

Quarterly Derivatives Fact Sheet -- Third Quarter 1997

GENERAL

The notional amount of derivatives in insured commercial bank portfolios increased by \$1.7 trillion in the third quarter to \$25.0 trillion. Relative to the second quarter of 1997, the total notional amount of derivative contracts increased by more than seven percent. During the third quarter of 1997, the notional amount of interest rate contracts rose by \$1.5 trillion, to \$17.3 trillion. Foreign exchange contracts increased by \$184 billion, to \$7.3 trillion (this figure excludes spot foreign exchange contracts, which increased by \$144 billion to \$651 billion). Commodity and equity contracts rose by \$39 billion, to \$452 billion. Credit derivatives rose by \$13 billion, and now total \$39 billion. The number of commercial banks holding derivatives increased by 11 in the third quarter to 475.

Approximately 69 percent of the notional amount of derivative positions was comprised of interest rate contracts with an additional 29 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 99 percent accounted for by the top 25 banks.

Over-the-counter (OTC) and exchange-traded contracts comprised 86 percent and 14 percent, respectively, of the notional holdings as of third quarter, which has remained virtually the same since the third 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 rose by \$600 million from the second quarter of 1997, to \$10.8 trillion. Contracts with remaining maturities of one to five years increased by \$500 billion, to \$5.7 billion, and long-term (i.e., with maturities of five or more years) contracts increased by \$200 billion, to \$1.9 trillion.

RISK

Notional amounts are helpful in measuring the level and trends of derivatives activity. However, these amounts may be a misleading indicator of risk exposure. Data such as fair values and credit risk exposures are more useful for analyzing point-in-time risk exposure, while data such as trading revenues and contractual maturities provide more meaningful information on trends in risk exposure.

The notional amount of credit derivatives reported by insured commercial banks increased by 50 percent from second quarter levels, totaling \$39 billion. Notional amounts for the fourteen commercially insured institutions that sold credit protection (i.e., assumed credit risk) to other parties was \$14.7 billion, an increase of \$7.3 billion from the second quarter of 1997. The notional amount for the nine commercial banks reporting credit derivatives that bought credit protection (i.e., hedged credit risk) from other parties was \$24.1 billion, a \$6 billion increase from second quarter. The notional imbalance between the aggregate levels of credit derivatives where banks bought and sold credit protection may result from dealer institutions using credit derivatives to hedge risk in their own credit portfolios. Additionally, dealers may use cash instruments to hedge transactions for which the dealer has purchased credit protection.

Credit exposures are reflected in Table 4. However, that table does not reflect the full effects of bilateral netting on potential future credit exposures (i.e., the add-on component). Under the current 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).

There was a \$33 billion increase in the third quarter in total credit exposure from off-balance sheet contracts, to \$316 billion. Relative to risk-based capital, total credit exposures for the top eight banks increased slightly, to 6.4 percent of aggregated capital in the third quarter from 6.2 percent in the second quarter. The increase in the dollar amount of total credit exposure appears to be largely due to changes in market rates over the third quarter. Credit exposure would have been significantly higher without the benefit of bilateral netting agreements. The extent of the benefit can be seen by comparing 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 \$8.1 million, or .003 percent of total credit exposure from derivatives contracts. Data through the third quarter 1997 indicate that banks with derivative contracts reported \$59 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 relatively small loss figures reflect both the current healthy economic environment and the generally high credit quality of counterparties and end-users with whom banks presently engage in derivatives transactions, as well as the increased use of collateral.

The Call Report data reflect the significant differences in business strategies among the banks. The preponderance of trading activities, including both customer transactions and proprietary positions, is confined to the very largest banks. The banks with the 25 largest derivatives portfolios hold 95 percent of the contracts for trading purposes, primarily customer service transactions, while the remaining 5 percent are held for their own risk management needs. The trading contracts of these banks represent 93 percent of all notional values in the commercial banking system. Smaller banks tend to limit their use

of derivatives to risk management purposes. Banks below the top 25 hold 66 percent of their contracts for purposes other than trading.

The gross negative and gross positive fair values of derivatives portfolios are relatively balanced; 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 contracts held for trading purposes, the eight largest banks have \$304 billion in gross positive fair values and \$306 billion in gross negative fair values. 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 the effects of positions in portfolios of affiliates.

End-user positions, or derivatives held for risk management purposes, have aggregate gross positive fair values of \$9.3 billion, while the gross negative fair value of these contracts aggregated to \$7.5 billion. Readers should recognize that these figures are only useful in the context of a more complete analysis of each bank's asset/liability structure and management process. For example, these figures do not reflect the impact of off-setting positions on the balance sheet.

REVENUES

The Call Report data include revenue information regarding cash instruments *and* off-balance sheet 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 third quarter alone, and are not annualized.

Relative to the second quarter of 1997, commercial banks reporting derivatives contracts in the third quarter of 1997 show an aggregate increase in trading revenues from cash instruments and derivatives activities of \$510 million, or 26 percent. The revenue figures reported for trading activities in the third quarter indicate that the banks with derivatives realized approximately \$2.5 billion in revenue for the third quarter from cash instruments and off-balance sheet derivative, with the top eight banks accounting for 85 percent of these trading revenues. In the third quarter, revenues from interest rate positions increased by \$234 million, generating \$1.2 billion, while revenues from foreign exchange positions increased by \$162 million, to \$1.1 billion. Revenue from other trading positions, including equities and commodities positions, increased by \$112 million, generating \$228 million in revenues, with approximately 99 percent of that amount in the top eight banks. Note: users of this report are reminded that these results are for the third quarter ending September 30, 1997 and do not reflect the market volatility experienced thus far in the fourth quarter.

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 a loss of \$28 million, or .03 percent to the gross revenues of

banks with derivative contracts in the third quarter. These figures reflect a decrease of \$276 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 remain largely confined to banks with total assets less than \$10 billion. The number of banks reporting high-risk mortgage securities decreased by 24 to 430, in the third quarter. The third quarter aggregated numbers indicate that book values exceeded market values (fair values) by \$8.7 million for high risk mortgage securities, a \$35 million dollar improvement from the second quarter, stemming from the decrease in market interest rates in the third quarter. The average book value of holdings for these banks relative to total assets for the third quarter of 1997 remained at 1.1 percent. Average depreciation to capital was .34 percent, an improvement from second quarter levels.

The number of banks reporting structured notes on their books decreased in the third quarter by 151, to 2,948. Book values exceeded market values by \$55 million for structured notes, a \$53 million dollar improvement from the second quarter, due to the decrease in interest rates over the third quarter. For banks with structured notes, the average book value of holdings to total remained virtually unchanged at 1.7 percent, compared to 1.8 percent in the second quarter, while the average amount of depreciation to capital was .27 percent, an improvement from second quarter levels.