

**Mr. Hartmann reports on the driving forces behind current changes in payment and settlement systems** Speech by Mr. Wendelin Hartmann, a member of the Board of the Deutsche Bundesbank, delivered at the 6<sup>th</sup> Annual Conference on International Payment Systems in London on 20/4/98.

There are several driving forces behind current changes in payment and settlement systems.

As a political factor, we are all aware of the start of stage three of European Monetary Union (EMU) on January 1, 1999 with the introduction of a single currency and a European monetary policy.

Change is also being caused by developments in the highly liquid and mobile markets. Volume and value of transactions in these markets are still increasing and markets' liberalisation and interdependence is continuously growing. Last but not least, technological advances are leading to an improvement in communications technology and a lowering of costs. The Internet is likely to become universally comparable to the telephone nowadays.

Let us now take a look at the current situation in international payment and settlement systems. The use of correspondent relationships is customary for the execution of cross-border payment orders. This results, for example, in larger banks having hundreds of correspondents in Europe. One cause of this can be seen, for example, in the fact that banks mutually attend to credit customers and to large-value payments between third countries (such as Japan and Hong Kong). But this variety of relationships may lead to a complicated liquidity management and high costs.

European cross-border retail payments could almost be said to be still in the "Middle Ages": they are characterised by high fees, long execution times and very little transparency. This situation led to the EU Directive on cross-border credit transfers (Transparency Directive) coming into force early 1997, the outcome of which has, up to now, regrettably been mediocre. As an example, if we compare the cost and time taken for a credit transfer of FRF 5.000 from Frankfurt to Paris, the fee charged by the different German banks varies - according to a German newspaper - from DEM 20.00 to DEM 60.00 and the processing time takes between two and 14 days. The statistical reporting requirement of cross-border orders cannot be construed as an adequate explanation for this. On the contrary, the European market will require considerable improvements in this field.

Another obstacle is, for example, the lack of a common European bank-code number, branch identification and account number. The European Committee for Banking Standards (ECBS) is pursuing several activities such as the introduction of an International Bank Account Number (IBAN). But, due to problems in the implementation of developed standards, its work has so far been none-too effective. Another approach to cross-border payments is the linkage of automated clearing houses. This solution has been hindered in Germany by the banking associations protecting profitable fees and hampering a strategic cooperation. As far as the European banking associations are concerned, they are not yet ready to design a common standard for retail payments. At all events, some progress can be identified in in-house, club and special associations' solutions.

Owing to their global availability, the card market is dominated by the American credit card systems. The eurocheque card as a strategic European response is widely used only in a few countries. The Maestro functionality will allow a gradual expansion worldwide. At all events, the eurocheque cards are still successful as an access medium for ATMs and in their direct debit function. Especially in Germany, they are quite important: approximately 60 million cards using ec

technology are in circulation. Prepaid cards are a logical development of the eurocheque card with a common security access and clearing standard. But their system faces drawbacks due to relatively high transaction and turnover fees charged to retailers. Since there are only national solutions, American cards have expanded their global dominance, despite well designed European systems. Attempts to cooperate internationally, for example, by the French and German banking industry on the major German prepaid card system seem to have stagnated.

Not only chips on cards but also networks have gained in importance for payment and settlement systems. The Internet is inevitably moving from a pure access medium (for home banking, for instance) into an independent carrier of payment systems on a local, regional, and global basis. As part of electronic commerce, the Internet is even governmentally subsidised, as it is in the United States, for example. International financial authorities are gradually taking an interest in a controlled use of the Internet.

Chip cards used on the "Net" will go beyond their function as a pure access or storage medium. But this inevitably requires a common security strategy. Current barter clubs might also spread globally by using the Internet.

Central banks regard the dissemination of this electronic money to be in its early stages at present. But they suspect a possible loss of control over the money stock and interest rate movements if the amounts transferred through these systems become significant. They are therefore calling for non-banks to be excluded from the issuance or administration of electronic money units. The European central banks made this approach concerning prepaid cards public in the 1994 European Monetary Institute (EMI) report.

At all events, the creation of fully private systems such as "Microsoft money" can only be successfully regulated by a worldwide cooperation on the part of governments and central banks.

The introduction of different electronic cashless payment instruments has not reduced the high demand for cash. This is partially due to inadequate financial systems and the fear of inflation in foreign countries, such as in East Europe or South America. Thus, the USD currency in circulation abroad is assumed to be about 70% and, for the DEM currency, to be approximately 30% of the total amount in circulation.

An increasing consolidation in the respective countries might reduce international demand. But retailers, for instance, still consider cash payments to have comparative commercial advantages over cashless payment and combined high bank fees.

The criticism that central banks subsidise the use of cash is not valid. The DEM 260 million or so in bank notes have to be "bought" from the Bundesbank. Assuming an interest rate for refinancing of 3%, this would result in a benefit DEM 7.8 billion per year.

The high demand for cash also supports the transformation process of the central banks' interest policy. Therefore, central banks do not consider it necessary to push back cash demand beyond the already existing impact of technological developments. Progress in this field is fully accepted by them.

With regard to the replacement of cash, retail transactions in coins of all denominations and in lower value banknotes at vending machines or service terminals are most

likely to be replaced by electronic payment means. This evolution might even be fostered by the delayed changeover to the euro cash.

Let us now take a look at an important driving force in more detail: Stage Three of EMU.

Implementation of the single monetary policy will then require a single money market in the participating countries and secure and efficient payment and settlement systems. Therefore, the central banks, in particular, are paying interest to interbank and commercial large-value payments. For that reason, they are setting up TARGET, the Trans-European Automated Real-time Gross settlement Express Transfer system, which will link the national RTGS systems in Europe. Non-participating countries can also be connected to TARGET.

Monetary policy transactions have to be fully collateralized. Securitisation will also be needed for payment systems. Since the European systems for the cross-border use of securities are not yet fully designed, the central banks are preparing the what is known as Correspondent Central Banking Model (CCBM), with the foreign central bank acting as correspondent. The CCBM will serve as an interim solution for the cross-border use of securities until a private sector system has been put in place. A private system of this kind is the solution of the European Central Securities Depository Association (ECSDA), using bilateral links between the domestic and foreign central securities depositories with an efficiency comparable to that of TARGET.

Taking an overall view of payment systems at the beginning of next year, TARGET will not be the only European scheme; there will also be several net settlement systems.

Owing to their net characteristics, those systems cannot provide an immediate finality of payments. Participants not fulfilling their due payments may - under certain circumstances - even cause an unwinding of all transactions. Allowing, on the one hand, for liquidity-saving through the netting of payment orders, there is, on the other hand, the risk of a liquidity trap since the settlement is final only at the end of the business day.

The operators of net settlement systems, which are for example the EBA Clearing, the EAF 2 and SNP (système net protégé) have their own individual strategy for preparing for Stage Three of EMU. At all events, some changes will be brought about by the Lamfalussy standards and the requirement for cross-border net systems to settle in central bank money.

The choice and, ultimately, the success of the different schemes will depend on issues such as liquidity demand, early finality, security and, last but not least, availability characterised by execution times, operating hours and days. Cost and fees for participation in payment systems are another factor which cannot be considered unimportant.

Looking at the European payment systems of the future, allow me to make a forecast from my personal point of view.

At the moment, the future development of coexisting payment and settlement systems is still undecided. But some trends towards the respective systems can be identified.

TARGET as the central banks' gross system will be the basis for all large-value monetary policy transactions.

Bearing in mind that all cross-border payments of large amounts will be best served by processing through TARGET due to the immediate finality of payments in this system, central banks will also act as a settlement provider for other large-value payments of the banking industry and their customers.

The European landscape for the banking industry's system might be highly diversified. The EBA Clearing, EAF 2 and SNP, as examples of these, might dominate the market for commercial large-value payments with Europe likely to remain a polycentric area needing several financial centres.

Cross-border retail payments are likely to be gradually integrated into net settlement systems owing to the lack of European standardisation. But there will still be a need for transformation into national standards.

Considering the fact that smaller banks will not have direct access to major cross-border oriented netting systems the sole use of big business partners might ultimately jeopardise their independence.