Some reflections on the process of managing change in payment systems

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This theme is not a mere technical matter: it has many implications for the regulatory framework and monetary policy. Its importance is critically felt in all the developing countries where financial sector reforms and market integration efforts are being undertaken.

Decisions on effecting changes in payment systems in developing countries have to be contextual, given the background of (a) the relatively high preference of the public for the use of cash for the settlement of transactions, and (b), following from (a), the limited use of cheques, even in major towns and metropolitan cities. Moreover, the following initial conditions also need to be taken into account:

- the type of cheques in use: for instance the limited issuance of MICR cheques and the fact that large-value cheques and small-value cheques are very often mixed together;
- manually operated clearing house systems and the fact that accounting systems are also generally manually driven;
- cheque clearing and settlement systems which are generally located in central banks with commercial banks rarely undertaking these payment services except at places where the central banks do not have offices;
- securities settlement systems that are generally ledger-based, with central bank staff recording entries manually.

These conditions may not apply in all respects in all developing countries. In some of them, there are different degrees of automation or IT use in the area of payment services. The settlement process may not, therefore, be fully electronic, and it may be expected that the processes associated with payments and settlements would be partly manual and partly electronically driven.

Floppy-disk-based inputting of entries also exists in certain areas, for example in the processing of large-value cheques. In the case of securities settlements, however, there are fewer cases of delivery-versus-payment (DVP) systems in use in developing countries.

The limited acceptability of cheques for the settlement of transactions may be partly due to the insufficient legal protection often faced by sellers of goods or services. The acceptance of cheques from towns/cities other than one's own would require a willingness on the part of the seller to wait for days for full settlement. Where manual operations are common, even intra-city cheque clearances may take two days to final settlement. The delays in settlement may be perceived as costly and may contribute to the unenthusiastic response to the idea of accepting cheques in payment.

However, as economies grow and diversify, the need for a greater variety of payment methods will be widely felt, with the use of cheques gaining in importance. It is widely recognised that the use of MICR cheques would facilitate the operation of modern cheque clearing systems. Most central banks favour MICR-based cheque clearing systems, even though these systems are costly in a number of ways. First of all, the fee charged for clearing services in many developing countries may be minimal, partly because of the need to promote the use of cheques and partly because, traditionally, such services have tended to be subsidised. Secondly, the operation of MICR-based cheque clearing systems requires a team of dedicated, well-trained staff, which may not be easy to put together. Thirdly, cheque clearance and settlement systems need to be integrated through automation for the efficient conduct of clearing house operations, but in many cases such downstream linkages of cheque clearing with accounting and settlement systems would require clear-cut, legally enforceable operating instructions and staff cooperation. Where operating instructions are in the form of mere guidelines, and where unionism is strong, such linkages are likely to be weak. Nonetheless, central banks in many developing countries have become acutely aware of the need to provide efficient payment services initially through automated cheque clearing systems and settlement mechanisms, in particular given the need for financial sector reforms.

Reforms entail the introduction of a sound regulatory framework and efficient monitoring and surveillance mechanisms. Central banks would necessarily have to take the lead in introducing modern payment services, either by themselves or through other institutions such as commercial banks or through private service providers. Rarely do we see private service providers being allowed to enter this area of activity in developing countries. Cheque clearance facilities can be provided by

commercial banks where central banks do not have their own offices. It is necessary to harmonise the operations of central and commercial banks in this field.

While cheque clearing and settlement are major elements in the modernisation of payment services, central banks will need to provide for the development and use of such payment options as electronic clearing (both debits and credits), credit, debit and smart cards, and also electronic funds transfers. These new activities help develop financial markets.

The availability of payment options depends to a large extent on the availability of communication technologies. Dedicated telecommunication lines are not available terrestrially in many developing countries. Many countries would therefore have to consider promoting a VSAT network, with access open only to banks and other financial institutions. The security of data and message transfers is vital, so that the closed user group (CUG) may have to be promoted while VSAT network systems are being set up. Central banks may have to take the lead in establishing a VSAT network.

Central banks would also have to set up securities settlement arrangements, preferably on a DVP basis. Once the VSAT linkages are in place, it would be relatively easy to effect such settlements and funds transfers.

When economies begin to open up and their foreign exchange markets become integrated with the domestic financial markets for government securities, money, capital and debt instruments, and also with the rest of the world, there will be an urgent need for efficient and modern payment and settlement systems to be put in place. "Real-time gross settlement", with adequate security features and precautions against systemic and other risks, will have to be implemented. While such a development will depend on the pace at which financial sector reforms are carried out, the central banks in developing countries are conscious of the need to move in this direction. This will require highly motivated and trained staff at the central and commercial banks, and continuous education and training programmes will be necessary. More importantly, central banks will need to have a good IT environment, with sound in-house applications for data collection, data warehousing and data retrieval as well as for providing services to customers efficiently at reasonable cost.

One needs to look at the blowing winds of change in payment systems from the point of view of their effects on, firstly, domestic monetary policy and exchange rate policy and, secondly, the functioning of the international monetary system. Often the central banks in developing countries consider that the first does not pose much of a problem, although this is not always the case, especially where data on payments and asset turnover are weak. With regard to the latter, cooperation not only in terms of educational campaigns, seminars and training workshops, but also in terms of designing electronic and legal systems for the settlement of cross-border transactions may become necessary. This is an issue of which many developing countries are not fully aware, in particular as regards the developments that are taking place in advanced economies. Mechanisms may have to be developed to ensure that technologies are used to promote the integration of markets not only within national boundaries but also beyond national borders.