The global OTC derivatives market at end-June 1998

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The BIS is releasing today for end-June 1998 the first instalment of its semi-annual statistics on open positions in the global over-the-counter (OTC) derivatives market. This new reporting framework is based on a July 1996 central bank report entitled "Proposals for Improving Global Derivatives Statistics",(1) the implementation of which was approved by the Governors of the central banks of the Group of Ten (G-10) countries in January 1997.(2) Its format draws on the Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity, whose preliminary global turnover results for April 1998 were released last October. The BIS will publish a more detailed analysis of foreign exchange and derivatives turnover (in April 1998) and amounts outstanding (at end-June 1998) in the spring of 1999.(3) Recent financial events have added urgency to improving transparency in derivatives activity and such regular reporting will help the authorities and market participants to better monitor the global financial system.

The statistics include the *notional amounts* and *gross market values* outstanding of the worldwide consolidated OTC derivatives exposure of major banks and dealers in the G-10 countries.(4) They cover the four main categories of market risk: foreign exchange, interest rate, equity and commodity. The notional amount is generally used as a reference to calculate cash flows under individual contracts and thus provides a rough indication of the potential transfer of risk associated with them. It is also used for comparisons of market size between related cash and derivatives markets. Gross market value is defined as the sum (in absolute terms) of the positive market value of all reporters' contracts and the negative market value of reporters' contracts with non-reporters (as a proxy for the positive market value of the latters' positions). It measures the replacement cost of all outstanding contracts, showing therefore the transfer of financial wealth which would have taken place if all outstanding contracts had been settled on 30th June 1998. It also provides a measure of market size that is readily comparable across market segments, both off and on-balance-sheet. Finally, the gross positive market value of contracts offers an indication of reporters' aggregate gross credit exposure.(5)

After adjustment for double-counting resulting from positions between reporting institutions, the total estimated *notional amount* of outstanding OTC contracts stood at $70 trillion at end-June 1998. This was 47% higher than the estimate for end-March 1995 within the framework of the triennial survey. However, adjusting for differences in exchange rates and the change from locational to consolidated reporting, the increase between the two dates was about 130%.(6) The most recent data also confirm the predominance of the OTC market over organised exchanges in financial derivatives business.(7) Interest rate instruments remained the largest OTC component (67%, mainly swaps), followed by foreign exchange products (30%, mostly outright forwards and forex swaps)(8) and those based on equities and commodities (with 2% and 1% respectively). Interest rate instruments involve less exposure to market and credit risk than foreign exchange transactions, which generally include the exchange of principal and are therefore highly sensitive to price changes in underlying markets. Of note in this respect is the considerably shorter maturity of currency-related contracts, with 87% expiring within a year, compared with 41% in the interest rate market. A breakdown by type of counterparty shows that the share of business with financial institutions was the highest in the interest rate market (87%, compared with 77% in the foreign exchange market). Finally, while the dollar is the counterpart to most foreign exchange transactions (86%), only 31% of interest-rate-related positions are denominated in the US currency. This confirms other evidence of the expansion of the swap market outside the US dollar sector, in particular in European currencies.

At end-June 1998, estimated *gross market values* stood at $2.4 trillion, or 3.5% of the reported notional amounts. It should be stressed, however, that such values exaggerate actual credit exposure, since they exclude netting and other risk reducing arrangements. Allowing for netting lowers the derivatives-related credit exposure of reporting institutions to $1.2 trillion, or to 11% of on-balance-sheet international banking assets. As could be expected, the ratio of gross market values to notional amounts varies considerably across individual market segments, ranging from less than 1% for FRAs to more than 15% for equity-linked options. Interestingly, the ratio was of the same order of magnitude in the two major individual market segments: outright forwards and forex swaps (3.9%), and interest rate swaps (3.5%). This stands in sharp contrast to the results of the 1995 survey, which had found a considerably higher value of replacement costs for foreign exchange contracts.(9) The regular reporting of gross market values will be valuable in assessing the evolution of risk exposure over time.

1 The report was prepared by a working group of the Euro-currency Standing Committee chaired by Mr. Shinichi Yoshikuni of the Bank of Japan (the Yoshikuni Report).
2 See the BIS Press Communiqué of 27th January 1997: "G-10 approve regular collection of derivatives market statistics".
3 A more detailed currency breakdown will also be provided. In the future, the triennial survey will be used to provide benchmarks and supplementary data to regular reporting (such as turnover, activity by centre, and trading by non-regular reporting dealers).
4 The data were collected from 75 large market participants representing nearly 90% of total market activity.
5 Correspondingly, negative market values represent the gross credit exposure of counterparties to reporting dealers.
6 Differences between the two reporting systems are explained in footnote 2 to Table 1.
7 However, the closing-out or modification of existing OTC positions generally results in the creation of new counterparty relationships, whereas most exchange-traded positions can be unwound through opposite contracts and are in most instances reversed before contract expiry. Moreover, the exclusion of the value of non-financial contracts and options on single equities in the figures reported to the BIS leads to an underestimation of the total size of the exchange-traded derivatives market.
8 These results contrast with turnover data for April 1998 released in October, with the higher turnover posted by foreign exchange products explained by their shorter maturity compared with interest rate products.
9 The difference between the two periods could reflect the more cautious attitude of participants in the face of overall market turbulence and the subdued volatility of currency parities within continental Europe in 1998. In contrast, the increased volatility in underlying markets in late 1994 and early 1995 may have temporarily raised the market value of positions outstanding at end-March 1995.