

requested comment on whether a risk tolerance of a change of 8 percent of equity resulting from a 200-basis-point-rate change is appropriate.²⁰ One commenter agreed that the introduction of EVE is appropriate given the current supervisory guidelines for the BHC peer group and stated that the proposed constraint is appropriate.

The Board received no comment on whether these two measures of interest rate risk, earnings at risk and equity at risk, are together sufficient measures for monitoring and controlling interest rate risk. The Board will adopt the EVE measure and set the risk tolerance at a change of 8 percent of equity resulting from a 200-basis-point-rate change. In addition, the earnings at risk tolerance will be maintained as a prudent constraint on the imputed investments.

3. Credit Risk

The overall level of credit risk compared with the level of equity is measured by the ratio of risk-adjusted assets to capital.²¹ The FDIC uses two risk-based capital measures as criteria in defining a "well-capitalized" institution for insurance premium purposes. One requires a risk-based capital ratio of 10 percent or more for total capital and the other requires a risk-based ratio of 6 percent or more for tier one capital.²² Only tangible equity capital (tier one capital) is imputed to Reserve Bank priced services; therefore, the two measures are the same. The current investment in three-month Treasury bills carries a risk weight of zero. As a result, the balance sheet underlying the 2003 PSAF showed that the priced services risk-based capital ratio is nearly 33 percent for both measures.²³ A change in investment strategy that includes investments with greater risk requires establishing a minimum risk-based total capital ratio within which to make investment decisions. To manage credit risk, the Board requested comment on whether either of two options for establishing a minimum risk-adjusted total capital ratio adequately limits imputed investment risk. The first option would maintain the ratio of total capital to risk-adjusted

assets at a level equal to or greater than that maintained by the fifty largest BHCs, which has remained near 12 percent between 1997 and 2002. Under the second option, the risk-based capital ratio would be maintained equal to or greater than the minimum required by the FDIC for a well-capitalized institution, which is currently 10 percent.

One commenter noted that the current priced services risk-based capital ratio is not representative of that of its peers and supported a change to a ratio within the range of 10 to 12 percent and provided empirical data suggesting that the FDIC minimum is within the range of risk-based capital ratios for the top 50 BHCs. The Board has concluded that imputed investments will be limited to those that result in priced-services activities maintaining a risk-based capital ratio equal to or greater than the minimum required by the FDIC for a well-capitalized institution, which is currently 10 percent.

In responding to whether other risk management criteria should be considered, one commenter suggested that, because of rapidly changing risk management practices, the Board regularly review BHC peer group risk management practices. Because the priced services risk-based capital ratio will be based on FDIC requirements, it will be reviewed each year to determine the ratio necessary to meet the regulatory capital requirements. The Board has concluded that all four risk constraints will be included in the framework used to select investments on which to impute priced-services income.

C. Implementation Methods

The Board requested comment on two alternative methods to impute clearing balance investment income based on the proposed conceptual framework. Both methods emerge from an underlying imputed portfolio of investments. The first method proposed constructing a specific portfolio of hypothetical investments, tracking its yield, and ascribing the income to priced-services activities (the actual return method). The second method proposed using average hypothetical portfolio returns, expressed as a constant spread over the three-month Treasury bill rate, as the basis for future investment performance and ascribing the income to priced services activities (the constant annual spread method).

1. Constructing a Portfolio

To construct a hypothetical portfolio, the Reserve Banks would select from the investment options described earlier

that are available to banks and BHCs, based on an allocation method that uses historical data to create an optimized portfolio. Historical data are used to create the optimized portfolio to avoid any perception that the Federal Reserve is signaling future monetary policy actions or is otherwise projecting future economic conditions or interest rate environments. This optimized portfolio is the basis for the investment allocation within the risk-management framework that maximizes the spread of the rate of return on the portfolio over the Treasury bill rate.²⁴ To avoid the administrative complexities of incorporating realized capital gains and losses in the imputed investment results for fixed-term investments, such as corporate bonds, the Board proposed to impute these investments as held to maturity.²⁵

To impute the pricing-year's investment income, the Board proposed using this portfolio method to create a pricing-year imputed portfolio of investments for the actual return method or to create a ten-year average portfolio performance for the constant annual spread method.

To create a pricing-year imputed portfolio of investments to implement the actual return method, the Board proposed assuming that the pricing-year portfolio is the most current optimized portfolio for the most current ten-year period. For example, the 2004 pricing-year's imputed portfolio yield would be the yield obtainable in 2004 from the optimum portfolio allocated based on the optimized portfolio's investment return performance from 1994 through 2003.

To create ten years of optimized portfolio actual returns to average for implementing the constant annual spread method, the Board proposed creating the optimized portfolio for each year in the most recent ten-year period. For example, the 2004 pricing-year's constant annual spread would be based on the actual investment return performance from 1993 through 2002. The optimized portfolio for 1993 would be based on historical investment return performance from 1983 through 1992, the portfolio for 1994 would be based on performance from 1984 through 1993, and so on.

The key difference in the implementation methods is how the

rate sensitivity analysis captures the risk to near-term earnings.

²⁰ Large BHCs typically manage the EVE measure within a risk-tolerance range of 5 to 10 percent. More information on measurement of interest rate risk can be found at <http://www.federalreserve.gov/boarddocs/supmanual/trading/trading.pdf>.

²¹ Credit risk results from the possibility that the issuer of a bond or other borrower cannot repay its obligations as promised. Criteria for managing credit risk are necessary when investing in instruments other than Treasury securities.

²² <http://www.fdic.gov>.

²³ 66 FR 67834, November 7, 2002.

²⁴ A ten-year period was selected because the data are available and the period includes a variety of interest rate environments.

²⁵ This results in a ladder approach to determining the average yield. For an investment in five-year corporate bonds, for example, the average yield would incorporate the yield from bonds purchased in increments over the preceding five years.