

Quarterly Derivatives Fact Sheet -- First Quarter 1998

GENERAL

The notional amount of [derivatives](#) in insured commercial bank portfolios increased by \$985 billion (about three percent) in the first quarter, to \$26.0 trillion. During the first quarter, the notional amount of interest rate contracts rose by \$1.3 trillion, to \$18.4 trillion. Foreign exchange contracts fell by \$362 billion, to \$7.1 trillion. This figure excludes spot foreign exchange contracts, which increased by \$361 billion to \$678 billion. Equity, commodity and other contracts rose by \$35 billion, to \$529 billion. Credit derivatives almost doubled, increasing by \$37 billion, to \$91 billion. The number of commercial banks holding derivatives decreased by 8, to 451.

Approximately 70 percent of the notional amount of derivative positions was comprised of interest rate contracts with an additional 27 percent represented by foreign exchange contracts. Equity, commodity and other contracts accounted for only 2 percent of the total notional amount. The composition of contract types remains relatively unchanged since 1994.

Holdings of 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 held by the top 25 banks.

Over-the-counter (OTC) and exchange-traded contracts comprised 85 percent and 15 percent, respectively, of the notional holdings as of first quarter of 1998, which has remained virtually the same since the fourth 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 expose participants to greater credit risks and tend to be less liquid than exchange-traded contracts, which are standardized and fungible.

The notional amounts of short-term contracts (i.e., with remaining maturities of less than one year) fell by \$1 trillion from the fourth quarter of 1997, to \$9.7 trillion. Contracts with remaining maturities of one to five years rose by \$20 billion, to \$5.8 trillion, and long-term (i.e., with maturities of five or more years) contracts increased by \$160 billion, to \$2.3 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.

Credit exposures are reflected in Table 4. However, Table 4 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. The method chosen must be used consistently and is subject to examiner review.

There was an \$8 billion decrease in the first quarter in total credit exposure from off-balance sheet contracts to \$348 billion. Relative to risk-based capital, total credit exposures for the top eight banks decreased to 260 percent of aggregated risk based capital in the first quarter of 1998 from 290 percent in the fourth quarter of 1997. The decrease in the dollar amount of total credit exposure appears to be largely due to changes in market rates, as well as the overall level of activity in the first 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.

Past due derivative contracts remained at nominal levels. For all banks, the book value of contracts past due 30 days or more aggregated only \$2.3 million, or .0007 percent of total credit exposure from derivatives contracts. A more complete assessment of the magnitude of troubled derivative exposures would include non-performing contracts as well as past due contracts. Call Report instructions, however, currently do not require banks to report totals for non-performing derivative contracts. Therefore, use of past-due information alone does not provide a complete picture of the extent of troubled derivative exposures. During the first quarter of 1998 banks charged off \$157 million due to credit losses from off-balance sheet derivatives, or .05 percent of total credit exposure. For comparison purposes, net loan charge-offs relative to total loans for the quarter was .16 percent. Banks' 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 94 percent of all notional values in the commercial banking system. Smaller banks tend to limit their use of derivatives to risk management purposes.

The gross positive and gross negative 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 \$356 billion in gross positive fair values and \$354 billion in gross negative fair values. Note that while gross fair value data is more useful than notional amounts 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 \$9.9 billion, while the gross negative fair value of these contracts aggregated to \$8.6 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 risk management process. For example, these figures do not reflect the impact of off-setting positions on the balance sheet.

The notional amount of credit derivatives reported by insured commercial banks increased by 67 percent from fourth quarter levels, or \$37 billion, and now total over \$91 billion. Notional amounts for the fourteen commercially insured institutions that sold credit protection (i.e., assumed credit risk) to other parties was \$46.4 billion, an increase of \$32.1 billion from the fourth quarter of 1997. The notional amount for the eleven commercial banks reporting credit derivatives that bought credit protection (i.e., hedged credit risk) from other parties was \$44.9 billion, a \$4.5 billion increase from fourth quarter.

REVENUES

The Call Report data include revenue information regarding trading activities involving cash instruments and off-balance sheet derivative instruments. 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, Graphs 6a and 6b reflect figures for the first quarter alone, and are not annualized.

Relative to the fourth quarter of 1997, commercial banks reporting derivatives contracts in the first quarter of 1998 more than doubled their trading revenues from cash instruments and derivatives activities. The revenue figures reported in the first quarter indicate that the banks with derivatives realized approximately \$2.7 billion in revenue from trading activities, with the top eight banks accounting for 85 percent of this figure. In the first quarter, revenues from interest rate positions increased by \$533 million, generating \$1.1 billion, while revenues from foreign exchange positions increased by \$82 million, to \$1.4 billion. Banks also reported trading revenues of \$272 million from equity, commodity and other (i.e. emerging market debt) trading positions in the first 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 first quarter. Non-traded derivatives contributed \$128 million, or .14 percent to the gross revenues of banks with derivative contracts in the first quarter. These figures reflect an increase of \$50 million from the fourth quarter. These results are only useful in the context of a more complete analysis of each bank's asset/liability structure and risk 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 34 to 378, in the first quarter. The first quarter aggregated numbers indicate that book values exceeded fair values by approximately \$11 million for high risk mortgage securities, a \$22 million deterioration from fourth quarter levels. The average book value of holdings for these banks relative to total assets for the first quarter of 1998 remained the same as fourth quarter, at .3 percent. Average depreciation to risk-based capital remained at .01 percent.

The number of banks reporting structured notes on their books decreased in the first quarter by 363 to 2,421. Book values exceeded fair values by \$29 million for structured notes, a \$15 million dollar improvement from the fourth quarter. For banks with structured notes, the average book value of holdings relative to total assets was .53 percent. The average amount of depreciation to risk-based capital remained at .02 percent.