# Payment Systems

10.1 The payment system is a key element of the financial infrastructure that facilitates efficient functioning of the financial system. Under Article 26 of the Bangladesh Bank Order, 1972 Bangladesh Bank through its Department of Currency Management & Payment Systems performs core functions relating to issuance of notes and coins and management of currencies in circulation. Although there is no specific reference in the Bangladesh Bank Order, as all central banks do, the BB also accepts the responsibility for payment systems, driven not least by its concerns for the stability of the currency and financial system and the efficiency of the monetary policy operations.

#### **Modes of Payments**

10.2 Owing to its intrinsic convenience, cash continues to be the predominantly used medium of transactions in Bangladesh. Bangladesh Bank makes efforts to satisfy transaction demand for currency through a steady flow of currency notes and coins of all denominations. Domestic currency cheque is the second most systemically important payment medium for national payments. Cheques and payment orders drawn on commercial banks are widely used by the industrial and commercial sector, and to a lesser extent by individuals. Cheques drawn on Bangladesh Bank are used by commercial banks, mainly for inter-bank transfers and government payments, which are considered as large value transactions. The volume and value of cheques have grown steadily over the years. Table 10.1 presents the volume and value of cheques used in Dhaka city during 1999 - 2005. The daily average value of cheques has increased from Taka 3,409.91 million in 1999 to Taka 6,913.24 million by June 2005, recording an increase of 103 percent.

Table 10.1 Volume and value of cheques used in Dhaka city

Year	Number of cheques/instruments	Amount (in million Taka)	Daily average value (in million Taka)
1999	5,715,697	900,213.82	3,409.91
2000	6,687,756	1,107,189.16	4,193.90
2001	7,158,541	1,271,462.27	4,816.14
2002	8,178,496	1,471,313.41	5,091.05
2003	9,015,798	1,676,847.12	5,684.23
2004	10,058,121	1,642,734.05	5,645.13
2005	12,270,188	1,928,793.41	6,913.24

#### **Payment Settlement Systems**

- 10.3 There are four payment and settlement systems operating in Bangladesh. They are: (a) Bangladesh Bank's Clearing Houses in Dhaka and its branches in seven other cities; (b) Sonali Bank's Clearing Houses in 31 cities where there are no BB branch (c) the BB large value cheque settlement system; and (d) the Bangladesh Bank Foreign Currency Clearing System in Dhaka which clears and settle foreign currency cheques and pay orders.
- 10.4 There are two clearings each day at 9:30 a.m. and 5:30 p.m. at the BB's clearing house in each branch at which cheques, bank drafts, pay orders etc. drawn on commercial banks and BB are cleared. The clearing process operated by the BB's Dhaka and Chittagong offices are partly computerized where the commercial banks, in addition to the physical instruments, present diskettes that contain each bank's paying obligations and receivables from other banks. In all other stations, clearing and settlements are conducted manually. Compared to the volume in Dhaka, the cheques cleared in outstation branches are insignificant.

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10.5 Apart from non-cash payment instruments like cheques, drafts etc. card-based payments, which include credit card, debit card and ATM transactions are gaining popularity gradually. The commercial banks and the business community are trying to promote the use of credit and debit cards for point of sale transactions and direct debits. The use of such payment instruments, however, is popular in the urban areas only and the volume of such transactions is yet to reach a significant level.

# **Developments in Payment Systems**

10.6 The present payments and settlement system in Bangladesh is not at par with international best practice which emphasizes on safe and secured payments and settlements and the reduction of the gap between payments and settlement. Under the present clearing system, customers can use funds on t+2 or t+3. Collection cheques take much longer time to clear. But with these changing and demanding times, instant payment needs to be initiated. This type of manual clearing is very tedious also, which involves a number of officers working after hours to finalize settlements. It has forced commercial banks to maintain idle funds in each of the clearing centre beyond any economic or business purpose. This liquidity burden costs to the banks, as they do not get benefit of excess funds at one clearing centres to offset the deficit at another. Moreover, moving funds from one place to another is expensive and results in poor liquidity management. Besides, there are many risks involved in endof-day settlements. Firstly, credit risk is likely with the event of a bank being placed in liquidation after it had written a large number of cheques, which are to have been settled through the clearing houses. Although this situation has never been experienced here, these risks are real and could happen at any given time. The second type of risk is the liquidity risk where a bank may fail to settle due to insolvency, liquidation, temporary liquidity problem or a technical problem. Therefore, there is a risk for the net receiving bank not getting its dues in full on that day it should receive its money. Thirdly, systemic risk can occur if a large bank is unable to make its payments and that could have a domino effect on other banks and their customers bringing the whole system to a grinding halt. The Basel Committee on Payment and Settlement System (CPSS) has been working in this area for quite a while now. Based on the Core Principles for Systemically Important Payment Systems recommendations by the CPSS, central banks around the world are striving towards developing a safe and efficient payment system that is core principles compliant.

10.7 Over the past few years, Bangladesh Bank has been actively working on the development of modern payment systems in Bangladesh. Significant effort has been expended in the review of existing systems with focus on the capacity building necessary to define a long-term strategy for payments in Bangladesh. As a result of these efforts, two major initiatives are underway to advance the scope and usage of payment systems. The first is the planned automation of cheque processing and the second is the development of internal capacity and a long-term vision/strategy for payment systems in Bangladesh. Both projects come under a programme entitled the "Remittance and Payments Partnership" (RPP) Project which is being funded through a grant from the UK Department for International Development (DFID).

## **Cheque Design Standards**

10.8 Bangladesh Bank announced the new Cheque Design Standards for the use with the planned automated cheque processing system that would be purchased next year through the support of DFID. Bangladesh Bank working in conjunction with representatives of the Commercial Banks, cheque printers and vendors of automated cheque processing equipment completed the specification for the new cheques. The cheques will be Magnetic Ink Character Recognition (MICR) encoded with information regarding the amount, transaction type, account number, bank information and

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cheque number. In addition, the information on both the front and the back of the cheques will be recorded through the use of imaging. The standards incorporate international standards and proven designs based on the experiences of various countries.

#### **Automated Cheque Processing System**

10.9 The new automated cheque processing system will coincide with the introduction of the Bangladesh Automated Clearing House (BACH) which will be responsible for the processing of cheques, credit and debit payment instruments. The BACH will effect the installation of systems and processes that support modern automated cheque processing utilizing MICR, ICR and imaging technologies. The system is based on a centralized processing centre based in Dhaka with several regional clearing sites at existing Bangladesh Bank offices. The system will support both intra-regional and inter-regional clearings. The proposed processes and systems conform to best practices for MICR and Imaging (short of truncation) and will represent the most cost effective solution for cheque processing. Bangladesh Bank will require the participant banks to provide either amount encoded paper cheques or paper cheques without amount encoded with all of the data from the MICR code line in electronic form at the time of submission of cheques to the clearing centre. This will significantly increase the efficiency of the clearing house operations.

## Implementation Timeline

10.10 The Cheque Design Standards were released in September 2006 with the requirement that banks be in compliance with the new standards by 31 December 2007. The new cheque processing system will be in place by 31 March 2008 with the roll out to begin when the new cheques reach a circulation of approximately 95 percent. It is anticipated that the system will commence operations in Dhaka soon thereafter with operations in Chittagong and the other regional locations to be phased in over the coming months. The goal is to have the system operating nationally by end 2008.

# Strategic Planning Initiative for Payment Systems

The "Remittance Partnership Programme" RPP also has a long-term component which focuses on the building of payments expertise within Bangladesh Bank and strategies for the deployment of additional payment systems to support both the retail and wholesale needs of the country's financial markets. These will include the expansion of card systems both debit and credit. Point of Sale (POS) systems for use by merchants and interbank payment capabilities to support the need for fast and secure debt and credit transfers. Special focus will be given to the need to provide payment mechanisms that support high transactions such as the sale of securities or foreign exchange. The implementation of a Real Time Gross Settlement (RTGS) system will also be planned as part of this focus on payment systems. This will be a significant undertaking by the Bank; however it cannot be accomplished by Bangladesh Bank alone.

The programme puts special emphasis on the National Payments Council (NPC) which is expected to be formed in February 2007. The NPC will be made up of representatives of a select number of banks and other significant stakeholders such as the Securities and Exchange Commission (SEC) and is chaired by Bangladesh Bank. The role of the NPC will be to define the long-term strategy and implementation priorities for such systems in Bangladesh. This will include all forms of payments from cheque processing to retail payments including card payments and ATMs to interbank payments that will eventually flow through a Real Time Gross Settlement (RTGS) system operated by Bangladesh Bank. Provision will also be made for the settlement of securities and foreign exchange payments.

A portion of the funding will be dedicated to finding ways to increase the flow of remittances from Bangladeshi citizens and family members that live abroad. These 'Challenge funds' will be used as an incentive for the private sector such

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as banks and other interested parties to develop innovative products and services for this new market of remittances.

## **Legal and Regulatory Reform**

10.13 Another facet of the payment modernization process focuses on the need to support these new systems with the legal and regulatory frameworks necessary to operate such systems in a transparent manner with high standards governance. Consultants, provided through the RPP Project have been reviewing the existing legal and regulatory infrastructure for payment systems in Bangladesh and have made recommendations for the addition of legislation necessary to support the payment system participants and provide a framework for

regulatory oversight by Bangladesh Bank. These will likely take the form of legislation or amendments to the Bangladesh Bank Order further defining the Central Bank's role in payment systems. It will also result in the rules, procedures and legal foundation to be adopted by the Bangladesh Automated Clearing House (BACH).

The results of all these efforts will have a significant impact on the financial sector in Bangladesh. The timing for these projects is immediate commencement with the results to be implemented over the next three to four years. At the end of that time, Bangladesh will be well on its way to establishing payment standards consistent with its neighbours and international standards.