
Payment and settlement strategy

*The Bank of England announced in November last year that it proposed to review, with market participants and other interested parties, the strategic requirements for payment and settlement for UK financial markets. The review was conducted during the first half of this year and this note summarises its findings. It was presented by the **Governor** to the City Promotion Panel on 3 July.*

Over the past 10–15 years there has been an increasing awareness of the risks involved in the expanding volumes of payments and settlements both domestically and internationally. At the same time advances in information technology have made it possible to reduce or eliminate these risks. This note describes the key steps that have already been taken in this direction and the further steps envisaged in the period ahead.

The starting point

The starting point was one in which sterling payments were based on end-of-day net settlement between settlement banks which had no effective means of controlling their exposure to each other during the course of the day. Securities settlement involved slow paper-based transfers, which, because of the difficulties of the payment system, could not be synchronised with the related payments, so that neither the seller nor the purchaser of a security could be sure that he would retain title to either the security or the cash payment in the event of default by his counterparty. Similar weaknesses applied to the settlement of foreign exchange transactions.

Progress to date

A series of steps have been initiated over the past decade to reduce these weaknesses.

In 1986 the Bank developed, with the Stock Exchange, a book entry transfer system for settling gilt-edged securities called the Central Gilts Office (CGO). This permitted faster and cheaper transfers and provided a very high degree of certainty of delivery of good title to securities in the system. The CGO service also introduced an assured payment mechanism under which the settlement banks provided a form of delivery versus payment (DVP) for all members of the system except themselves. This was a considerable advance in terms of reducing risk in the system, but as with the payment system, settlement banks still incurred intra-day exposures to each other which were settled net at the end of the day.

In 1990 the Bank introduced a broadly similar service for settling money-market instruments such as commercial bills, Treasury bills and Certificates of Deposit. This service, called CMO, did not include an assured payments mechanism.

A further major step in improving settlement efficiency and reducing risk will be taken later this month when the CREST system for settling equities, corporate bonds and other securities goes live on 15 July. It will provide automated links with banks and brokers on one side and companies' registrars on the other, thereby enabling it to provide faster and cheaper transfers through book entry. It will also include an assured payment mechanism.

The CGO service itself is being upgraded using CREST software to accommodate recent and prospective innovations in the gilt-edged market such as repos and strips. The augmented service will operate from spring 1997. The use of common software for CGO and CREST opens up the possibility of merging the two settlement systems in due course, and that option is being studied.

The elimination of the intra-day exposures between settlement banks in the payment system took rather longer than the initial development of CGO and CMO. But in April of this year the Real Time Gross Settlement (RTGS) system, which the Bank developed jointly with APACS and the CHAPS settlement banks, went live. It provides final payment in central bank funds as each individual high value payment is made between settlement banks. The receiving bank therefore has immediate good funds which can safely be made available to its customer for immediate use without the risk that the transaction might not settle or might be unwound.

Future developments

The steps already taken represent the essential building blocks for further progress towards risk reduction in our domestic settlement arrangements.

Under the present arrangement for assured payments, settlement banks guarantee their customers' payments when the securities they are buying move in the system. To give such a guarantee, however, settlement banks accept potentially very large exposures to each other which are similar to the exposures they ran in the CHAPS system before RTGS was introduced. Although the exposures incurred by settlement banks *vis-à-vis* their customers will be controlled in CREST, and in the augmented version of CGO, by caps on exposures, the interbank risks can be eliminated only by linking the movement of securities to the

real-time movement of central bank funds between settlement banks in a full form of DVP.

The RTGS system, together with the development of efficient book entry transfer systems for securities settlement, provide the building blocks for full DVP arrangements. They offer the possibility of synchronising the exchange of final funds against good title.

There are a number of different ways in which DVP can be achieved in practice, each involving different IT and legal issues. The priority, in terms of risk reduction, is to achieve DVP in CGO as the average daily values settled in that system amount to £85 billion—almost as much as settled in the RTGS payment system, which is currently around £110 billion per day. CREST expects to settle around £8 billion per day and CMO settles around £11 billion per day. But, given the great similarity between the CREST system and CGO—particularly when CGO is upgraded—it will be very likely that any technical solution for CGO will work in a similar form for CREST.

To plan the introduction of full DVP in domestic securities settlement the Bank is establishing a working group to examine these technical options for CGO, and presumptively for CREST, in detail. In the meantime the Bank will be exploring the legal problems relating to the exchange of title to money-market instruments electronically as a necessary step towards DVP also in relation to CMO.

Implementation of this programme over the next few years will address most of the weaknesses in our domestic payment and settlement arrangements. But we need also to improve the relationship between our domestic arrangements and those in the rest of the world. In this connection we are working on two fronts—on intra-European arrangements, connected with the possible introduction of the euro and on improving foreign exchange settlement more generally.

European arrangements

Within the European Union, all central banks are committed to introducing domestic RTGS systems. In addition the European Monetary Institute is co-ordinating the development of a cross-EU system called TARGET to link domestic systems as part of the preparation for the single currency. TARGET would operate in euros and would enable a bank in one country to send a high-value euro payment to a bank in another participating country in central bank funds within minutes. All countries in the monetary union would take part and other EU countries, not in the monetary union, would be able to connect to the system. In the latter group the euro would be a foreign currency.

In just the same way as domestic RTGS systems eliminate domestic interbank exposures, the European TARGET system would eliminate interbank exposures in euro for cross-border payments. The United Kingdom will join TARGET whether or not the United Kingdom becomes part of the monetary union. The Bank of England will offer a connection to the TARGET system together with settlement accounts in euro, which will enable banks in the United Kingdom to make safe high-value euro payments. The settlement banks, through CHAPS, have established a working group to consider what mechanism they might wish to establish to enable them to make use of these facilities.

Foreign exchange settlement risk

The largest settlement risk, in terms of the sums involved, is foreign exchange settlement risk. That issue has been reviewed by a group established by the G10 central banks meeting at the BIS in Basle and which reported in March this year. The G10 group analysed the risks in detail and surveyed banks' ability to monitor and control their foreign exchange settlement exposures. The results were disturbing and the G10 has put in place a three-point strategy to achieve significant progress within two years. That strategy is a clear priority for improving payment and settlement arrangements in all major countries.

In settling a foreign exchange transaction a bank is exposed to the risk that its counterparty may fail from the moment its instructions to transfer the sold currency become irrevocable to the moment it receives the bought currency with finality. The risk is for the entire principal amount—it is like an unsecured loan to its counterparty. The G10 report showed that these exposures were much more than an intra-day risk and could last several days. In some cases, the exposure to a single counterparty could exceed a bank's capital.

The three-point strategy in relation to foreign exchange risk involves action by individual banks, by industry groups and by central banks. Individual banks can improve their ability to monitor exposures. They can also reduce their exposures by more careful control of the release of payment instructions, by demanding better service from correspondents, and by monitoring receipts carefully. Industry groups can improve settlement arrangements through well-founded bilateral or multilateral netting arrangements or through other collective arrangements to synchronise better the exchange of payments. And central banks will publicise the issue, monitor banks' responses in conjunction with banking supervisors, and review progress after one and two years. If progress is not adequate, central banks will consider what further action is required.