banks' exposures for purposes of assessing capital adequacy. The agencies believe that such rate movements are realistically conservative given the movements in interest rates experienced in 1994. They also believe that such rate scenarios are sufficiently transparent and easy to understand that they can be easily incorporated into either a bank's own IRR model or the supervisory model. The scenarios are incorporated into the proposed supervisory model via the proposed risk-weights that are applied to a bank's reported maturity and repricing balances.

The agencies stress that their adoption of these rate scenarios does not replace the need for a bank to evaluate its IRR exposure over a wider range of possible rate changes for its own risk management purposes. Such rate changes may include non-parallel yield curve shifts and gradual, as well as immediate, rate changes. To ensure greater consistency, however, in the agencies' assessments of banks' exposures and their need for capital, banks are encouraged to include the proposed instantaneous and parallel 200 basis point rate scenarios into their internal IRR measurement processes.

3. Structure of Supervisory Model

The supervisory model in the September NPR grouped assets, liabilities, and off-balance-sheet positions by various categories, based on their general cash flow and product characteristics. Each category and time band was assigned risk-weights corresponding to a rising rate scenario and a declining-rate scenario. The risk-weights were constructed by the agencies, using hypothetical market instruments that were representative of the category being measured. For amortizing instruments, the risk-weights incorporated assumptions about prepayments.

A number of commenters expressed concerns regarding the accuracy of the model proposed in the September NPR. Frequently cited concerns included: the use of hypothetical, rather than bank-specific, instruments to derive risk weights; the level of data aggregation; the use of standardized prepayment assumptions; and the treatment of interest rate protection agreements (caps and floors). A number of commenters voiced concerns about the treatment of residential mortgage-related products. In general, these commenters believed that additional detail on mortgage holdings, such as coupon information on fixed-rate mortgages, and more explicit information on periodic and lifetime interest caps for adjustable-rate products, would improve the model's accuracy.

The agencies sought comment in the September NPR on whether commercial banks with portfolios that are similar to thrift should be required to use the Net Portfolio Value model used by the Office of Thrift Supervision (OTS) for federally-supervised thrift institutions. Most commenters believed that such a requirement would impose substantially greater reporting burdens without necessarily improving the accuracy of the measure and might create incentives for banks to substitute such a model for the judgment of bank management. A minority of commenters disagreed and stated that the approach and data used by the OTS were superior and more accurate than what the banking agencies had proposed.

The agencies have carefully considered commenters' concerns about the proposed supervisory model's accuracy. The agencies believe it is critical to have a supervisory model that can identify banks with significant IRR exposures. They also are attentive to the risk that model measurement errors could lead to undesirable incentives or incorrect assessments regarding the risk and complexity of products, activities, or banks. At the same time, the agencies recognize the need to balance the desire for increased accuracy against the potential costs of greater reporting detail and model complexity. The agencies are particularly concerned that the supervisory model retain sufficient transparency so that bankers can understand its methodology and anticipate and compute their bank's measured exposure and that it not replace the role or need for sound internal interest rate risk management systems.

The agencies intend to make five modifications to the structure of the supervisory model to improve its accuracy and which are described below. The first four changes modify the basic supervisory model outlined in the September NPR. This revised basic model will be the baseline model for non-exempted banks. The last modification creates supplemental modules for banks that have concentrations in residential mortgage-related instruments. The agencies are mindful that the supplemental schedules will impose additional reporting requirements for some banks. Nonetheless, the agencies are concerned that the baseline model may not be sufficiently accurate to capture the risk at banks with significant holdings of mortgage loans or mortgage pass-through securities, and therefore propose to require additional reporting for those banks. A detailed description of the model, the risk weights, and information requirements are discussed in the policy statement. Schedule 1, provided in the attached policy statement, illustrates the type of information that will be used in the baseline supervisory model, while Schedules 2–4 illustrate the information used for the supplemental modules.

a. *Adjustable-rate residential mortgages.* The first modification that the agencies have made is to treat adjustable-rate residential mortgage loans and securities (ARMs) separately from fixed-rate residential mortgage assets. As modified, information on ARMs will be reported by a bank on the basis of the reset frequency of the ARM's pricing index, rather than by the ARM's next date to repricing. In addition, a bank will report ARMs that are currently within 200 basis points of their lifetime cap separately from those ARMs that are further away from their lifetime caps. The agencies believe that this stratification of ARM products will provide a better reflection of their potential price sensitivity to changes in market interest rates than the treatment described in the September NPR.

b. *Fixed-rate residential mortgages and other amortizing assets.* The second modification the agencies made is to treat fixed-rate residential mortgage assets separately from other amortizing assets. In the September NPR, these assets had been combined into a single category. As a result of this combination, the same prepayment assumptions were applied to all amortizing assests. By separating these two categories, the agencies propose to apply different prepayment assumptions to the two categories.

c. *Self-reporting of market value sensitivities.* The third modification will require a bank that holds certain types of financial instruments to provide in its Call Report submissions, estimates of changes in market value sensitivities of those instruments for the specified 200 basis point interest rate scenarios. These estimates may be obtained from the bank's own internal risk measurement systems or from reliable third-party sources, provided that the bank knows, understands, and documents the assumptions underlying those estimates. All estimates and supporting documentation will be subject to examiner review. The September NPR used this approach for certain mortgage derivatives securities. The agencies propose to extend this treatment to other products. The products for which banks would be required to self-report market value sensitivities generally have complex options or cash flow