in order to hedge other elements of the trading account (that is, reduce risk by offsetting other positions that have exposure to changes in market rates or prices).[6] Trading activities may include positions in debt instruments, equities, foreign currencies, and commodity instruments, or related derivative[7] or other off-balance-sheet contracts.

b. Debt instruments in the trading account are all fixed-rate and floating-rate debt securities and instruments that behave like debt, including non-convertible preferred stock. Convertible bonds, i.e., preferred stock or debt issues that are convertible, at a stated price, into common shares of the issuer, should be treated as debt instruments if they trade like debt instruments and as equities if they trade like equities. Also included are derivative contracts of debt instruments and other off-balance-sheet instruments in the trading account that react to changes in interest rates. A security that has been sold subject to a repurchase agreement or lent subject to a securities lending agreement is treated as if it were still owned by the lender of the security. Such transactions remain subject to capital requirements for credit risk for the off-balance-sheet portion of the transaction as set forth in section III.D. of appendix A of this part.

c. Equities in the trading account are equity instruments that behave like equities. The instruments covered include common stocks (whether voting or non-voting), convertible securities that behave like equities, and commitments to buy or sell equity securities. Also included are derivative contracts of equity instruments and other off-balance-sheet instruments in the trading account that are affected by changes in equity prices. However, non-convertible preferred stock is included in debt instruments.

3. *Foreign Exchange and Commodities Risk.* Foreign exchange or commodities positions, whether or not included in a bank's trading account, are subject to a capital requirement for the market risk of those positions.

a. The capital requirement for foreign exchange risk applies to a bank's total currency and gold positions. This includes spot positions (that is, asset items and liability items, including accrued interest and expenses, denominated in each currency); forward positions (that is, forward foreign exchange transactions, including currency futures and the principal on currency swaps not included in the spot position); and certain guarantees. It includes future income and expenses from foreign currency transactions not yet accrued but already fully hedged (at the discretion of the reporting bank), foreign exchange derivative and other off-balance-sheet positions that are affected by changes in exchange rates, and any other item representing a profit or loss in foreign currencies.

b. A bank may, subject to approval by the Federal Reserve, exclude from its foreign exchange positions any structural positions in foreign currencies. For this purpose, such structural positions are limited to transactions designed to hedge a bank's capital ratios against the effect of adverse exchange rate movements on subordinated debt, equity, or minority interests in consolidated subsidiaries and dotation capital assigned to foreign branches that are denominated in foreign currencies. Also included are any positions related to unconsolidated subsidiaries and to other items that are deducted from a bank's capital when calculating its capital base. In any event, such structural foreign currency positions must reflect long-term policies of the institution and not relate to trading positions.

c. A bank doing negligible business in foreign currency and that does not take foreign exchange positions for its own account may be exempted from the capital requirement for foreign exchange risk provided that:

i. Its foreign currency business, defined as the greater of the sum of its gross long positions and the sum of its gross short positions in all foreign currencies, does not exceed 100 percent of eligible capital as defined in section II. of this appendix E; and

ii. Its overall net open foreign exchange position as determined in section IV.C.2. of this appendix E does not exceed 2.0 percent of its eligible capital.

d. The capital requirement for commodities risk applies to a bank's total commodities positions, including commodity futures, commodity swaps, and all other commodity derivatives or other off-balance-sheet positions that are affected by changes in commodity prices. A commodity is defined as a physical product that is or can be traded on a secondary market (such as agricultural products, minerals (including oil), and precious metals), but excluding gold (which is treated as foreign exchange).

C. Capital Requirements

1. *Capital Requirements.* The minimum capital requirement for a state member bank subject to the market risk measure is the sum of:

a. The capital requirement for credit risk as determined in accordance with appendix A of this part, *excluding* debt and equity instruments in the trading book and positions in commodities, but *including* the counterparty credit risk requirements on all over-the-counter derivative activities whether in the bank's trading account or not; and

b. The capital requirement for market risk as determined by the internal models approach, the standardized approach, or a

[5] This appendix E does not impose specific risk capital requirements for foreign exchange risk and commodities positions because they do not have the type of issuer-specific risk associated with debt and equity instruments in the trading account.

[6] At a bank's option, when non-trading account instruments are hedged with instruments in the trading account, on- or off-balance-sheet, the non-trading account instruments may be included in the measure for general market risk. Such non-trading account instruments remain subject to the credit risk capital requirements of appendix A of this part.

[7] In general terms, a derivative is a financial contract whose value is derived from the values of one or more underlying assets or reference rates or indexes of asset values (referred to as ''the underlying''). Derivatives include standardized contracts that are traded on exchanges and customized, privately negotiated contracts known as over-the-counter (OTC) derivatives.