

Box 17

CLEARING OF OVER-THE-COUNTER (OTC) DERIVATIVES TRANSACTIONS

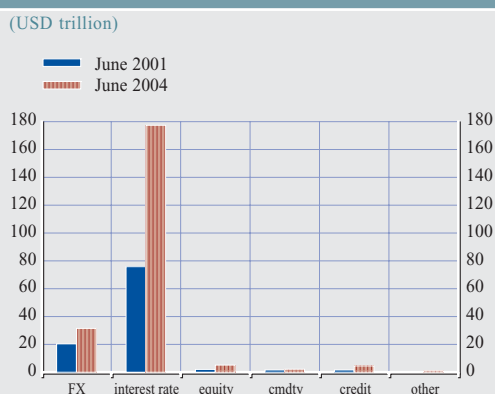
In March 2005, the Bank for International Settlements (BIS) published its regular Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity.¹ The survey compiles statistics gathered by 52 central banks and monetary authorities around the world. The turnover part of the survey is based on data for April 2004. It covers both foreign exchange and OTC derivatives markets, while the part on positions in derivatives contracts reflects the situation as it was in June 2004 and purely covers OTC derivatives. This Box highlights some of the key findings of the survey and reviews some initiatives that have taken place in the development of infrastructures for post-trade processing in OTC derivatives markets.

The main finding of the BIS survey is that, in comparison to the last survey conducted in 2001, both turnover and outstanding volumes have grown substantially, reaching new record highs. In the case of OTC derivatives, outstanding notional amounts increased by 120% between June 2001 and June 2004, reaching USD 220 trillion in June 2004 (see Chart B17.1); after adjusting for currency movements, this represents an increase of approximately 80%. The most remarkable growth was recorded in the credit derivatives sector (see Chart B17.2), where outstanding volumes rose more than six-fold from USD 700 billion to USD 4,500 billion in the same period. Credit default swaps (CDS) accounted for most of this increase, thanks to the standardisation of contractual terms as well as the establishment of CDS indices and trading platforms. The counterparty breakdown provided in the survey of the OTC derivatives market shows that the share of turnover with financial institutions other than reporting dealers increased as well to reach 43% of global turnover, up from 29% in April 2001. This increase may reflect a greater use of derivatives by small commercial banks, mutual funds, insurance companies and hedge funds.

The increasing popularity of OTC derivatives with end-investors means that there has been commensurate growth in the needs of dealers/market makers in these products to offset customer transactions in the marketplace. Apart from the higher administrative burden arising from the greater number of transactions, this growth brings with it an increase in operational

¹ See BIS (2005), "Triennial Central Bank Survey – Foreign Exchange and Derivatives Market Activity in 2004", March (available at <http://www.bis.org/publ/rpfx05t.pdf>).

Chart B17.1 Outstanding amounts of OTC derivatives



Source: BIS.

Chart B17.2 Outstanding amounts of OTC derivatives



Source: BIS.

and credit risk and, mirroring this, the need for additional regulatory capital. It appears, however, that the rapid growth in the OTC derivatives markets, and especially the credit derivatives segment, might not have been matched by equivalent growth in investment in infrastructures for post-trade processing (i.e. clearing and settlement as well as servicing of the outstanding transactions until maturity) – a fact that has been pointed out recently by the UK’s Financial Services Authority.² The need to address this phenomenon is made even more important by the fact that a large part of the transactions in dealers’ books can be viewed as redundant, at least from the point of view of their market positioning. This is because these positions are used to offset the unwanted components of the risk with other market makers. These outstanding positions with other market makers often go in opposite directions, effectively cancelling each other out. However, they still need to be kept in the dealers’ books and serviced. Dealers have used occasional bilateral netting and the termination of such “unnecessary” transactions without any significant decrease in overall outstanding volumes.

The problems of extensive credit line utilisation or insufficient back office capacity are neither new nor restricted to credit derivatives. These issues have been addressed from different angles with varying success. One of the ways to ease the burden on banks’ back offices as well as credit lines is through the introduction of a central counterparty for the risk management and settlement of OTC derivatives. One such service for interest rate swaps (IRS) is called SwapClear, which was launched in September 1999 by the London Clearing House Ltd (now LCH.Clearnet Ltd). In this scheme, LCH.Clearnet becomes the central counterparty to, and has responsibility for, the corresponding trade obligations arising from each half of the original bilaterally negotiated IRS. The dealers’ bilateral netting arrangements are replaced by more efficient multilateral netting, thus releasing credit lines, reducing regulatory capital requirements as well as operational risk and cost. This is because multiple cash flows are netted and replaced with one single payment per currency per day to or from the central counterparty. Credit exposures are further reduced through daily margining arrangements. In the event of a default of one of the original parties to the transaction, the central counterparty continues to service the trade so that the non-defaulting party is not affected. By the end of April 2005, the notional amount of IRS transferred to SwapClear by its 19 member banks was USD 45 trillion.

² See the letter from the FSA to chief executives of major participants in the OTC credit derivatives market (available at <http://www.fsa.gov.uk/Pages/Library/Communication/PR/2005/022.shtml>)

A different scheme, originally started in April 2003 for IRS and recently extended to cover CDS and energy derivatives, aims at reducing the burden on banks by terminating derivatives transactions on a multilateral basis. In this service, provided by TriOptima AB of Sweden under the name of triReduce®, a successful termination process ensures that the transactions no longer exist. Therefore, credit exposure and operational risk are not merely reduced, but are also completely eliminated. The process is based on the assumption mentioned above that many of the trades on banks' books are merely hedging trades used to pass on the undesired parts of their risk to other market makers. TriOptima collects information on such "unnecessary" trades from multiple market participants without disclosing individual positions to the other participants. Each participant has to define tolerances and preferences regarding the market and credit risk change of their position after the proposed termination. The trades are then matched and a termination proposal is calculated. The proposal is passed on to each participant together with the resulting changes in net positions within the tolerance limits. As of the end of April 2005 26 cycles in eight currencies had been run on interest rate derivatives, resulting in the termination of IRS with a notional value of USD 9.2 trillion. In CDS, eight termination cycles in both single name CDS and CDS indices have terminated to date a total of USD 276 billion notional value of contracts. The success rates, i.e. the proportion of terminated trades to the total number of trades submitted, have varied according to the underlying between 40% and 80%.

While the long-term impact of the aforementioned schemes on the total outstanding volume of derivatives contracts will still have to be assessed, they can certainly be seen as a useful addition to the available risk-reducing instruments, thereby also reducing some of the potential financial stability risks associated with the continued strong growth of OTC derivatives markets.