

dealer could amend its exemptive application to request Commission approval to use VaR models to calculate market risk capital charges for other eligible positions, which would include positions for which there is a ready market and for which there is adequate historical data to support a VaR model.

The Commission seeks comment on all aspects of the phase-in timetable, including the appropriateness of the positions selected for each level of eligibility and the 9-month time periods between successive levels. Should these time periods be shorter or longer? How should the Commission evaluate the success or adequacy of the models during these phase-in periods? Are there any other additional criteria or methods the Commission should consider using?

The Commission seeks comment on all aspects of the proposed calculation of market risk capital charges. In particular, we request comment on the use of mathematical models for regulatory capital purposes, including the quantitative and qualitative requirements for VaR models, the multiplication factors used to calculate the capital charge for market risk, and the use of backtesting to determine the multiplication factor. For example, should the multiplication factors be higher or lower? How should the multiplication factors be determined? Are the backtesting procedures appropriate? Is the 99% one-tailed confidence level appropriate? Is the requirement that the price changes be equivalent to a ten business-day movement in rates and prices appropriate? If not, what parameters would be appropriate?

Because VaR models use historical price data to predict future price movements, under paragraph (c)(4) of proposed Appendix E, an eligible broker-dealer could not use VaR models to calculate capital charges on securities that do not have adequate historical data available to make the VaR models reliable. For example, a broker-dealer could not use VaR models to calculate capital charges on securities recently sold in an initial public offering or for securities without a ready market. In those cases, the broker-dealer could apply to use scenario analysis or would continue to use the standard haircut method to calculate the capital charges on those positions.

b. Market Risk Capital Charge Calculation Using Scenario Analysis

Under paragraph (c)(5) of proposed Appendix E, for positions for which the Commission has approved the broker-

dealer's use of scenario analysis³⁴ to compute a market risk capital charge (for example, positions having no ready market) the market risk capital charge would be three times the greatest adverse price movement resulting from the scenario over any ten-day period on a daily basis. The broker-dealer would be required to take a minimum market risk capital charge of \$25 per 100-share equivalent equity contract for equity positions or 1/2 of one percent of the face value of the contract for all other types of contracts, even if the scenario model indicates a lower amount. We believe that it is appropriate to build in minimum charges to help assure that the firm has adequate capital in view of risks that may not be captured by scenario analysis. We request comment on the proposed calculation of capital charges using scenario analysis. Specifically, is three the appropriate multiplier? Is \$25 per 100-share equivalent equity contract the appropriate minimum charge for equity positions? Is 1/2 of one percent of the face value of the contract the appropriate minimum for all other types of contracts? The Commission also could require a broker-dealer using scenario analysis to take additional capital charges for specific risk based on the liquidity or the perceived risks of the instruments. We request comment on the appropriate capital charge for specific risk.

The Commission solicits comment on all aspects of the use of scenario analysis to determine capital charges including the proposed multipliers and minimum charges. We are also interested in receiving any comments on other methodologies that may be appropriate to more accurately measure risk and correlate that risk to capital charges.

c. Market Risk Capital Charge Calculation for Other Positions

Under paragraph (c)(6) of proposed Appendix E, an eligible broker-dealer that computes its market risk capital charges pursuant to proposed Appendix E to Rule 15c3-1 would continue to compute market risk capital charges using paragraph (c)(2)(vi) of Rule 15c3-1 (the "haircut method") for positions for which the Commission has not approved its use of a VaR model or scenario analysis to compute those capital charges.

³⁴ Scenario analysis is the identification of the potential impact on the profit or loss on a position of various extreme events that affect the pricing of the position in the portfolio.

4. Credit Risk Capital Charge

An eligible broker-dealer would be required to use paragraph (d) of proposed Appendix E to compute its credit risk capital charge on credit exposures arising from the broker-dealer's positions in derivatives instruments if the Commission authorized the broker-dealer to use VaR or scenario analysis to compute its market risk capital charge on those positions. The credit risk capital charge computed pursuant to proposed Appendix E would be similar to the credit risk capital charge calculated pursuant to Appendix F to Rule 15c3-1, which applies to electing OTC derivatives dealers. The credit risk capital charge would be the sum of counterparty exposure charges for each counterparty, concentration charges by counterparty, and a portfolio concentration charge across all counterparties. Each of these charges is designed to address different components of credit risk.

First, for each counterparty, the broker-dealer would compute a counterparty exposure charge equal to the "credit equivalent amount" (defined below) of the broker-dealer's exposures to the counterparty, multiplied by 8%,³⁵ and further multiplied by a credit risk weight for the counterparty (or, under paragraph (d)(1) of proposed Appendix E, the counterparty exposure charge is the net replacement value in the account of a counterparty if that counterparty is insolvent, in bankruptcy, or that has senior long-term debt in default). This method for computing credit risk capital charges is consistent with the computation of credit risk capital charges for OTC derivatives dealers under Appendix F to Rule 15c3-1.

The credit equivalent amount to a counterparty would be defined in paragraph (d)(2) of proposed Appendix E as the sum of: (1) the broker-dealer's maximum potential exposure to the counterparty multiplied by the appropriate multiplication factor; and (2) the broker-dealer's current exposure to the counterparty. The multiplication factor would generally be determined based on backtesting results of the VaR model used to calculate maximum potential exposure, except that the initial multiplication factor would be one. Current exposure would be defined in paragraph (d)(3) of proposed Appendix E as the replacement value of

³⁵ The 8% multiplier is consistent with the calculation of credit risk in the OTC derivatives dealers rules and with the Basel Standards and is designed to dampen leverage to assure that the firm maintains a safe level of capital.