

# Reforming Payments and Securities Settlement Systems

## *A key element of financial infrastructure*

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Payment and securities settlement systems are critical to the effective functioning of financial systems worldwide. They provide the channels through which funds are transferred among banks and other institutions to discharge payment obligations arising in the financial markets and across the entire economy. An efficient, secure and reliable payment system reduces the cost of exchanging goods and services. Moreover, it is an essential tool for the effective implementation of monetary policy, and for the smooth functioning of the money and capital markets. It is also the channel for settlement of all other types of transactions, including cross-border financial flows. A payment system that, in contrast, is not efficient, secure and reliable can adversely affect the financial system, and can contribute to systemic crises. If the risks inherent in its design and operation are not adequately contained, a financial shock—initially in the form of a liquidity shortfall, which may be followed by default and even bank insolvency—can be passed from one participant to another. Since a bank's liquidity problems will typically first become visible in the payment systems in which it participates, those systems are by definition vulnerable to a wide range of shocks.

*An efficient payment system, in addition, promotes orderly economic development and growth. In particular, a wide and cost-effective range of payment instruments is essential for supporting customers' needs in a market economy. Some transactions simply do not take place in absence of certain payment instruments. Moreover, the safe and efficient use of money as a medium of exchange in retail transactions is particularly important for the stability of the currency and a foundation of the trust people have in it. A fair and open retail payment system has also important social implications when it is able to reach out the underserved segment of the population and provide them with affordable payment and remittance services. For example, interoperable networks for processing payments at low cost are essential to guarantee appropriate coverage of payment instruments in a country.*

In light of the above considerations, close attention has been paid since the mid-1980s, initially by central banks and then by other regulators and participants, to the design and operation of payments and securities settlement systems. This was in response to both technological developments, which reduced the cost and increased the speed of the automated processing of payment instructions, and a rapid increase in the values being settled through many of these systems. As a result, substantial changes are being seen in the design and use of these systems in a wide range of countries and currencies. The Committee on Payment and Settlement Systems (CPSS) of the Bank for International Settlement (BIS) has published several important reports and is the standard setter in the area. Its focus has ranged from large value to retail systems, from foreign exchange transactions to securities settlement systems. The CPSS is also developing General Guidelines for the reform of the payments system as a whole. The Bank and the Fund participate actively in several of these efforts.

As many countries embark on projects to reform and modernize their payment systems, domestic policymakers are faced with the formidable task of how best to design payment system infrastructures in fast-changing technological and institutional environments. These tasks become increasingly complex as competition and innovation push constantly to the limit the search for better combinations of efficiency, reliability, safety, and system stability in the provision of payment services to larger numbers of individual users and institutions. A strategic and cooperative approach is the most efficient way to overcome reform obstacles.

**The Strategic Process of Reform:** A strategic process is important to reach an agreed Vision by all stakeholders on the future of the National Payments System (NPS). This approach is likely to stimulate local interest and provide a basis for discussion with key stakeholders during the months previous to launching a reform. Agreements on a number of policy, organizational, technical and operational issues will be required before next steps are undertaken. A successful initiative requires active participation from key stakeholders at both the policy and operational level.

Central banks normally take the leading role in formulating and implementing the strategy for payments system modernization, acting in the interests of the system as a whole. As a neutral agent, central banks are less likely to trigger competitive concerns that could slow progress and is more able to support the creation of a comprehensive vision for the future national payment system.

**Addressing the Needs of Consumers, Businesses, the Financial Sector and the Public Sector:** Emerging technology in the financial services arena is changing the way businesses, financial sector institutions, governments, and the public interact. It is important to identify the needs of each user group's needs for an efficient development of payment and securities settlement systems. Consumers demand cost-effective and efficient payment instruments to serve their different needs and rely on providers to minimize the risks associated to their use (e.g. counterfeiting, frauds). Businesses and corporations need reliable and fast services which can facilitate their back-office procedures and are easy to use. The financial sector and its oversight and supervisory authorities ask the payment system to minimize systemic risks and absorb to the extent possible liquidity shocks by eliminating the risk of moral hazard against the central bank.

The challenge for the public sector is to develop low-cost, easily accessible and easy to use methods for financial transactions and to keep pace with developments in financial technology. Given the important number and combined amount of the payments that the governments send and receive each year, and the number of individuals and businesses who receive or send those payments, the potential benefit to the government and to the public is significant. In several countries, the public sector has lagged behind the private sector in terms of efficient use of payment instruments and has failed to reach an efficacious integration with the banking sector.

**Environmental Issues Influencing the Reform-The Constraints:** The development of modern payments and securities settlement systems rely on the quality of the national infrastructure, but go beyond Information Technology (IT) systems. Important environmental issues to be taken into account in the development and oversight of payments and securities settlement systems include: Country demographics, Physical infrastructure, Involvement in international trade and financial transactions, Macroeconomic framework, Financial sector, Legal and regulatory framework, Stakeholders, and Business perspective.

The legal basis is of special importance. A fundamental requirement for a stable and secure payment system is that it should operate in a well-defined legal environment, setting out the rights and obligations, in normal as well as in adverse circumstances, of each party involved in transmitting a payment through the system. This requires predictability in the application of rules and regulations by the system operators and overseers, and predictability in their enforcement by the courts. The legal environment needs to cover payment instruments as well as the system.

**Governance and Oversight-Reconciling Needs with Constraints:** Effective governance of payment systems is essential to ensure that all user needs are satisfied. Effectively governed institutions should meet certain basic requirements. Governance arrangements should be clearly articulated, coherent, comprehensible, and fully transparent. Governance arrangements should therefore seek to minimize the conflicts between the objectives of owners, users, and other interested parties, and as far as possible to resolve any remaining conflicts. In addition, financial markets operate most efficiently when participants have access to relevant information concerning the risks to which they are exposed and, therefore, can take actions to manage those risks.

The role of the central bank as payment system overseer is particularly relevant to ensure safe and efficient payments and securities settlement systems through reliable and efficient infrastructure and its adequate governance. Direct involvement of the central bank in managing clearing and settlement systems has been, in many countries, the first step to governing the overall structure and operation of a country's payments system and ensuring that the desire to limit systemic risk especially in the area of large-value payment systems is adequately taken into account. In all cases, in order to pursue the public interest in the payments and securities settlement systems, central banks and other regulators should ensure that the systems they operate comply with the principles and guidelines they establish and, as overseers, to ensure the financial and operational reliability and efficiency of the clearing and settlement systems they do not operate.

In practice, the Bank supports payment system reforms in several ways that can be summarized as follows:

- *Supporting comprehensive initiatives* (Algeria, Angola, Azerbaijan, Bahamas, Barbados, BCEAO, BCEAC, China, Ecuador, Tanzania, Trinidad and Tobago, Uzbekistan, Venezuela, Vietnam, West Bank Gaza, etc.).
- *Undertaking initial diagnostics and developing reform strategies* (Costa Rica, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, India, Indonesia, Jamaica, Libya, Madagascar, Morocco, OECS, Poland, Thailand, Tunisia, etc.)
- *Providing specific technical advice* (Brazil, Chile, Colombia, Estonia, Hong Kong, Netherlands Antilles, Peru, Russia, Ukraine, Mongolia, Moldova, etc.)
- *Coordinating and managing multi-country and regional initiatives*: BCEAO Central Bank of West Africa, BCEAC Central Bank of Central Africa, Southern African Development Community (SADC), Western Hemisphere Initiative (WHI), Commonwealth of Independent States Initiative, Arab Initiative.
- *Supporting the launch of cooperative arrangements* (e.g. Payments Councils).
- *Organizing training activities.*
- *Preparing support and educational materials including study methodologies.*
- *Conducting Research in innovative areas* (e.g. Oversight).
- *Preparing and publishing case studies. Participating in CPSS and IOSCO Task Force(s) and other influential bodies. Supporting the Financial Sector Assessment Program (FSAP) and developing its methodology for assessments of payments and securities settlement systems.*
- *Coordinating reform efforts with other areas in the financial sector network* (e.g. credit reporting, access to financial services, capital markets).

In particular, the regional approach has proven to be very effective as countries often face similar challenges in developing and modernizing their financial sector infrastructure. The ability to share experiences, problems and solutions across countries can strengthen (and accelerate, through peer pressure) the policies that each nation adopts and reduce the time and cost of modernization. By working together, countries may also identify areas where harmonizing policies would be beneficial. The WB has taken this approach on payments and securities settlement systems, first through the Western Hemisphere Payments and Securities Clearance and Settlement Initiative (WHI, <https://www.forodpagos.org>) launched in winter 1999 and later through Commonwealth of Independent States Payments and Securities Settlement Initiative (CIS) launched in fall 2004 and the Arab Region Payments and Securities Settlement Initiative (ARAB) to be launched in spring 2005.

In sum, payment system reform is a continuous process and the Bank is well positioned to support client countries in this effort. In the past, Bank staff at all levels have been able to identify reform opportunities by referring to some fundamental questions listed below and engaging Bank payment system experts in the follow up:

- Do the present arrangements satisfy the needs of all market sectors for making payments?
- Do the systems adequately cover the entire country?
- Do special procedures exist for processing large value payments?
- Are payments cleared and settled sufficiently quickly?
- Are the range of available instruments sufficient to satisfy the differing needs of the users?
- Are the systems convenient and easy to use from a user's perspective?
- Are the systems reliable and always available for use?
- Are the systems safe and secure?
- Is the legal underpinning for payments reliable under all circumstances?
- Do the systems satisfy international minimum standards?

The Bank Payment System Group is looking forward to receiving feedback from colleagues on these matters.