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Credit Exposure From Bank Derivatives Continues to Decline

WASHINGTON, DC -- Credit exposure for the top nine banks holding derivatives continued to decline in the fourth quarter of 1995 to 250 percent of risk-based capital, the Office of the Comptroller of the Currency (OCC) announced today. The decline continued throughout 1995 from the first quarter when credit exposure from derivatives was 336 percent of risk based capital.

Revenues from bank trading activities, including derivatives, declined somewhat in the fourth quarter after three quarters of revenue increases. Revenues in the fourth quarter were positive, however, for the top 9 banks that conduct 94 percent of derivatives activities.

Credit Exposure: Overall credit exposure from derivatives declined \$12 billion in the fourth quarter to \$228 billion. This decline is mostly the result of a decline in interest rates and a decline in various market volatilities in the fourth quarter as well as the continuing use by banks of bilateral netting to reduce credit exposure. (See table 4, graphs 5a and 5b).

Revenues: Revenues from trading activities, which include off-balance sheet derivatives and cash instruments, declined by \$377 million in the fourth quarter, compared to an increase of \$312 million in the third quarter.

Fourth quarter revenues from trading activities were \$1.6 billion. Revenues for the year were \$6 billion. (See table 7, graph 6).

Revenues from foreign exchange contracts declined by \$169 million in the fourth quarter. Revenues from interest rate contracts declined by \$85 million.

Derivatives Activity: The notional amount of bank derivatives activity declined by \$778 billion in the fourth quarter of 1995 to \$16.86 trillion. This slight decline is consistent with a pattern of stabilizing or declining notional amounts in previous fourth quarter figures.

The largest decline in activity was foreign exchange derivatives contracts, which declined \$555 billion, to \$5 trillion. Interest rate derivatives contracts fell by \$234 billion, to \$11 trillion. (See tables 1, 2 and 3, graphs 1 and 3).

Short-term contracts (maturities less than a year) were down \$829 billion in the fourth quarter to \$8.27 trillion. Medium-term contracts (maturities of one to five years) increased by \$53 billion to \$3.59 trillion. Long-term contracts (maturities five years or more) grew by \$62 billion to \$876 billion. (See

tables 10, 11 and 12, graphs 7, 8 and 9).

The number of banks holding derivatives declined by 37 in the fourth quarter, to 558 banks. Nine banks account for 94 percent of derivatives activity.

Market Risk: Banks continue to maintain relative balance in their exposure to market risk. This risk is measured by positive and negative fair values of derivatives portfolios. (Positive fair value shows what a bank's counterparty would owe the bank if its contract were liquidated today; negative fair value shows what the bank would owe the counterparty if the contract were liquidated today.) Relatively balanced bank books mean that the value of positions where the bank could have a gain do not significantly differ from the positions where the bank could have a loss. (See table 6).

Structured Notes: Structured notes and high-risk mortgage securities are held primarily by banks with assets under \$1 billion. Both types of securities showed appreciation in the aggregate during the fourth quarter stemming mostly from the decline in interest rates during the quarter.

Structured notes were held by 4,273 banks in the fourth quarter, a decline of 110 from the third quarter. (See tables 8 and 9, graphs 10 and 11).

A copy of the tables can be obtained through the OCC Information Line at (202) 479-0141 document number 79634.

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The OCC charters, regulates and examines approximately 2,800 national banks and 70 federal branches and agencies of foreign banks in the U.S., accounting for more than half the nation's banking assets. Its mission is to ensure the safety and soundness of the national banking system.

GLOSSARY OF TERMS

Bilateral Netting: A legally enforceable arrangement between a bank and a counterparty that creates a single legal obligation covering all included individual contracts. This means that a bank's obligation, in the event of the default or insolvency of one of the parties, would be the net sum of all positive and negative fair values of contracts included in the bilateral netting arrangement.

Derivative: A financial contract whose value is derived from the performance of assets, interest rates, currency exchange rates, or indexes. Derivative transactions include a wide assortment of financial contracts including structured debt obligations and deposits, swaps, futures, options, caps, floors, collars, forwards and various combinations thereof.

Exchange-Traded Derivative Contracts: Standardized derivative contracts transacted on an organized exchange and which usually

have margin requirements.

Gross Negative Fair Value: The sum total of the fair values of contracts where the bank owes money to its counterparties, without taking into account netting. This represents the maximum losses the bank's counterparties would incur if the bank defaults and there is no netting of contracts, and no bank collateral was held by the counterparties.

Gross Positive Fair Value: The sum total of the fair values of contracts where the bank is owed money by its counterparties, without taking into account netting. This represents the maximum losses a bank could incur if all its counterparties default and there is no netting of contracts, and the bank holds no counterparty collateral.

High-Risk Mortgage Securities: Securities where the price or expected average life is highly sensitive to interest rate changes, as determined by the FFIEC policy statement on high-risk mortgage securities. See also OCC Banking Circular 228 (rev.)

Off-Balance Sheet Derivative Contracts: Derivative contracts that generally do not involve booking assets or liabilities (i.e., swaps, futures, forwards, and options).

Over-the-Counter Derivative Contracts: Privately negotiated derivative contracts that are transacted off organized exchanges.

Structured Notes: Non-mortgage-backed debt securities, whose cash flow characteristics depend on one or more indices and/or have embedded forwards or options.

Total Risk-Based Capital: The sum of tier 1 plus tier 2 capital. Tier 1 capital consists of common shareholders equity, perpetual preferred shareholders equity with noncumulative dividends, retained earnings, and minority interests in the equity accounts of consolidated subsidiaries. Tier 2 capital consists of subordinated debt, intermediate-term preferred stock, cumulative and long-term preferred stock, and a portion of a bank's allowance for loan and lease losses.

FACT SHEET

DERIVATIVES DATA - FOURTH QUARTER 1995 CALL REPORT

GENERAL

The notional amount of derivatives in commercial bank portfolios decreased by \$778 billion in the fourth quarter to \$16.86 trillion. (This figure excludes spot foreign exchange contracts, which decreased by \$299 billion to \$305 billion as of 12-31-95). Although notional amounts have increased steadily over the last few years, this quarter's slight decline is consistent with a pattern of stabilizing or declining notional amounts that have been present in previous fourth quarter numbers. During the fourth quarter, the notional amount of

interest rate contracts fell by \$234 billion, to \$11.10 trillion. Foreign exchange contracts fell by \$555 billion, to \$5.39 trillion, while commodity and equity contracts grew by \$12 billion, to \$378 billion. The number of commercial banks holding derivatives decreased by 37 in the fourth quarter to 558. [See Table 1, 2, & 3, Graph 1 & Graph 3]

Off-balance sheet derivatives are concentrated in the largest banks. Nine commercial banks account for 94% of the total notional amount of derivatives in the banking system, with 97% accounted for by the top 25 banks (these figures include spot foreign exchange). For the years 1991 through 1994, the concentration of derivatives in the top nine banks was 86%, 91%, 91%, and 92% respectively. [See Table 3 & Graph 4 for concentrations excluding spot foreign exchange]

Approximately 66% of the notional amount of derivative positions were comprised of interest rate contracts with an additional 32% represented by foreign exchange contracts. Commodity and equity contracts were only 2% of the total notional amount. The composition of contract types remains relatively unchanged since 1991. [See Table 3 & Graph 3]

Over-the-counter (OTC) and exchange-traded contracts comprised 86% and 14%, respectively, of the notional holdings as of fourth quarter, which is virtually the same as third quarter. OTC contracts tend to be more popular with banks and bank customers due to the flexibility in tailoring them to meet risk management needs. However, OTC contracts tend to be less liquid than exchange-traded contracts, which are standardized and fungible. [See Table 3]

The notional values of short-term contracts (i.e. with remaining maturities of less than one year) are down \$829 billion, or 9.1% from third quarter, to \$8.27 trillion. Medium-term contracts (i.e., remaining maturities of one to five years) increased by \$53 billion, or 1.5%, to \$3.59 trillion, and long-term contracts (i.e., maturities of five or more years) increased by \$62 billion, or 7.6%, to \$876 billion. [See Tables 10, 11 & 12, Graphs 7, 8 & 9]

RISK

Notional amounts are helpful in measuring the level and trends of derivatives activity. However, these amounts are a 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 positions) while other data will be more useful over time in evaluating trends (e.g. revenue and maturity data).

In addition to the Call Report changes, the risk-based capital guidelines were amended as of the fourth quarter (1) to revise and expand the set of conversion factors used to calculate the potential future credit exposure of derivative contracts, and

(2) to 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. New 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 the attached table reflect those new factors. However, the attached 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 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 this choice is left up to the bank, the attached table reflects only available Call Report information. Thus, 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 fourth quarter saw a \$12 billion decrease in total credit exposure from off-balance sheet contracts to \$228 billion. Relative to risk-based capital, total credit exposures for the top nine banks averaged 250.3% of capital compared to 272.9% at the end of the third quarter. This decrease in exposure is largely the result of declines in both U.S. interest rates and in various market volatilities, as well as the recognition of continuing benefits from bilateral netting. Credit exposure would have been significantly higher without the benefit of bilateral agreements. The extent of the benefit can be seen by comparing the gross positive replacement cost from Table 6 to the bilaterally-netted current exposures shown on Table 4. [See Table 4, Graph 5a & Graph5b]

Non-performing contracts remained at nominal levels. For all banks, the book value of contracts past due 30 days or more aggregated only \$18 million or .0001% of total current exposure from all derivatives 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 94.1% of the contracts for trading purposes, primarily customer service transactions, while the remaining 5.9% are held for their own risk management needs. The trading contracts of these banks represent 91.4% of all notional values in the commercial banking system. Banks below the top 25, which use derivatives primarily for risk management transactions, hold 71.68% of

their contracts for purposes other than trading. [See Table 5]

The gross negative and gross positive fair values of derivatives portfolios show that banks are maintaining 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, the nine largest banks have \$219.1 billion in positive fair values and \$219.2 billion in negative fair values. These figures represent a slight decline from third quarter. The decline in positive fair values corresponds to the reduction in credit risk mentioned above, while the decline in negative fair values means that banks owe their counterparties less. Note that while gross fair value data are very useful in depicting more meaningful market risk data, users must be cautioned that these figures do not include the results of cash positions in the trading portfolio. 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 positions.

End-user positions, or derivatives held for risk management purposes, have aggregate gross positive fair values of \$14.4 billion, while the gross negative fair value of these contracts aggregated to \$10.1 billion. Readers must be cautioned, however, that these results are only useful in the context of a more complete analysis of each bank's asset/liability structure and management process. [See Table 6]

REVENUES

The Call Report data include revenue information regarding cash and derivative trading activities. The data also show the impact on net interest income and non-interest income from non-trading activities. Note that the revenue data reported in Table 7 and Graph 6 reflect figures for the fourth quarter alone, and do not reflect year-to-date data.

Relative to the third quarter, the fourth quarter resulted in a decrease in trading revenues from cash and derivatives activities of \$377 million, totaling \$1.6 billion in the fourth quarter, with the top nine banks accounting for 84% of that amount. Year-to-date trading revenue for 1995 from cash and off-balance sheet positions was \$6.14 billion. In the quarter, revenues from interest rate contracts fell \$85 million to \$879 million, while revenues from foreign exchange contracts decreased \$169 million, to \$592 million. Revenue from other trading contracts, including equities and commodities contracts, fell \$122 million, generating \$95 million in revenues, with virtually all of that amount in the top nine banks. [See Table 7, Graph 6]

Derivatives held for purposes other than trading did not have a significant impact on either net interest income or non-interest income in the fourth quarter. Non-traded derivatives contributed \$509 million, or .69% to the \$73.8 billion in gross revenues of banks with derivative contracts in the fourth

quarter. These figures reflect a decline of \$268 million from the third quarter (third quarter contributed \$777 million to gross revenues). 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 were largely confined to banks with total assets under \$1 billion. The fourth quarter aggregated numbers indicated that market values (fair values) exceeded book values by \$54 million for high risk mortgage securities, a \$93 million dollar improvement from the third quarter. Market values were below book values by \$146 million for structured notes, a \$175 million dollar improvement from the third quarter. This overall appreciation from third to fourth quarter stems from the decline in interest rates in the fourth quarter. Additionally, the decline in interest rates resulted in higher mortgage prepayments and resulting maturity of some issues, thus reducing the aggregated book value of high risk mortgage securities from third to fourth quarter. For all banks with high-risk mortgage securities, the book value of holdings averaged 1.4% of total assets, compared to 1.5% in the third quarter. Average depreciation to capital declined to .33%, from .62% in the third quarter.

The numbers indicate that for banks with structured notes, the book value of holdings to total assets averaged 2.8%, compared to 3.1% in the third quarter, while average depreciation to capital declined to .52%, from .77% in the third quarter. The number of banks reporting high-risk mortgage securities decreased by 36, to 569 in the fourth quarter. The number of banks reporting structured notes on their books decreased in the fourth quarter by 110 to 4,273. [See Table 8 & Table 9, Graphs 10 & 11]

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