

TABLE III—DURATION METHOD: TIME-BANDS AND ASSUMED CHANGES IN YIELD—Continued

Zone	Time-band	Assumed change in yield
	11.3 up to 16.6 yrs	0.60
	Over 16.6 years	0.60

3. *Interest rate derivatives.* a. Debt derivatives and other off-balance-sheet positions that are affected by changes in interest rates are included in the measurement system under section IV.A. of this appendix E (except for options and the associated underlyings, which are included in the measurement system under the treatment discussed in section IV.E. of this appendix E). A summary of the treatment for debt derivatives is set out in Attachment III to this appendix E.

b. Derivatives are converted into positions in the relevant underlying instrument and are included in the calculation of specific and general market risk capital charges as described above. The amount to be included is the market value of the principal amount of the underlying or of the notional underlying. For instruments where the apparent notional amount differs from the effective notional amount, a banking organization must use the effective notional amount.

c. Futures and forward contracts (including FRAs) are broken down into a combination of a long position and short position in the notional security. The maturity of a future or a FRA is the period until delivery or exercise of the contract, plus the life of the underlying instrument.³⁰ Where a range of instruments may be delivered to fulfill the contract, the banking organization may choose which deliverable instrument goes into the maturity or duration ladder as the notional underlying. In the case of a future on a corporate bond index, positions are included at the market value of the notional underlying portfolio of securities.

d. Swaps are treated as two notional positions in the relevant instruments with appropriate maturities. The receiving side is treated as the long position and the paying side is treated as the short position.³¹ The separate sides of cross-currency swaps or forward foreign exchange transactions are slotted in the relevant maturity ladders for the currencies concerned. For swaps that pay or receive a fixed or floating interest rate against some other reference price, for example, an equity index, the interest rate

component is slotted into the appropriate repricing maturity category, with the long or short position attributable to the equity component being included in the equity framework set out in section IV.B. of this appendix E.³²

e. A banking organization may offset long and short positions (both actual and notional) in identical derivative instruments with exactly the same issuer, coupon, currency, and maturity before slotting these positions into time-bands. A matched position in a future and its corresponding underlying may also be fully offset and, thus, excluded from the calculation, except when the future comprises a range of deliverable instruments. However, in cases where, among the range of deliverable instruments, there is a readily identifiable underlying instrument that is most profitable for the trader with a short position to deliver, positions in the futures contract and the instrument may be offset. No offsetting is allowed between positions in different currencies.

f. Offsetting positions in the same category of instruments can in certain circumstances be regarded as matched and treated by the banking organization as a single net position which should be entered into the appropriate time-band. To qualify for this treatment the positions must be based on the same underlying instrument, be of the same nominal value, and be denominated in the same currency. The separate sides of different swaps may also be "matched" subject to the same conditions. In addition:

i. For futures, offsetting positions in the notional or underlying instruments to which the futures contract relates must be for identical instruments and the instruments must mature within seven days of each other;

ii. For swaps and FRAs, the reference rate (for floating rate positions) must be identical and the coupon closely matched (i.e., within 15 basis points); and

iii. For swaps, FRAs and forwards, the next interest reset date, or for fixed coupon positions or forwards the remaining maturity, must correspond within the following limits: If the reset (remaining maturity) dates occur within one month, then the reset dates must be on the same day; if the reset dates occur between one month and one year later, then the reset dates must occur within seven days of each other, or if the reset dates occur over one year later, then the reset dates must occur within thirty days of each other.

g. Interest rate and currency swaps, FRAs, forward foreign exchange contracts and

interest rate futures are not subject to a specific risk charge. This exemption also applies to futures on a short-term (e.g., LIBOR) interest rate index. However, in the case of futures contracts where the underlying is a debt security, or an index representing a basket of debt securities, a specific risk charge will apply according to the category of the issuer as set out in section IV.A.2. of this appendix E.

B. Equities

1. *Specific risk.* The measure of specific risk is calculated on the basis of the banking organization's gross equity positions, that is, the absolute sum of all long equity positions and of all short equity positions at current market value.³³ The specific risk capital requirement is 8.0 percent of that sum, unless the portfolio is both liquid and well-diversified, in which case the specific risk capital requirement is 4.0 percent of the gross equity position. A specific risk charge of 2.0 percent applies to the net long or short position in a broad, diversified equity index and is viewed as necessary to provide for risks associated with contract execution.³⁴

2. *General Market risk.* The measure of general market risk is based on the difference between the sum of the long positions and the sum of the short positions (i.e., the overall net position in an equity market) at current market value. An overall net position must be separately calculated for each national market in which the banking organization holds equities. The capital requirement for general market risk is 8.0 percent of the net position in each equity market.

3. *Equity derivatives.* a. Equity derivatives and other off-balance-sheet positions that are affected by changes in equity prices are included in the measurement system under section IV.B. of this appendix E (except for equity options, equity index options, and the associated underlying, which are included in the measurement system under the treatment discussed in section IV.E. of this appendix E).³⁵ This includes futures and swaps on both

³³ Matched positions in each identical equity in each national market may be treated as offsetting and excluded from the capital calculation, with any remaining position included in the calculations for specific and general market risk. For example, a future in a given equity may be offset against an opposite cash position in the same equity.

³⁴ A portfolio that is liquid and well-diversified 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. The volatility of the portfolio's value should not be dominated by the volatility of any individual equity issue or by equity issues from any single industry or economic sector. In general, such portfolios should be characterized by a large number of individual equity positions, with no single position representing a large portion of the portfolio's total market value. In addition, it would generally be the case that a sizable proportion of the portfolio would be comprised of issues traded on organized exchanges or in well-established over-the-counter markets.

³⁵ Where equities are part of a forward contract (both equities to be received or to be delivered), any interest rate or foreign currency exposure from the other side of the contract should be appropriately included in the measurement system in sections IV.A. and IV.C. of this appendix E.

³⁰ For example, a long position in a June three-month interest rate future (taken in April) is reported as a long position in a government security with a maturity of five months and a short position in a government security with a maturity of two months.

³¹ For example, an interest rate swap under which a banking organization is receiving floating-rate interest and paying fixed is treated as a long position in a floating rate instrument with a maturity equivalent to the period until the next interest reset date and a short position in a fixed-rate instrument with a maturity equivalent to the remaining life of the swap.

³² A banking organization with a large swap book may, with prior approval of the Federal Reserve, use alternative formulae to calculate the positions to be included in the maturity or duration ladder. For example, a banking organization could first convert the payments required by the swap into present values. For that purpose, each payment would be discounted using zero coupon yields, and the payment's present value entered into the appropriate time-band using procedures that apply to zero (or low) coupon bonds. The net amounts would then be treated as bonds, and slotted into the general market risk framework. Such alternative treatments will, however, only be allowed if: (i) the Federal Reserve is fully satisfied with the accuracy of the system being used, (ii) the positions calculated fully reflect the sensitivity of the cash flows to interest rate changes; and (iii) the positions are denominated in the same currency.