

## RECONCILIATION OF THE OTS NPV SENSITIVITY ESTIMATES AND THRIFTS' TB 13A ESTIMATES WITH INSTITUTION'S OWN ESTIMATES

TB 13a requires that institutions with more than \$1 billion in assets and smaller institutions that invest in high-risk mortgage-derivative products produce quarterly estimates of the interest rate sensitivity of their NPV. Institutions should be able to explain differences between the OTS estimates of NPV sensitivity and their own estimates if:

- There are substantial differences between the two sets of estimates.
- OTS's estimates exceed the institution's internal exposure limits, even though the institution's own estimates do not.

Some institutions that have attempted to reconcile their own estimates and the OTS estimates found that the differences are often the result of inconsistencies in input data for the two models. Institutions often have separate systems for gathering data for TFR reporting and for input into their own NPV models. The input data formats and levels of aggregation required for a given institution's model are likely to differ from those required by Schedule CMR. Institutions should, at a minimum, ensure consistency between the two models regarding the input data for totals of broad categories of assets and liabilities (for example, total current-index ARMs or total transaction accounts).

In addition to inconsistencies in input data, differences in methodologies for valuing financial instruments can cause significant differences between an institution's estimates and those of OTS. Two areas where differing methodologies can have a large effect are in the valuation of mortgages and core deposits. The manner in which the valuation methodology treats the mortgage prepayment option, and especially the interest rate caps in ARMs, can have a significant effect on the estimated price sensitivity of mortgages and the resulting NPV sensitivity estimates.

On the liability side, core deposit values can vary significantly depending on how fast the rate paid on deposits changes with changes in market rates and how fast existing balances shrink (decay) over time. Models that assume different decay rates (from those used by the OTS Model) result in different economic value estimates for core deposits. Some have argued that their core deposits do not decay; that new accounts replace those that are closed. The OTS estimate of NPV includes only *existing* assets, liabilities, and off-balance-sheet instruments. The assumption that any maturing asset or liability is replaced may result in NPV sensitivity estimates significantly different from the OTS estimates. Further, the OTS estimates include only those assets, liabilities, and off-balance-sheet activities that result in identifiable cash flows and, therefore, do not include the value of goodwill.

To help institutions determine the source of differences between OTS's NPV sensitivity estimates and their own, OTS publishes quarterly the *Selected Asset and Liability Price Tables*. These tables list the estimated economic values of various financial instruments calculated by the OTS model in each of seven interest rate environments described in TB 13a. For example, an institution could use the tables to compare the value estimated by the OTS model for a fixed-rate mortgage loan with a remaining maturity of 300 months and a coupon of 8 percent, in each of the interest rate environments, with the value calculated by its own model. (Consult *The OTS Net Portfolio Value Model* manual for a detailed

description of the valuation of individual classes of assets and liabilities and a full description of what OTS includes in the NPV measure.)

You may determine that the methodologies and assumptions, for example, on mortgage prepayment rates and deposit decay rates, used by an institution's model are more appropriate for that particular institution than those used by OTS's model. You may accept the association's estimates as the more accurate estimate of the institution's NPV sensitivity. If you determine that the institution uses inappropriate methodologies or assumptions, you may rely solely on OTS estimates.