Quarterly Derivatives Fact Sheet - Third Quarter 1996

General

The notional amount of derivatives in commercial bank portfolios increased by $782 billion in the third quarter to $19.8 trillion. (This figure excludes spot foreign exchange contracts, which increased by $6.6 billion to $567 billion). During the third quarter, the notional amount of interest rate contracts rose by $740 billion, to $13.3 trillion. Foreign exchange contracts increased by $85 billion, to $6.2 trillion, while commodity and equity contracts fell by $43 billion, to $351 billion. The number of commercial banks holding derivatives decreased by 6 in the third quarter to 501.

Approximately 67 percent of the notional amount of derivative positions was comprised of interest rate contracts with an additional 31 percent represented by foreign exchange contracts. Commodity and equity contracts accounted for only 2 percent of the total notional amount. The composition of contract types remains relatively unchanged since 1991.

Off-balance sheet derivatives continue to be concentrated in the largest banks. Eight commercial banks account for 94 percent of the total notional amount of derivatives in the banking system, with 98 percent accounted for by the top 25 banks (these figures exclude spot foreign exchange).

Over-the-counter (OTC) and exchange-traded contracts comprised 87 percent and 13 percent, respectively, of the notional holdings as of third quarter, which has remained virtually the same since first quarter of 1996. OTC contracts tend to be more popular with banks and bank customers because they can be tailored to meet firm-specific risk management needs. However, OTC contracts tend to be less liquid than exchange-traded contracts, which are standardized and fungible.

The notional amounts of short-term (i.e., with remaining maturities of less than one year) contracts are down $621 billion from the Second, quarter, to $8.7 trillion. Contracts with remaining maturities of one to five years increased by $281 billion, to $4.4 trillion, and long-term (i.e., with maturities of five or more years) contracts increased by $116 billion, to $1.2 trillion.

Risk

Notional amounts are helpful in measuring the level and trends of derivatives activity. However, these amounts may be misleading indicator of risk exposure. Beginning in the first quarter of 1995, the Call Report provided data that improve disclosure and understanding of the relative riskiness of bank activities involving derivatives. Some of the data provide immediate information (e.g., fair values and credit risk exposures) while other data will be more useful over time in evaluating trends (e.g., trading revenue and contractual maturity data).

In addition to the Call Report changes, the risk-based capital guidelines were amended as of the second quarter of 1995 to (1) revise and expand the set of conversion factors used to calculate the potential future credit exposure of derivative contracts, and (2) recognize the effect that qualifying bilateral netting arrangements will have on the potential future credit exposure for derivative contracts. Contracts with the longest maturities (i.e., over five years) are now subject to new, higher conversion factors. Different conversion factors were also established that specifically apply to derivative contracts related to equities, precious metals, and other commodity contracts. The credit exposure calculations in Table 4 reflect those new factors. However, that table does not reflect the effects of bilateral netting on potential future credit exposures. Under the new risk-based capital guidelines, banks have the option of either calculating their netted potential future credit exposure on a counterparty basis or approximating their netted potential future credit exposure on an aggregate basis (so long as the method chosen is used consistently and is subject to examiner review). Since available Call Report information does not reveal the method chosen by the bank to report the impact of netting on future credit exposure, the total credit exposures reported here represent upper bounds. If a bank has a legally valid bilateral netting arrangement, potential future credit exposure could be decreased.

The third quarter saw a $3.5 billion increase in total credit exposure from off-balance sheet contracts to $238 billion. Relative to risk-based capital total credit exposures for the top eight banks averaged 236.9 percent of capital in the third quarter, compared to 244.1 percent for top nine banks at the end of the second quarter (note that third quarter figures reflect the Chase Manhattan and Chemal bank merger; data for these banks in previous quarters have not been merger-adjusted and may not be comparable). The increase in the dollar amount of total credit exposure is largely due to the growth in derivative volumes and the related increase in the future add-on portion of the credit exposure calculation. However, credit exposure would have been significantly higher without the benefit of bilateral netting agreements. The extent of the benefit can be seen by comparing the gross positive fair values from Table 6 to the bilaterally-netted current exposures shown on Table 4.

Non-performing contracts remained at nominal levels. For all banks, the book value of contracts past due 30 days or more aggregated only $21 million, or .009 percent of total credit exposure from derivatives contracts. During the third quarter 1996, banks with derivative contracts reported $37 million in credit losses from off-balance sheet derivatives. This number represents the year-to-date charge-offs incurred from off-balance sheet contracts. These figures reflect both the current healthy economic environment and the relatively high credit quality of counterparties and end-users with whom banks currently engage in derivatives transactions.

The Call Report data reflect the significant differences in customer bases and business strategies among the banks. The preponderance of trading activities, including both customer transactions and proprietary positions, is confined to the very largest banks. Smaller banks tend to limit their use of derivatives to risk management transactions. The banks with the 25 largest derivatives portfolios hold 93.6 percent of the contracts for

trading purposes, primarily customer service transactions, while the remaining 6.4 percent are held for their own risk management needs. The trading contracts of these banks represent 91.5 percent of all notional values in the commercial banking system. Banks below the top 25, which use derivatives primarily for risk management transactions, hold 72.7 percent of their contracts for purposes other than trading.

The gross negative and gross positive fair values of derivatives portfolios show that banks continue to maintain relatively balanced books; that is, the value of positions in which the bank has a gain is not significantly different from the value of those positions with a loss. In fact, for derivative contract held for trading purposes, the eight largest banks have $200.6 billion in positive fair values and $200.4 billion in negative fair values. These figures represent a slight increase from second quarter levels. Note that while gross fair value data are very useful in depicting more meaningful market risk exposure, users must be cautioned that these figures do *not* include the results of cash positions in trading portfolios. Similarly, the data are reported on a legal entity basis and consequently do not reflect effects of positions in portfolios of affiliates, and may result in double-counting bank and non-bank affiliate market.

End-user positions, or derivatives held for risk management purposes, have aggregate gross positive fair values of $8.3 billion, while the gross negative fair value of these contracts aggregated to $8.8 billion. Readers must be cautioned, however, that these figures are only useful in the context of a more complete analysis of each bank's asset/liability structure and management process.

Revenues

The Call Report data include revenue information regarding cash **and** derivative derivative trading activities. The data also show the impact on net interest income and non-interest income from derivatives used in non-trading activities. Note that the revenue data reported in Table 7 reflect figures for the first quarter alone. The revenue figures reported for trading activities in the third quarter of 1996 indicate that the banks with derivatives realized approximately $1.7 billion from cash and off-balance sheet derivative contracts, with the top eight banks accounting for 84.1 percent of these trading revenues. Relative to the second quarter of, commercial banks reporting derivatives contracts in the third quarter of 1996 show an aggregate decrease in trading revenues from cash and derivatives activities of $182 million, or 9.5 percent. .

In the third quarter, revenues from interest rate contracts rose $39 million, to $990 million, while revenues from foreign exchange contracts decreased $218 million, to $514 million. Revenue from other trading contracts, including equities and commodities contracts, fell $3 million, generating $230 million in revenues; with virtually all of that amount was in the top eight banks.

Derivatives held for purposes other than trading did not have a significant impact on either net interest income or non-interest income in the third quarter. Non-traded derivatives contributed $327 million, or .43 percent to the $76.1 billion in gross revenues

of banks with derivative contracts in the third quarter. These figures reflect an increase of $97 million from the second quarter. Readers must be cautioned that these results are only useful in the context of a more complete analysis of each bank's asset/liability structure and management process.

High-risk Mortgage Securities and Structured Notes

The number of banks reporting either structured notes or high-risk mortgage securities structured notes or high-risk mortgage securities remain largely confined to banks with total assets less than $1 billion. The third quarter aggregated numbers indicate that book values exceeded market values (fair values) by $61 million for high risk mortgage securities, a $34 million dollar improvement from the second quarter. Book values exceeded market values by $204 million for structured notes, a $49 million dollar improvement from the second quarter. The improvement in depreciation from second to third quarter stems from the overall decline in market interest rates in the third quarter. For all banks with high-risk mortgage securities, the average book value of holdings relative to total assets for the third quarter of 1996 was 1.2 percent, compared to 1.3 percent in the second quarter of 1996. Average depreciation to capital was .76 percent, compared to .83 percent in the second quarter.

For banks with structured notes, the average book value of holdings to total assets declined slightly to 2.2 percent, compared to 2.4 percent in the second quarter, while average depreciation to capital declined to .58 percent, compared to .68 percent in the second quarter. The number of banks reporting high-risk mortgage securities decreased by 30 to 505, in the third quarter. The number of banks reporting structured notes on their books decreased in the third quarter by 163, to 3,687.