VII Payments System

The payments system is an essential part of the financial infrastructure in a market economy. It ensures that transactions are settled in a timely and reliable manner. While an efficient payments system can facilitate the smooth operation of markets and support sustainable economic growth, an inefficient one easily creates bottlenecks that impede real growth and undermine confidence in payments media and the financial system as a whole.

The quality of payments systems in sub-Saharan Africa varies significantly. Cash is the most important means of payment for the vast majority of the population, reflecting a lack of development in the noncash payments systems in many of the countries of the region. Electronic payments systems are available to only a limited extent. Although banks in several countries have introduced automatic teller machines (Botswana, Mauritius, South Africa, Zambia, and Zimbabwe), typically only the banks' own customers can use them, and there are no linkages between bank networks. In addition, there is no clear distinction between noncash systems for large and time-sensitive payments and those for retail payments, although some countries—such as Mauritius, South Africa, and Zimbabwe—are working toward the introduction of a real-time gross settlement system for large-value and time-critical transactions. In general, therefore, most of the noncash systems are paper based, relying primarily on checks, and are often manual in that they do not use automated sorting and truncation. In several of these countries, the rules for clearing and settlement are poorly enforced, resulting in erratic float, fraud, and significant systemic risks for the central bank.

Several countries have taken major initiatives to reform their payments systems—a demanding and time-consuming task. But with increasing growth and a general movement toward the use of indirect monetary instruments, the urgency for such reforms intensifies. Unless they progress quickly, payments system inadequacies will become a significant hindrance to the development of financial systems in sub-Saharan Africa.

Recognizing this problem, the Southern African Development Community has established a project to assist individual countries in the region to define payments systems strategies, coordinate regional approaches to cross-border payments, and use the same terminology and standards. A project team based in South Africa provides much of the technical input for the project.

The World Bank has also been involved in improving payments systems in several countries, as has the IMF through MAE's technical assistance in such countries as Lesotho, Malawi, Mozambique, Tanzania, and Zambia, as well as the countries for which the BCEAO serves as central bank.

Weaknesses in the Payments System

For the vast majority of people in sub-Saharan African countries, cash is the only medium for making payments. With the exception of Botswana, Lesotho, South Africa, and Swaziland, cash constitutes a relatively high share of GDP and of broad money. Low denominations of circulating cash, reflecting a high velocity of circulation in the face of high inflation, make large transactions difficult and inconvenient because of the large number of notes involved. In some areas, there is a shortage of domestic currency, and foreign currencies are sometimes used as a means of payment ("dollarization"). In some areas, bankers resort to bargaining, which directly increases the cost of transactions.

Where significant noncash payments systems have been emerging, these too have exhibited a number of weaknesses. First, they are generally not separated into retail and large-value systems, and second, most of the noncash systems are paper based. The check is the most common paper instrument. While post office payment services exist in some of these countries (Botswana, for example), in the region as a whole these services have tended to decline even though the advantages of a comprehensive post office network can support the use of postal orders as an alternative to checks. Third, in some countries, the noncash payment system has been subject to significant dollarization.

Banks typically exchange checks and other paper at clearinghouses in major cities and centers each morning; centers often hold a second clearing in the afternoon, sometimes just for large-value checks. Members and the supervisor of the clearinghouse calculate and agree on the net multilateral settlement positions for each member, which are then settled across the members' current accounts (settlement accounts) at the central bank, generally once each business day. The sorting of checks is mostly manual, the coordination of clearings nationwide is poor, and the rules and procedures of the clearinghouses and the allocation of responsibilities for settlement, resolution of disputes, and enforcement of compliance are often vague. In many countries, there is the possibility for increased automation of clearings and for improvements to the rules and procedures that govern clearing operations and their settlement.

In major cities throughout South Africa and other sub-Saharan African countries, there are often automated or electronic payments systems operating. Some banks have automatic teller machines, issue credit and debit cards, provide direct debit and credit services, and offer electronic transfers of funds at the point of sale. However, an absence of interbank cooperation arrangements limits these services to in-house transactions between customers of the banks offering them, except in the case of major debit and credit cards where other banks in the same country also issue the same brand cards (for example, in Botswana and Mauritius). Development of interbank cooperation would considerably improve the payments services available to bank customers.

Some countries have local foreign exchange clearings in which members interchange foreign-denominated checks issued by local banks. The settlement agent is then often a reputable international bank (for example, in Tanzania in recent years) or sometimes the central bank, or correspondent banks abroad may settle various positions. Typically, central bank oversight of these arrangements has not been as thorough as is desirable because of an insufficient awareness of the risks associated with these arrangements.

Several countries that now issue government securities and have stock exchanges are introducing book-entry systems, which have already facilitated the settlement of the security leg of transactions. However, often there has been little progress in organizing the associated payment settlements to support standards, such as delivery versus payment.

Box 5. Lamfalussy Standards: Minimum Standards for the Design and Operation of Cross-Border and Multicurrency Netting and Settlement Schemes

I. Netting schemes should have a well-founded legal basis under all relevant jurisdictions.

II. Netting scheme participants should have a clear understanding of the impact of the particular scheme on each of the financial risks affected by the netting process.

III. Multilateral netting systems should have clearly defined procedures for the management of credit risks and liquidity risks that specify the respective responsibilities of the netting provider and the participants. These procedures should also ensure that all parties have both the incentives and the capabilities to manage and contain each of the risks they bear and that limits are placed on the maximum level of credit exposure that can be produced by each participant.

IV. Multilateral netting systems should, at a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participant with the largest single net debit position.

V. Multilateral netting systems should have objective and publicly disclosed criteria for admission that permit fair and open access.

VI. All netting schemes should ensure the operational reliability of technical systems and the availability of backup facilities capable of completing daily processing requirements.

Source: Bank for International Settlements (1990), p. 26.

Improvements to Noncash Payments System

In general, the multilateral netting clearing systems do not comply with the Lamfalussy standards (see Box 5) and therefore expose the central bank to significant systemic risks. The clearing system may have basic rules that are sometimes little more than expressions of clearing processes. This situation often leaves bank customers, bank members of the clearing system, and, in particular, the central bank financially exposed if there is a crisis or a bank failure. Solutions include the development of clearing rules that cover not just the technical processes of the clearing and exchange of paper, but also settlement processes and procedures to follow if a member fails to settle. In sum, netting systems should comply with the Lamfalussy standards, and this is a high priority for large-value systems.

In countries where manual clearings dominate, banks are slow to provide final funds to depositing customers. In some countries, interregional clearings can involve significant delays, which means that the period between the initial deposit of a check and the depositor's access to funds from the deposit can be unduly long—sometimes several weeks.[21] The reasons for delays are many, including the legal requirement to present checks to the paying bank branch for payment. This requirement, combined with infrequent secure transport links between paying and collecting banks' branches, results in long delays. Other problems include high levels of fraud and other related criminal activity that increase the amount of processing and checking that banks do before they credit or debit an account, as well as built-in incentives, such as float, that discourage rapid clearing and finalization of payments.

The authorities should encourage banks to process, clear, settle, and transport checks more quickly. Central banks should also encourage commercial banks to automate their internal clearing procedures when the benefits outweigh the costs of doing so. Perhaps the largest gains will result from legal changes allowing the banks to "present" a payment instrument electronically to the paying bank. Such a change, when combined with the necessary infrastructure, can radically speed up the availability of funds to depositors, particularly in those areas where telecommunications are satisfactory. Furthermore, enforced standards for checks, use of magnetic ink character recognition, and optical character recognition would allow automation of the processing and improve security in many payments systems. However, in many rural regions, the infrastructure is not developed or reliable enough, or the volumes are simply too small, to warrant investment in such processes. Thus, two systems may be required: manual in rural areas and automated in urban areas.

A lack of synchronization between accounting (posting) of final funds to the accounts of the payer, the paying bank, the receiving (collecting) bank, and the payees can result in float. For example, in manual check systems, it may take several days before a bank debits a payer's bank account for a check. Thus, the payer, who has initiated payment, retains the use of the funds for several days. Such a situation creates incentives to exploit the float and thus act in a way that will degrade the effectiveness of the payments system. Sometimes the arrangements benefit banks at the expense of bank customers, as in Zambia.

Float can also increase the difficulty of implementing monetary policy. In particular, if the central bank is the government's fiscal agent, the liquidity effects of the government's spending will be highly unpredictable, making liquidity management very difficult. But float may also affect monetary aggregates and credit aggregates that are used as indicators of the monetary policy stance.

Float may be decreased through a reduction of some of the operational delays and backlogs, which can often be achieved through better staffing, improved operational procedures, and better training of processing staff, or through the establishment of dedicated document delivery services to eliminate transportation delays where possible. Short of more fundamental reforms to speed up the payments process, several more partial solutions can be adopted to reduce float. Availability schedules, for example, may delay the credit for a check (or debit for a payment order) to a time equivalent to that in which the corresponding debit (credit) would normally be processed and posted. Another example is the provisional crediting of checks, where the value is credited to the payee's bank account, but the value cannot be withdrawn until the payment is finally settled. It may also be possible to discourage float through appropriate pricing, which will tend to offset the costs of float.[22]

In a number of sub-Saharan African countries, fraud is a significant problem to the extent that it has undermined the use of the payments system in several countries. Fraud may include simple kiting schemes or can involve bank staff, forgers, and often clearing clerks. In designing measures to combat fraud, policymakers should avoid regulations and arrangements that may overburden the payments systems and slow the processing of transactions. In some countries, relatively simple improvement can be made to clearinghouse operations and to other procedures to improve security. The prevalence of fraud and forgery can also be decreased in many countries through actions that make it more difficult for forgers to alter checks or other bank paper. The introduction of secure check paper and secure printing can significantly improve matters, as can automated processing with automated verification procedures.

The legal systems in some countries also impede the development of noncash payments systems. They are slow, outdated, and often unpredictable in business and financial matters. Without improvements in the legal systems that will ensure financial discipline, it will be difficult to significantly improve the payments system. Legislation of insolvency, netting arrangements, and the authority of ad-

[21]For instance, the 1991 regulation of clearing in Mozambique stipulated that the deadline for returning payments drawn in the same city was 24 hours; for payment documents between provincial capitals, 60 days; and as long as 90 days for some other cases.

[22]When the United States adopted the Monetary Control Act of 1980, for example, it introduced measures to reduce the float by adopting availability schedules and pricing the remaining float (Young, 1986). The pricing involved an explicit interest charge by the Federal Reserve on the proportion of banks' reserves that could be attributed to float.

Box 6. Main Recommendations on Payments Systems

Objectives. Reduce the economy's explicit and implicit transactions costs in making payments; improve the integrity of the payments systems by reducing systemic risks (mainly at the wholesale level); and enhance efficiency (mainly at the retail level).

National payments council. The central bank should establish a national payments council (NPC), which should (1) develop a long-run payments system strategy; (2) meet on a regular basis (for example, quarterly) to discuss developments in both wholesale and retail payments systems, in particular, regarding risk and efficiency issues; and (3) establish working groups to assess and make recommendations on specific payments system issues as necessary (for example, adopt new uniform formats and standards for checks and similar procedures). The central bank should take a leadership role: a high-level central banker should chair the NPC, and the central bank should provide secretariat functions for the NPC. Membership should include providers and users of payments system services, such as the banking sector and other financial and nonfinancial institutions (for example, telecommunications suppliers) that are actively participating in the payments system, government agencies, and consumer representatives.

Role of the central bank. The central bank, in addition to setting up an NPC, should oversee the payments systems and promote the necessary legal framework (for example, for truncation) for a sound payments system. Therefore, the central bank should develop a separate payments system unit. In particular, the central bank should centralize the commercial banks' settlement accounts at the central bank.

Large-value transfer systems. Reduce systemic risk in wholesale systems by ensuring that large and time-sensitive payments are cleared, are settled on the books of the central bank, and are final (that is, the payment is irrevocable and unconditional) in a predictable and timely way.

Real-time gross settlement. Systemic risk can be reduced by a real-time gross settlement (RTGS) system. Consideration must be given to proper pricing with sound incentives, queuing systems, collateralization, and/or limits on central bank intraday credit to minimize demands on liquidity. The RTGS system must have fair and open admission, and the operational reliability and backup facilities for completing real-time processing should be ensured.

Netting schemes. Systemic risk can also be reduced if netting schemes comply with the Lamfalussy standards. Among other features, compliance will ensure that there are incentives and/or regulations to ensure finality without a public guarantee and that time lags in settlement are short (at least same-day settlement). The Lamfalussy standards are contained in Box 5.

Securities settlement. Book-entry systems facilitate the clearing and settlement of securities. Settlement and transfer arrangements, particularly delivery versus payment, should meet the recommendations of the Bank for International Settlements, the International Organization of Securities Commissions, and the Group of Thirty Countries.

Foreign exchange settlement. Measures should be taken to reduce the settlement gap between the two legs of transactions in foreign exchange (Herstatt risk). Ideally, delivery-versus-payment arrangements should be established to eliminate the risk of nonsynchronous settlement. Netting arrangements for transactions in foreign exchange should also comply with the Lamfalussy standards.

Retail payments systems. The NPC and the central bank should promote adequate pricing, strengthen reliability, develop clearinghouse organizations, and encourage private sector participation in clearing retail payments. The NPC should also be involved in consumer and development issues—for instance, by promoting confidence in the payments systems, ensuring that sufficient payment services are provided to all regions and the whole population, promoting fair treatment of customers and consumer organizations, and ensuring effective and fair dispute resolution procedures.

ministrators and liquidators all need to be clarified and enforced. However, even countries in which the legal system operates satisfactorily may need to clarify the rules for electronic fund transfers so as to allow truncation, which will support the further development of the payments system.

Areas for Further Reform

The central bank should take the lead in reforming the payments system in all sub-Saharan African countries—a continuous and arduous process. First, the central bank is often legally committed to overseeing the safety and efficiency of the payments system. Second, the other participants in the payments system, including users, banks, and other providers of payment services, will typically have vested interests—for instance, with regard to exploiting the float—and will thus not have the incentive to reform the system. Third, the central bank will typically bear the costs of an inefficient payments system, either by lower seigniorage or by assuming the risk of the system. A major first step to ensure continued improvement of the payments systems is to establish a national payments council, which should be headed by a high-ranking dynamic central banker. Several countries have now established a national payments council, among others, Malawi, South Africa, Zambia, and Zimbabwe.

A newly established payments council will typically have a two-pronged strategy: first, to identify and address immediate problems; and, second, to establish a strategy for the development of the payments system. The long-run strategy would include revising the legal framework to facilitate electronic payments, ensuring that multilateral netting systems comply with the Lamfalussy standards, and perhaps establishing a real-time gross settlement system for large and time-critical payments. A real-time gross settlement system and a linkage to the depository for government securities, which ideally should ensure delivery versus payment, are important elements of the infrastructure for a central bank to conduct quick and efficient open market operations. Further actions in this area are summarized in Box 6, page 39.