THE PAYMENT SYSTEM IN MAURITIUS
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OVERVIEW OF THE NATIONAL PAYMENT SYSTEM IN MAURITIUS

The banking sector comprises the Bank of Mauritius (the central bank), nine offshore banks and ten commercial banks, five of which are locally incorporated and five are branches of foreign banks. There exists an active interbank forex market. Treasury bills are auctioned weekly on the Primary Money Market. A Secondary Money Market also exists whereby bills can be transacted on any day. Interest rates are freely determined by commercial banks. The interbank money market also is relatively active.

Mauritius is a highly monetised economy. Popular payment instruments are cheques, credit cards and debit cards. The project of introducing e-cash is still in its preliminary stages.

Cheque clearing is performed three times daily at the Bank of Mauritius at 10 a.m., noon and 3 p.m. On average about 410,000 cheques and other instruments totalling Rs11 billion are cleared every month.

Negotiations have started with the South African Reserve Bank to set up funds settlement through a Real-Time Gross Settlement (RTGS) system, an exchange and settlement system for the securities market, funds settlement for the money and foreign exchange markets and settlement for Government securities transactions.

The RTGS system will have the following positive effects on the Mauritius payment system:

- lowering of risk for large-value payment instructions;
- finality of settlement;
- reduction of systemic risk given the continuous settlement process;
- platform for new financial services;
- new forms of payment services;
- the increase in turnover of the payment system will lead to fast growth in financial market activity;
- securities market will benefit from implementation of delivery versus payment;
- promote economic efficiency and enhance financial stability.

The following factors have a limiting effect on the process of modernisation:

- the needs and visions of “small” and “large” banks differ widely;
- cost to “small” banks of joining the PALMS;
- agreeing on the right way of addressing settlement risk;
- full commitment of commercial banks to the project;
- legal and technological aspects.

The following factors contribute favourably to the process of modernisation:

- over half of the banking sector has reached an appreciable state of computerisation;
- all players favourable to the project;
- leadership from the central bank;
- relatively small size of the banking sector;
- physical proximity of the head offices of commercial banks to the central bank;
– relatively good telecommunications infrastructure;
– government commitment to the project of modernisation.

1. INSTITUTIONAL ASPECTS

1.1 General legal aspects

The legal framework governing the Mauritian payment system is contained in legislation, rules and regulations. The predominant legislation is:

– A hybrid of French Code de Commerce and English Commercial Law;
– Bank of Mauritius Act, effective 1966;
– Banking Act, effective 1st January 1989;
– Foreign Exchange Dealers Act, effective 7th July 1995;
– Bills of Exchange Act 1914.

No special regulations have been made to regulate new payment systems.

As per the Bank of Mauritius Act, one of the purposes of the Bank of Mauritius is to direct its policy towards achieving monetary conditions conducive to strengthening the financial system and increasing the economic activity and the general prosperity of Mauritius. The Bank of Mauritius Act also lays down the basis for the establishment of a clearing house. Banks are licensed, regulated and supervised under the Banking Act 1988. The Bills of Exchange Act 1914 regulates payment instruments such as cheques, promissory notes and other bills of exchange. As far as plastic cards, such as credit cards and debit cards, are concerned, they are based on contractual agreements between the card holder and the card issuing organisation.

1.2 Role of financial intermediaries that provide payment services

The financial system of Mauritius comprises the following broad categories of financial intermediaries:

– domestic banks;
– offshore banks;
– non-bank financial institutions authorised to carry on deposit-taking business;
– the Post Office Savings banks;
– Mauritius Housing Company Ltd;
– Development Bank of Mauritius Ltd;
– foreign exchange dealers/money changers;
– insurance companies;
– pension funds;
– central bank;
– mutual funds;
– leasing companies;
– unit trusts;
1.2.1 Domestic banks

Under the Banking Act 1988, financial institutions may be licensed by the Bank of Mauritius to transact domestic banking business. Presently, there are ten domestic banks operating in Mauritius with 137 branches, 14 counters and 2 mobiles. Out of these ten banks, five are incorporated locally while the other five are branches of foreign banks. One of the locally incorporated banks has also established overseas branches whereas another locally incorporated bank operates a foreign banking subsidiary.

Locally incorporated banks are:
- the Mauritius Commercial Bank Ltd;
- State Bank of Mauritius Ltd;
- South East Asian Bank Ltd;
- Indian Ocean International Bank Ltd;
- The Delphis Bank Ltd.

Branches of foreign banks are:
- Banque National de Paris “Intercontinentale”;
- Barclays Bank Plc;
- Bank of Baroda;
- The Hong Kong and Shanghai Banking Corporation Ltd;
- Habib Bank Ltd.

Domestic banks accept various types of deposits from the public ranging from accounts payable on demand, personal savings deposits and fixed-term deposits. Banks also grant loans under various conditions for agricultural, commercial, personal and industrial purposes. They also deal in foreign exchange, provide safekeeping facilities and perform various other services.

1.2.2 Offshore banks

Mauritius offers an ideal environment for foreign banks and other financial institutions to conduct their international business. Presently, nine banks are licensed under the Banking Act 1988 to transact offshore banking business.

Offshore banks are licensed to conduct banking business or investment banking business in currencies other than the Mauritian rupee. They undertake, inter alia, deposit-taking, trade financing, fund management, investment advisory services and trusteeship of offshore trusts.

1.2.3 Non-bank financial institutions authorised to transact deposit-taking business

The Bank of Mauritius has authorised four non-bank financial institutions to carry on deposit-taking business. As stipulated under the Banking Act 1988, non-bank financial institutions are authorised to accept deposits of money and to employ such deposits in the financing of the specific business activities in which the non-bank financial institutions are engaged.

1.2.4 Savings banks

The Savings Bank Act 1975 provides for the establishment of savings banks under the management and control of the Postmaster-General. Savings banks as defined in the Savings Bank Act comprise the Mauritius Post Office Savings Bank and its branches. Savings banks are entitled to receive money deposits from the public for fixed or indeterminate periods.

1.2.5 Housing corporation

The Mauritius Housing Corporation was established under the MHC Ordinance No. 36 of 1962. Initially, its activities were limited to lending for housing finance business. With the widening of its role and expectations, there was a need for more flexibility to allow expansion and the Ordinance No. 36 of 1962 was replaced by the Mauritius Housing Corporation Act 1974. Subsequently, in 1989, the legal status of the Mauritius Housing Corporation changed from that of a para-statal body to that of a private company, namely the Mauritius Housing Company Ltd.

The Mauritius Housing Company Ltd is empowered to provide housing finance and to establish a savings scheme, namely the Housing Savings Scheme. It has also been authorised by the Bank of Mauritius to transact deposit-taking business. Its main objective, however, remains the granting of mortgage loans to the public for the purchase, construction, reconstruction, repair or improvement of non-commercial buildings.

1.2.6 Development bank

The Development Bank of Mauritius was initially established under the Development Bank of Mauritius Act. It was privatised in 1988 and is now known as the Development Bank of Mauritius Ltd.

The Development Bank of Mauritius Ltd plays an active role in the implementation of Government’s economic development policies and diversification programmes. Its general objectives are to provide financial support to the manufacturing, tourism, construction, transport, education and health sectors.

In particular, the Development Bank of Mauritius Ltd provides assistance for projects relating to the modernisation and diversification of agriculture and manufacturing activities, promotion of small and medium enterprises, dissemination of information technology and the promotion of computer culture.

1.2.7 Foreign exchange dealers

Enacted in June 1995, the Foreign Exchange Dealers Act 1995 regulates the activities of persons, other than offshore banks, authorised by the Minister of Finance to deal in foreign exchange, either as foreign exchange dealers or money changers. Foreign exchange dealers are allowed to conduct the business of buying and selling foreign currency, including forward foreign exchange transactions and wholesale money market dealings, whilst money changers are authorised solely to undertake the buying and selling of foreign currency notes and travellers’ cheques, replacement of lost or stolen travellers’ cheques and encashments under credit cards.
1.2.8 Other financial institutions

The Mauritian financial sector also comprises other financial institutions, namely:

– insurance companies which are regulated by the provisions of the Insurance Act 1987;
– non-bank offshore entities, international companies and offshore trusts which are governed by the Mauritius Offshore Business Activities Act 1992, the International Companies Act 1994 and the Offshore Trust Act 1992 respectively;
– the activities of the stock market which are regulated by the Stock Exchange Act 1989.

1.3 Role of the central bank

The Bank of Mauritius is the central bank of the country. It was established in September 1967 under the Bank of Mauritius Act 1966 and has the sole right of issuing Mauritius currency notes and coins. It is also charged with the responsibility of regulating the banking and credit system so as to ensure a proper distribution of credit and a sound financial structure.

The Bank does not accept deposits from individuals or non-financial institutions or compete with deposit-taking institutions in the lending field.

The Bank does, however, interact with the payments system in two different ways. Firstly, it facilitates and effects the final settlement of balances for the clearing system and, secondly, it acts as banker to the Government by clearing government receipts and disbursements.

The Bank of Mauritius is expected to play a major role in the implementation of the Real-Time Gross Settlement (RTGS). The system will be owned by the Bank of Mauritius by virtue of section 12(c)(iv) of the Bank of Mauritius Act. Authorised banks will process settlement related to RTGS through their settlement accounts maintained with the Bank of Mauritius.

(a) The main purposes of the Bank are to exercise the functions of a central bank in accordance with the Bank of Mauritius Act and to safeguard the internal and external value of the currency of Mauritius and its international convertibility.

(b) The Bank further directs its policy towards achieving monetary conditions conducive to strengthening the financial system and increasing the economic activity and the general prosperity of Mauritius.

(c) The Bank has the sole right to issue Mauritius currency notes and coin. It can also open accounts for, accept deposits from, and act as banker to:

– the Government;
– funds and institutions controlled by the Government;
– such statutory or corporate bodies as the Board may approve;
– authorised banks;
– any credit institutions in Mauritius;
– members of its staff.

(d) It also undertakes:

– dealing in bills and securities on behalf of Government;
– investing in securities of the Government;
– granting of advances and loans as specified under section 12 of the Bank of Mauritius Act 1966.
The Bank of Mauritius has also the statutory responsibility for the supervision of banks. The Banking Act 1988 lays down the legal basis for banking regulation and supervision aimed principally at preserving the soundness of the banking system and safeguarding the interests of depositors. In relation to banking supervision, the Bank of Mauritius supervises domestic commercial banks and offshore banks, both of which are licensed by it. It is also empowered to inspect non-bank deposit-taking institutions, money changers and foreign exchange dealers.

1.4 Role of other private sector and public sector bodies

Another organisation operating in the field of the payments system is the Port Louis Clearing House. The Port Louis Clearing House was established in 1967 under the chairmanship of the Bank of Mauritius. It provides an interbank clearing mechanism for large and low value cheques. Banks with large branch networks supplement the activities of the Clearing House by providing intra-bank clearing facilities.

Most domestic commercial banks are grouped into an organisation known as the Mauritius Bankers’ Association. It was established in 1967 with the primary function of looking after the interests of its members and is now actively contributing to the modernisation of the payments system.

1.5 Mauritius Forex Association

This is a grouping which includes representatives of all the banks. Its main objective is to promote the orderly development of a foreign exchange market in Mauritius. As there is no exchange control in Mauritius, banks engage on a continuous screen-based FX trading with the result that the exchange rate of the rupee is determined by the forces of demand and supply on the market.

2. SUMMARY INFORMATION ON PAYMENT MEDIA

2.1 Cash payments

The legal tender used in Mauritius is the Mauritian Rupee consisting of bank notes and coin. Cash payments are the most widely used form of payment in Mauritius. The denominations of notes and coin in circulation are as follows:

<table>
<thead>
<tr>
<th>Notes</th>
<th>Coin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rs 10</td>
<td>Cent 1</td>
</tr>
<tr>
<td>Rs 50</td>
<td>Cents 5</td>
</tr>
<tr>
<td>Rs 100</td>
<td>Cents 20</td>
</tr>
<tr>
<td>Rs 200</td>
<td>Cents 50</td>
</tr>
<tr>
<td>Rs 500</td>
<td>Rupee 1</td>
</tr>
<tr>
<td>Rs 1,000</td>
<td>Rupees 5</td>
</tr>
</tbody>
</table>

Rupees 10

The notes that are more widely used are Rs10, Rs100 and Rs200.

The proportion of notes in relation to the value of total cash in circulation approximates to 95%, using June 1997 data, and 96.7% as at the end of June 1998, and the share of notes and coin in circulation in the hands of the public in relation to money supply is as follows:

<table>
<thead>
<tr>
<th>Money Supply</th>
<th>M1</th>
<th>45.8%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M2</td>
<td>6.6%</td>
</tr>
</tbody>
</table>
2.2 Non-cash payments

2.2.1 Credit transfers

Credit transfers operate on an interbank basis - that is, the commercial banks’ balances are debited and credited accordingly. It occurs when a commercial bank requests the central bank to debit its account and credit the account of another commercial bank. A letter is normally sent to initiate the process. Vouchers are raised as soon as the letters are received, but since the computer system uses batch processing, there is a time lag between the time instructions are received, and the time the accounts are actually updated.

Standing orders. A person who wishes to remit a regular fixed amount of money to someone else may instruct his bank to debit his account on a fixed date and to credit a like amount to the beneficiary’s account which may be held within the same bank or with another bank.

2.2.2 Cheques

Cheques are currently the second most important medium for effecting payment transactions (after cash). Over the last five years, the number of cheques cleared daily has doubled whereas their value has increased by nearly five times. The amount of cheques cleared in the clearing house amounted to approximately 16,500 per day with 20,000 in peak periods.

In addition to cheques, there are other paper-based payment instruments such as bills of exchange and promissory notes in use in Mauritius. The legal framework for the use of cheques, bills of exchange and promissory notes is laid down in the Bills of Exchange Act 1914. Agreements between the banks and their customers as well as judicial decisions add to this regulatory framework.

The legislation governing cheques, promissory notes and other bills of exchange, known as the Bills of Exchange Act, was enacted in 1914 and is derived from the English Bills of Exchange Act of 1882. The Bills of Exchange Act 1914 sets out the rights and duties of parties to different types of paper instruments.

Commercial banks usually enter into agreements with customers while providing the latter with cheque books. These agreements, together with cases decided by courts, have laid down some of the fundamental principles governing the use of cheques and other bills of exchange.

2.2.3 Direct debits

The Debit Scheme is designed for the benefit of utilities (examples: Central Water Authority, Central Electricity Board and Mauritius Telecom) which receive large numbers of regular payments from their debtors through standing orders originated on the accounts of the debtors with the banks concerned. The amounts to be debited to the debtor’s account and the payment date may vary. Commercial organisations and clubs also use the direct debit service.

2.2.4 Payment cards

Payment cards (for example: credit, debit, prepayment and charge cards) are now an integral part of the Mauritian retail payment systems. The cards are issued to customers (the cardholders) by their banks or other card-issuing organisations such as MasterCard, VISA International, American Express and Diners Club and represent a convenient method of payment as an alternative to cash or cheques. They allow payment for goods or services and enable the holders to access Automated Teller Machines (ATMs) which provide an increasing range of banking services, as more fully described below.
Credit card. The holder of a credit card may obtain from his bank extended credit up to an agreed limit and may choose not to repay the whole amount outstanding at the end of the month. A minimum payment will usually be required. Interest on the outstanding balance is added monthly to the account balance.

There are usually three parties to a credit card operation: the cardholder, the retail merchant and the bank or other card-issuing organisations. Banks may be either acquirers or issuers of credit cards or both. (For example, The Mauritius Commercial Bank Ltd and State Bank of Mauritius Ltd are both acquirers and issuers of Master Card and VISA cards). The retail merchant is, in effect, the middleman in the channel of distribution for this particular bank service.

On the production of the card to the merchant, the latter supplies goods or services to the cardholder. Cash may also be obtained on the production of the card at a bank’s counter and access provided to Automated Teller Machines (ATMs) by entering the card into the terminal’s keypad.

Examples of credit cards most utilised in Mauritius are MasterCard and VISA.

Debit card. For all practical purposes, a debit card replaces a cheque in that it can be used to purchase goods or services and the transaction is immediately debited to the cardholder’s account held with the bank. Additionally, it may be used to provide access to ATMs.

There are two main types of debit cards in use in Mauritius: (a) a card usable to pay for the purchase of goods or services and to provide access to ATMs (Example: Maestro - an international label card) and (b) a card usable to obtain access to ATMs only (Example: Mr Best - a private label card).

Note: The main difference between debit and credit cards is that the amount of the purchase is deducted directly from the cardholder’s account rather than being billed for deferred payment as with credit cards.

Prepayment card (or prepaid card). Cards like this are issued by Mauritius Telecom. These cards bear a magnetic stripe and a credit value. When inserted into a terminal found on some public telephones the amount to be paid is deducted from the credit value of the card.

Charge card. The holder should repay the whole amount at the end of a grace period, except for cash advance transactions. Examples: American Express and Diners Club cards.

Cheque guarantee card. This service has been phased out in Mauritius. A cheque drawn on a Mauritian bank may be guaranteed up to a published limit provided it is accompanied by a cheque guarantee card issued by the bank on which it is drawn. Example: MCB Cheque Guarantee Card.

Car card. A new development of the credit card concept in Mauritius is the car card, to facilitate the payment for petrol bills, the central budgeting and control of car expenses. Example: Fleetman Card.

International cards

The types of cards issued are credit cards (MasterCard, VISA), debit cards (Maestro-MasterCard, Electron-Visa) and charge cards (American Express and Diners Club).

Private label cards (or fidelity cards). Credit cards issued by local banks in association with local merchants. Example: Prisunic - But cards.

2.2.5 Automated Teller Machines (ATMs)

ATMs are electronic funds transfer terminals located on or off the bank premises that may operate on-line. They can perform many routine consumer banking services which traditionally would have been handled by a teller over the bank counter.
The main transactions undertaken through ATMs are:

- cash withdrawal;
- balance enquiry;
- mini-statement request;
- cheque book ordering;
- depositing cash and other instrument to the cardholders accounts, including his credit cards accounts;
- transferring funds between the cardholders’ accounts;
- paying utilities bills.

ATMs are another way in which banks in Mauritius make their services more accessible and convenient for customers. Because they are available around the clock customers can bank on their own schedule. They locate the ATM terminal that is operated by their banks, key their PINs into the terminal’s keypad and input the information related to their transaction choice. And, through their participation in the CIRRUS and PLUS international networks, the major banks in Mauritius make their customers’ funds available to them in Mauritius and abroad. Likewise foreigners may have access to Mauritian ATMs which are branded CIRRUS/PLUS.

It has been a feature of the development of ATMs in Mauritius that banks own their ATM networks and do not share each other’s machine although this is feasible through the CIRRUS and PLUS networks. But ATM-sharing may become a feature of the payment system in the future. Presently, ATM systems in Mauritius are proprietary networks owned and operated by local banks. The machines are operated by the banks which hold the cardholders account and the transaction information is transmitted from the ATMs to the banks’ data processing centres. Upon receipt of the transaction information, the issuer’s authorisation system at the ATM level verifies the cardholder’s PIN and prompts the cardholder to available transactions through the display screen of the ATM. If the cardholder is correctly identified and there are sufficient funds in his account to engage in the transaction chosen, the transaction is electronically transmitted from the terminal to the cardholder’s bank where the appropriate debit or credit is made to the cardholder’s account.

The main components of an ATM are a card reader, a display screen, a keyboard, a cash dispenser and a deposit mechanism.

The ATM networks in Mauritius are a mix of private X25 networks, point to point asynchronous connections through the public telephone networks and public X25 networks.

The first ATM was installed in Mauritius by the Mauritius Commercial Bank Ltd in 1987. There are presently approximately 157 ATMs in Mauritius operated by the six major banks (namely, the Mauritius Commercial Bank Ltd, State Bank of Mauritius Ltd, the Hong Kong and Shanghai Banking Corporation Ltd, Barclays Bank Plc, Banque National de Paris “Intercontinentale” and the Delphis Bank Ltd) and whose services are made available to consumers throughout the country.

2.2.6 Points-of-sale (POS)

All payment cards incorporate a magnetic strip which enables the card-issuer to verify electronically whether the card (credit or debit) can be used for a given transaction. At the point of sale, the plastic card may be used to initiate a paper-based transaction or it may become the key that prompts the POS machines to activate a terminal-based transaction. (Note: transactions on debit cards such as Maestro cards are pin-based). Typically, the retail merchant uses the customer’s card to prepare a sales voucher, which is signed by the customer and deposited with a bank much as a customer’s cheque would be deposited.
All major merchants already have point-of-sale terminals linked with the banks’ computers. The entire transaction, that is, the debit to the customer’s account and the credit to the merchant’s account, takes place either instantaneously or on the same day. POS terminals are extensively used for across-bank transactions.

The POS networks in Mauritius are a mix of public X25 networks, public X28 networks, private X25 network and dial-in asynchronous connections using the public telephone networks. POS terminals are available throughout the country.

2.2.7 Other payment instruments

Banker’s draft (bank’s office cheque). A person who wishes to remit money to someone may, if he does not send his own cheque, obtain from his banker a banker’s draft (cheque) in rupees or in foreign currencies.

Travellers’ cheques (T/Cs). T/Cs, as is well known, are a form of travel currency (in rupees or in foreign currencies) giving the holder the security of a letter of credit and the convenience of a local currency. T/Cs are signed by the beneficiary immediately on issue and counter-signed on presentation for encashment at the correspondent bank, hotel, etc., but not beforehand. This provides a method of identification of the beneficiary.

Bills of Exchange and Promissory Notes. These are well-documented international instruments.

Documentary Credit (D/C). The D/C technique can also be considered an important payment instrument for debts connected mostly with international trading operations. It is a method of guaranteeing payment to the seller, provided he submits documents as requested by the purchaser.

Automated/electronic and other methods of payment. Telegraphic and airmail transfers. These international methods of payments are self-explanatory.

S.W.I.F.T. Five domestic and one offshore banks operating in Mauritius are members of the Society for Worldwide Interbank Financial Telecommunications.

Telebanking or homebanking. Business customers have the opportunity to link their computer systems up with their banks’ systems. Various services are available (management information, cash management and payment, for instance). Examples: Hexagon, Fidelink, Corporate Direct.

3. PRESENT INTERBANK EXCHANGE AND SETTLEMENT

3.1 General overview

The existing system of clearing is manual and the clearing house is situated at the Bank of Mauritius. Interbank transfers are effected either by the issue of a letter to the Bank from the commercial bank requesting to debit its account and credit the account of the other commercial bank (see 2.2.1) or by the use of clearing or debit vouchers which are then processed in the clearing system. Settlement is effected after the third clearing on the basis of the final balances of the day’s clearing by means of transfer vouchers on accounts of commercial banks at the Bank to be delivered within the next hour on week days.

Only banks licensed to operate in Mauritius and its dependencies under the Banking Act 1988 together with the Bank of Mauritius are admitted as participants in the system. According to the Port Louis Clearing House Rules and Regulations, the items to be cleared are cheques, drafts, debit vouchers, credit vouchers or other claims on member banks drawn in Mauritius Rupees as well as
articles drawn in foreign currencies up to a value of Rs 5,000. Articles drawn in foreign currencies exceeding Rs 5,000 should be specifically presented to the drawee bank. However, the most common articles cleared in the clearing house are cheques and debit vouchers.

The opening hours of the Clearing House from Monday to Friday are as follows:
- first clearing - 10 a.m.
- second clearing - noon
- third clearing - 3 p.m.

The articles to be cleared are made up in parcels on each bank. A machine list is attached to each parcel showing the amount of each document, the number of items, the total amount of the claim and the name of the presenting bank which are checked by the receiving bank. Unpaid items returned are listed on the clearing schedule marked “Unpaids” the total of which is added to the total of debit items being presented to each individual bank.

The level of automation is low at the Clearing House and cheques are physically exchanged. Automation exists at the participant’s level - that is, for example a waste system exists at the Bank of Mauritius for the entering of data for individual cheques and a summary report is printed together with a machine listing. Sorting of cheques is done manually and is reconciled with the summary report. Each member is represented at the clearing house by a competent officer who delivers and receives the documents referable to his bank. The amount delivered is noted as well as the amount received. The balance after each clearing may be a debit (i.e. an adverse clearing) or a credit and is carried forward at the next clearing up to the last clearing where settlement is effected by instructing the Bank of Mauritius to debit or credit their account. The settlement is normally final and there is no unwinding. Any corrections or disagreements are done through the issue of debit vouchers.

All expenses incurred in managing the Clearing House are borne equally by the “seatholders” in the Clearing House and are normally recovered on a quarterly basis.

As settlement occurs at the end of the last clearing, and cheques can take up to 3 working days to be cleared, liquidity and credit risk is already inherent in the system.

3.2 Structure, operation and administration

There is only one exchange and settlement system in the country.

3.2.1 Major legislation, regulation and policies

The legal framework of the current payments system is governed by the following provisions.

**Bank of Mauritius Act 1966.** The Bank of Mauritius Act confers on the Bank of Mauritius the powers of organising a clearing house in order to facilitate the clearing of cheques and other credit instruments. Pursuant to these powers, the Bank of Mauritius, in conjunction with the domestic banks, has set up a clearing house in Port Louis, known as the Port Louis Clearing House.

**Rules of the Port Louis Clearing House.** A Clearing House Committee was set up in 1967, under the chairmanship of the Bank of Mauritius, comprising members from all authorised domestic banks, to manage and make rules and regulations in respect of the Port Louis Clearing House. These rules and regulations are amended from time to time as and when necessary by the Clearing House Committee. The rules and regulations constitute a gentleman’s agreement between the banks, inclusive of the Bank of Mauritius. Any breach of the rules and regulations is resolved through negotiations between the parties concerned under the supervision of the Bank of Mauritius.
Banking Act 1988. The Banking Act 1988 prescribes the minimum share capital or assigned capital that a bank must have and the minimum liquid assets that it must hold. The Bank of Mauritius Act 1966 prescribes the minimum cash balance which banks are required to maintain. With effect from July 1997, the minimum liquid assets required to be maintained by commercial banks were reduced from 20% to 0% of their total deposits. The Banking Act also contains provisions relating to the winding up of banks, the priority of deposit liabilities over other unsecured liabilities of the banks and the priority to be observed within the different classes of deposits and liabilities.

3.2.2 Participants in the system

Participants in the Port Louis Clearing House are the main branches (head offices) of all domestic banks. Domestic banks maintain reserve accounts with the Bank of Mauritius. Funds from the reserve accounts are used to effect clearing settlement at the end of the day.

3.2.3 Types of transaction handled

The main aim of the Port Louis Clearing House is to clear large and low value cheques. Other paper instruments such as drafts, debit vouchers, credit vouchers or other claims on member banks drawn in Mauritian rupees as well as instruments drawn in foreign currencies up to a value of Rs 5,000 are also cleared through the Port Louis Clearing House.

3.2.4 Operation of the transfer system

Initially, the Port Louis Clearing House operated 6 days a week with two daily clearing sessions. Subsequently, its operation was reduced to weekdays only and the number of clearing sessions was increased from two to three sessions. The Port Louis Clearing House opens at 10 a.m., noon and 3 p.m. At the 10 a.m. session, uncleared cheques from the previous day’s session and other items received from the branches are processed. At the other two sessions, normal clearance of cheques and other payment instruments is undertaken.

Port Louis branches, other than main branches (head offices), of member banks clear their items through their respective head offices whereas up-country branches of member banks are allowed to clear items between themselves directly and obtain settlement by clearing vouchers on main branches.

3.2.5 Transaction-processing environment

At present, the Port Louis Clearing House is a manual paper-based operation. Cheques are physically transported by the commercial banks’ representatives to the Port Louis Clearing House and cheques drawn on respective commercial banks are handed over to them by the other banks for clearing and settlement purposes.

3.2.6 Settlement procedures

Settlement is carried out after the third clearing, the 3 p.m. session, on the basis of the final balances of the day’s clearing by means of transfer vouchers on accounts at the Bank of Mauritius within the next hour on weekdays.

3.2.7 Pricing policies

All expenses incurred in managing the Port Louis Clearing House are borne equally by the members of the Clearing House.
3.2.8 Credit and liquidity risks

At present, the clearing process is carried out manually and it usually takes two days for a cheque to be cleared. This leads to the prevalence of liquidity risk in the payments system, such that with the growing turnover in cheque based payment transactions, the need for an automated clearing house is being felt. As part of the payment system initiative, the Port Louis Clearing House will be fully automated and a Bulk Transfer and Netting System (BTNS) will be implemented in the next five years.

4. SPECIAL USE OF INTERBANK TRANSFER SYSTEMS FOR INTERNATIONAL AND DOMESTIC FINANCIAL TRANSACTIONS

4.1 Exchange and settlement system for international transactions

International payments are effected using telexes. The Bank of Mauritius maintains accounts with various foreign correspondents. The client, mainly Government, will send a letter of authority with its instructions. The account of the client is debited in the Bank’s book with the rupee equivalent and the asset account (i.e. balances with foreign banks) is credited. A telex is sent before the value date with the necessary information such as amount, currency, beneficiary and references. The value date of the transaction will depend upon where payment is to be effected - for example a payment to a beneficiary in Bahrain will require more advance notice to our foreign correspondent than that in the United Kingdom.

Most of the currencies can be traded in Mauritius depending upon their availability. The list of currencies tradable can be found in the Mauritius Bankers Association (MBA) daily publication of exchange rates and these rates fluctuate daily.

The instruments used for international payments made face to face are mainly credit cards and travellers’ cheques and they are widely used particularly by foreigners coming to Mauritius and Mauritians visiting other countries.

4.2 Exchange and settlement systems for securities transactions

The responsibility of regulating the securities market rests upon the Stock Exchange Commission (SEC), established under the Stock Exchange Act 1988. During the last few years, with the growing sophistication of the Mauritian economy and financial sector, dealings in securities have increased in volume. In order to facilitate dealings in securities, the Central Depository & Settlement Co. Ltd (CDS) was set up, under the Securities (Central Depository, Clearing and Settlement) Act 1996, to provide for central depository, clearing and settlement services.

Settlement of stock market transactions at the CDS is effected through the current accounts maintained at the Bank of Mauritius. The CDS calculates participants’ multilateral net positions and sends instructions to the Bank of Mauritius to debit or credit the current accounts of participants’ banks.
5. ROLE OF THE CENTRAL BANK IN INTERBANK SETTLEMENT SYSTEMS

5.1 General responsibilities

5.1.1 Statutory responsibilities

The Bank of Mauritius is governed by the Bank of Mauritius Act 1966 and regulations made under the Act. Before the establishment of the Bank of Mauritius, there was a Board of Commissioners of Currency - the first of its kind to be set up in the world - whose duties were restricted to those of an issuing authority.

The Bank of Mauritius is required to promote and maintain adequate and reasonable banking services for the public, ensure a sound financial structure, high standards of conduct and management throughout the banking and credit system, and to further such policies as may be in the national interest. The Bank of Mauritius is vested with the power to organise a clearing house and it oversees the activities of the Port Louis Clearing House.

5.1.2 Establishment of common rules

The Bank has spearheaded the development of an automated settlement system, including the accompanying rules, standards and procedures.

5.2 Provision of settlement and credit facilities

The interbank obligations are settled through the banks’ accounts with the Bank of Mauritius. Credit facilities that the Bank offers to other banks are:

– re-discounting of bills;
– advances;
– repo instruments.

Credit to banks is secured through pledging of Treasury bills and Government securities. The commercial banks are subject to reserve requirements. Clearing banks maintain cash balances with the Bank for this purpose. Banks are not charged for using the settlement system.

The Bank plays an active role on the interbank foreign exchange market. The Bank also has a secondary market cell for the sale and purchase of Government of Mauritius Treasury bills and other securities.

5.3 Monetary policy and payment systems

The Bank of Mauritius relied in the past on reserve requirements, quantitative control on bank credit expansion to the private sector, selective credit control and interest rate guidelines as the principal instruments of monetary policy. Such a framework of control over a long period of time brought rigidities into the banking system and hindered competition. In the context of the liberalisation of the financial system, the Bank of Mauritius, as from the year 1991-92, embarked on a phased programme of monetary policy reforms:

1) In the first phase of the reforms, the Bank of Mauritius stopped the issue of bills on tap at pre-determined yield and, instead, started with the auction of bills by weekly tender in November 1991.
2) In July 1992, ceilings on bank credit to the priority sectors of the economy were removed and, in July 1993, ceilings on bank credit to the non-priority sectors of the economy were also abolished.

3) Interest rates were fully liberalised with banks free to apply their own rates on deposits and loans and overdrafts.

4) In February 1994, a secondary bill market cell was set up in the central bank to facilitate dealings in bills.

5) In July 1994, the determination of the Bank Rate, which is the Bank’s minimum discount and advances rate, was linked to the average Treasury bill auction rate over the preceding twelve weeks, plus a margin of 1 percentage point. Effective end-December 1994, the margin of 1% was reduced to 0.25 percentage point and with effect from July 1995, the 12-week average was replaced by a one-week average, i.e. the most recent overall weighted yield rate plus a margin of 0.25 percentage point. As from December 1996, Bank Rate is equated to the most recent weekly weighted average yield on bills on the auction of Treasury bills on the primary market.

Prior to July 1997, commercial banks were required to hold 8% of eligible deposits in non-interest cash balances with the Bank of Mauritius and notes and coin in their vaults and 20% of eligible deposits in non-cash eligible liquid assets, namely Government securities and Treasury Bills. However, as from July 1997, the required cash reserve ratio has been brought down from 8% to 6% of eligible deposits and the non-cash liquid assets ratio, from 20% to 0%. As from July 1998, domestic banks are required to maintain a uniform 5.5% cash reserve ratio on their foreign currency and rupee deposits. Deposit-taking non-bank financial institutions are subject to a liquidity ratio of 10%.

5.4 Risk reduction measures

The present delay in the manual clearing system encourages float and liquidity risk in the payments system. The best remedy is to reduce the time for cheque clearance. This will be achieved with the implementation of the RTGS system whereby large-value credit payment instructions will be settled on-line and thereafter through the computerisation of the Port Louis Clearing House.

6. RECENT DEVELOPMENTS IN THE PAYMENT SYSTEM

6.1 Description of the new system

The Bank of Mauritius is in the process of setting up a Real-Time Gross Settlement System (RTGS) which is expected to be implemented over the next five years.

The RTGS system will be based on the principles set out in the BIS guidelines. The RTGS will primarily be used to process large-value credit payment instructions. Once this core application is operational, the Bank of Mauritius will move towards the construction of additional financial applications which will be interlocked with the RTGS system.

6.1.1 Major regulations governing the new system

Notwithstanding the effectiveness of the current legal framework, the implementation of the RTGS will require a review of the laws, rules and regulations governing the present payments system.
Bank of Mauritius Act 1966. The Bank of Mauritius is empowered to organise a clearing house to facilitate the clearing of cheques and other credit instruments. It may also act as banker to commercial banks and open accounts for and accept deposits from them. These provisions, although sufficient for the establishment of Port Louis Clearing House, are inadequate for the implementation of the proposed RTGS project since the Real-Time Gross Settlement system will not be a clearing system, but rather a settlement system. The Bank of Mauritius Act is currently in the process of being reviewed and it is proposed to vest the central bank with powers to promote the efficient and secure operation of payment systems. This will enable the Bank of Mauritius to oversee and regulate the payment as well as the settlement systems.

Banking Act 1988. With the growing sophistication of the banking and financial sector, the Banking Act 1988 is being reviewed with a view to providing for greater soundness and safety of the banking system. Besides, Government is considering coming up with appropriate legislation for strengthening the regulatory framework of the non-bank financial services sector.

Bills of Exchange Act 1914. The Real-Time Gross Settlement system would require truncation of large-value cheques and the provisions relating to the presentment for payment and endorsement of cheques in the Bills of Exchange Act 1914 would require amendment.

Companies Act 1984. Commercial banks are members of the Port Louis Clearing House. Banks, as defined under the Banking Act, must be bodies incorporated under the laws of Mauritius or branches of companies incorporated abroad. Banks, therefore, must be incorporated or registered under the Companies Act 1984. The provisions relating to the formation, registration, management and administration of companies and more specifically those in respect of their winding up are relevant to a clearing house. Thus, the winding up of a participant within the RTGS is an important issue in the smooth operation of the system. The Banking Act 1988 contains certain provisions for the winding up of a bank. However, the general procedures to be observed and adhered to during the winding up of companies are applicable to the winding up of commercial banks.

Computer-based evidence. The operations of the RTGS system would be conducted by means of information technology equipment. The present legal framework for the admissibility of computer-based records as evidence in civil or criminal proceedings is contained in the Courts Act 1945 and the Banking Act 1988. The provision in the Courts Act 1945 is of a general nature and provides only for the admissibility of machine copies or prints from microfilms as evidence in courts. However, the Banking Act 1988 provides for the admissibility of computer-based records as evidence in courts, but the Act does not apply to the Bank of Mauritius. As the latter will also be a party to the RTGS system, it would be necessary to make legal provisions for the admissibility of its computer-generated records as evidence in civil or criminal court cases. The Government of Mauritius is proposing to adopt an Information Technology Act which will, inter alia, cater for the admissibility of computer-based records as evidence in court proceedings.

Contract Law. Contractual obligations of every party to the payments system are governed by the Mauritian Civil Code (Code Napoleon). With the implementation of the RTGS system, contract-based rules setting out the functioning of the system and the obligations of the parties to the system will be drawn up and a multilateral agreement will be entered into between all commercial banks and the central bank, binding them to the rules of the system.

6.1.2 Participation in the new system

Direct and indirect participants will be accommodated in the system. Direct participants will be financial institutions maintaining a reserve account at the central bank, as a prerequisite to their participation in the RTGS system. However, they will also be required to maintain a settlement account at the central bank. Indirect participants will be smaller financial institutions or non-bank financial institutions, which do not maintain reserve accounts at the central bank, but which may benefit from the system through participation on a correspondent basis through direct participants.
6.1.3 Types of transaction handled

During the initial implementation phase of the RTGS, the following payment transactions are being considered:

– credit transfers for payment transactions exceeding Rs 100,000.
– funds settlement for the local clearing house in Port Louis.
– large-value cheques which will be truncated in the system.

Beyond the initial implementation phase, the following transactions will be added:

– an exchange and settlement system for the securities market;
– funds settlement for the money and foreign exchange markets;
– settlement for Government securities transactions;
– the construction of a Bulk Transfer Netting System (BTNS) which will replace the current manual clearing house and will accommodate plastic card traffic from throughout Mauritius.

6.1.4 Operation of the new system

With the fast moving Mauritian financial sector, there is a growing need for customers to continue making payments beyond traditional closing hours of banks. As a consequence, the RTGS system will be designed to be able to operate 24 hours a day, 7 days a week. A “value day”, which is different from the calendar day, will be introduced in order to enable the continuation of partial system operation on a 24-hour basis, even though the current account of the commercial bank and the RTGS Money Desk will be closed following daylight hours.

6.1.5 Transaction-processing environment

The aim of the RTGS system is to reduce the physical transfer of cheques by processing large-value payments by credit transfers. Operations will be confirmed on line via computer networks and the settlement will be carried out on a real-time, bilateral basis.

6.1.6 Settlement procedures

Commercial banks will be required to keep settlement accounts with the Bank of Mauritius for the purposes of the new system. Out of the settlement accounts, credit push payment transactions will be settled on a gross (individual), multilateral basis. If there are not sufficient funds in the account of a commercial bank, the payment order will be queued.

6.1.7 Credit and liquidity risks

Since transactions will be settled on a gross, multilateral basis, liquidity management will be improved and payments systemic risks will be reduced.

Credit risks. The Banking Supervision Department (BSD) has set out objective provisioning guidelines for bad and doubtful debts for banks to comply with. BSD requires banks to report regularly on their concentration of risk according to the provisions of the Banking Act 1988.

Liquidity risks. BSD monitors banks’ liquidity position as part of a system of prudential controls.
6.1.8 Pricing

At the initial stage, the Bank of Mauritius will grant intraday overdrafts without charging any interest. After the first year of operation, intraday interest will be charged on daylight overdrafts. The system will then migrate towards a tariff-based service environment which will require an on-line billing system. Participants will then be charged on a price per transaction basis, with the possibility of discounts for high volume levels of usage.

7. INFRASTRUCTURE

7.1 Telecommunications infrastructure

The existing telecommunications infrastructure can be seen as efficient and reliable throughout the country. In view of the upcoming RTGS project, the local telecommunications company, Mauritius Telecom, has been asked about the availability of lease lines and ISDN (Integrated Services Digital Network), with a positive response from them.

7.2 Availability of electricity

Electricity supply is available in all residential and industrial areas in both rural and urban parts of Mauritius. The Central Electricity Board caters for all developments in improving its supply throughout the country.

7.3 Road infrastructure

The road infrastructure has been greatly improved over the years in Mauritius and further developments are being undertaken to ensure rapid flow of traffic at all times and in every part of the country.

7.4 Economic reforms

7.4.1 Exchange controls

The gradual liberalisation of exchange control started in 1986. In 1994, the Exchange Control Act was suspended. Mauritius adopted Article VIII, Sections 2, 3 and 4 of the IMF Articles of Agreement with effect from September 1993. Both the current and the capital accounts are fully convertible. With a view to promoting greater competition in the foreign exchange market, the Foreign Exchange Dealers Act was passed in 1995 and licences are issued to applicants who meet the criteria set out in the Act.

7.4.2 Exchange rate policy

As far as exchange rate policy is concerned, at the time of the setting up of the Bank of Mauritius, the Mauritius rupee was pegged to the pound sterling. However, following the currency upheaval in the first half of the 1970s, the Mauritius rupee was de-linked from the pound sterling in January 1976 and pegged to the Special Drawing Rights (SDR) of the IMF. But, with the steady strengthening of the US dollar especially since 1981, the SDR had appreciated against other major currencies which, in turn, resulted in an appreciation of the rupee. Consequently, in February 1983,
the Mauritius rupee was de-linked from the SDR and pegged to a trade-weighted basket of currencies, more representative of the external trade pattern of Mauritius.

Following the suspension of the Exchange Control Act in July 1994, an interbank foreign exchange market was established. The exchange rate of the rupee is determined by the free interplay of market forces in the interbank foreign exchange market. The rupee is in a regime of independent float with its value being largely influenced by movements of major reserve currencies in international foreign market. The Bank of Mauritius intervenes in the interbank foreign exchange market exclusively in US dollars to ensure that the value of the rupee vis-à-vis major currencies reflects, amongst other things, the macroeconomic fundamentals of the country.

7.4.3 Prudential measures

The central bank has implemented the risk-weighted capital adequacy ratio in accordance with the Basle Capital Accord and adopted the International Accounting Standards (IAS 30) which call for a greater degree of transparency in banks’ published accounts. Until December 1996, domestic banks and offshore banks incorporated in Mauritius were required to maintain a risk-weighted capital adequacy ratio of not less than 8% in accordance with the Basle Capital Accord. The ratio was raised to 9% as from January 1997, and has been raised to 10% as from July 1997. The minimum capital requirement for both domestic and offshore banks is currently Rs 75 million. It will be raised to Rs 100 million as from 1st January 1999. Effective from 14th April 1997, the overall foreign exchange exposure or overall open position of a bank in foreign exchange at close of business each day should not exceed 15% of its Tier 1 Capital.

7.4.4 Other measures

To widen the range of financial instruments, authorised non-bank financial institutions are allowed to issue Certificates of Deposits.

Diversification of the economy: (a) the development of an offshore sector started in 1989 and presently seven offshore banks operate in Mauritius; (b) a Stock Exchange was set up in 1989; (c) a Free Port was established in 1992; and (d) the National Mutual Fund was set up in 1990 and the National Investment Trust in 1993.
Table 1

Basic statistical data

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (millions) (mid-year)</td>
<td>1.084</td>
<td>1.097</td>
<td>1.113</td>
<td>1.122</td>
<td>1.134</td>
</tr>
<tr>
<td>GDP (in millions of Rupees)</td>
<td>49.633</td>
<td>56.57</td>
<td>63.043</td>
<td>69.082</td>
<td>77.299</td>
</tr>
<tr>
<td>GDP per capita (thousands of Rupees)</td>
<td>45.77</td>
<td>51.554</td>
<td>56.662</td>
<td>61.564</td>
<td>68.192</td>
</tr>
<tr>
<td>Exchange rate (domestic vis-à-vis USD)</td>
<td>16.998</td>
<td>18.656</td>
<td>17.863</td>
<td>17.664</td>
<td>17.972</td>
</tr>
</tbody>
</table>

Table 2

Settlement media used by non-banks
(at year-end, not seasonally adjusted, in millions of Rupees)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes and coin</td>
<td>4.81</td>
<td>5.3</td>
<td>5.56</td>
<td>6.03</td>
<td>6.62</td>
</tr>
<tr>
<td>Transferable deposits</td>
<td>3.68</td>
<td>3.19</td>
<td>4.44</td>
<td>4.69</td>
<td>4.77</td>
</tr>
<tr>
<td>Narrow money supply (M1)</td>
<td>7.51</td>
<td>7.43</td>
<td>8.87</td>
<td>9.58</td>
<td>9.83</td>
</tr>
<tr>
<td>Broad money supply (M3)</td>
<td>34.7</td>
<td>40.64</td>
<td>45.65</td>
<td>54.18</td>
<td>58.26</td>
</tr>
</tbody>
</table>

Table 3

Settlement media used by banks
(in millions of Rupees)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserve balances held at central bank</td>
<td>1.95</td>
<td>2.68</td>
<td>2.84</td>
<td>3.56</td>
<td>2.5</td>
</tr>
<tr>
<td>Transferable deposits at other institutions</td>
<td>0.007</td>
<td>0.006</td>
<td>0.013</td>
<td>0.046</td>
<td>0.006</td>
</tr>
<tr>
<td>Accounts at the Post Office</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Accounts at the Treasury</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Required reserves</td>
<td>3.11</td>
<td>3.63</td>
<td>4.07</td>
<td>4.94</td>
<td>4.14</td>
</tr>
<tr>
<td>Institutions' borrowing from central bank</td>
<td>0.05</td>
<td>0.09</td>
<td>0.16</td>
<td>0.55</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Table 4

**Banknotes and coin**

(in millions of Rupees at year-end, not seasonally adjusted)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total banknotes and coin in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>circulation</td>
<td>4809.4</td>
<td>5304.5</td>
<td>5558.4</td>
<td>6033</td>
<td>6617.2</td>
</tr>
<tr>
<td>Denomination of banknotes:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000 notes</td>
<td>1251.30</td>
<td>1503.70</td>
<td>1623.20</td>
<td>1740.90</td>
<td>2064.40</td>
</tr>
<tr>
<td>500 notes</td>
<td>1033.00</td>
<td>1315.30</td>
<td>1470.90</td>
<td>1729.70</td>
<td>1890.00</td>
</tr>
<tr>
<td>200 notes</td>
<td>751.40</td>
<td>878.80</td>
<td>878.80</td>
<td>933.90</td>
<td>1025.50</td>
</tr>
<tr>
<td>100 notes</td>
<td>1142.50</td>
<td>1029.70</td>
<td>1020.90</td>
<td>1052.90</td>
<td>1057.90</td>
</tr>
<tr>
<td>50 notes</td>
<td>283.70</td>
<td>228.40</td>
<td>207.10</td>
<td>199.70</td>
<td>188.80</td>
</tr>
<tr>
<td>20 notes</td>
<td>13.50</td>
<td>7.80</td>
<td>5.60</td>
<td>3.60</td>
<td>2.20</td>
</tr>
<tr>
<td>10 notes</td>
<td>175.30</td>
<td>172.10</td>
<td>173.00</td>
<td>183.90</td>
<td>188.90</td>
</tr>
<tr>
<td>5 notes</td>
<td>9.10</td>
<td>6.80</td>
<td>6.00</td>
<td>5.70</td>
<td>5.40</td>
</tr>
<tr>
<td>Coin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 coins</td>
<td>0.20</td>
<td>0.20</td>
<td>0.20</td>
<td>0.20</td>
<td>0.20</td>
</tr>
<tr>
<td>5 coins</td>
<td>35.00</td>
<td>40.70</td>
<td>44.60</td>
<td>48.50</td>
<td>53.10</td>
</tr>
<tr>
<td>1 coins</td>
<td>46.20</td>
<td>50.00</td>
<td>54.40</td>
<td>57.20</td>
<td>61.20</td>
</tr>
<tr>
<td>½ coins</td>
<td>11.10</td>
<td>12.00</td>
<td>12.70</td>
<td>13.30</td>
<td>13.90</td>
</tr>
<tr>
<td>1/4 coins</td>
<td>6.50</td>
<td>6.50</td>
<td>6.50</td>
<td>6.50</td>
<td>6.50</td>
</tr>
<tr>
<td>1/5 coins</td>
<td>7.20</td>
<td>8.80</td>
<td>10.30</td>
<td>12.00</td>
<td>13.50</td>
</tr>
<tr>
<td>1/10 coins</td>
<td>2.50</td>
<td>2.50</td>
<td>2.50</td>
<td>2.50</td>
<td>2.50</td>
</tr>
<tr>
<td>1/20 coins</td>
<td>2.20</td>
<td>2.50</td>
<td>2.70</td>
<td>3.00</td>
<td>3.30</td>
</tr>
<tr>
<td>1/50 coins</td>
<td>0.30</td>
<td>0.30</td>
<td>0.30</td>
<td>0.30</td>
<td>0.30</td>
</tr>
<tr>
<td>1/100 coins</td>
<td>0.20</td>
<td>0.20</td>
<td>0.20</td>
<td>0.20</td>
<td>0.20</td>
</tr>
<tr>
<td>Banknotes and coin held by credit institutions*</td>
<td>989.3</td>
<td>1073.5</td>
<td>1146.28</td>
<td>1185.83</td>
<td>1566.41</td>
</tr>
<tr>
<td>Total banknotes and coin outside credit institutions</td>
<td>3820.1</td>
<td>4230.88</td>
<td>4412.23</td>
<td>4847.18</td>
<td>5050.76</td>
</tr>
<tr>
<td>Banknotes held in overseas territories</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*commercial banks only
### Table 5

**Institutional framework**  
(as at 30th September 1997)

<table>
<thead>
<tr>
<th>Categories</th>
<th>Number of institutions</th>
<th>Number of branches</th>
<th>Number of accounts (thousands)</th>
<th>Value of accounts (millions of Rupees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central bank (as at 30/06/96)</td>
<td>1</td>
<td>0</td>
<td>0.2</td>
<td>2</td>
</tr>
<tr>
<td>Commercial banks (as at 30/06/96)</td>
<td>11</td>
<td>138</td>
<td>1,311</td>
<td>49,924</td>
</tr>
<tr>
<td>Savings banks</td>
<td>1</td>
<td>87</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Post Office</td>
<td>1</td>
<td>93</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Memorandum item:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Branches of foreign banks</td>
<td>5</td>
<td>-</td>
<td>-</td>
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</tr>
</tbody>
</table>

---

### Table 6

**Cash dispensers, ATMs and EFTPOS terminals**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash dispensers and ATMs:</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Number of networks</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Number of machines</td>
<td>38</td>
<td>48</td>
<td>78</td>
<td>105</td>
<td>130</td>
</tr>
<tr>
<td>Volume of transactions (millions)</td>
<td>0.94</td>
<td>1.29</td>
<td>2.00</td>
<td>4.23</td>
<td>6.66</td>
</tr>
<tr>
<td>Value of transactions (billions of Rupees)</td>
<td>0.74</td>
<td>1.25</td>
<td>2.14</td>
<td>3.09</td>
<td>4.22</td>
</tr>
<tr>
<td>EFTPOS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of networks</td>
<td>1851</td>
<td>2059</td>
<td>2448</td>
<td>2753</td>
<td>3011</td>
</tr>
<tr>
<td>Number of machines</td>
<td>291</td>
<td>642</td>
<td>882</td>
<td>1212</td>
<td>1538</td>
</tr>
<tr>
<td>Volume of transactions (millions)</td>
<td>0.39</td>
<td>0.48</td>
<td>0.83</td>
<td>1.37</td>
<td>1.75</td>
</tr>
<tr>
<td>Value of transactions (billions of Rupees)</td>
<td>0.61</td>
<td>0.86</td>
<td>1.31</td>
<td>1.96</td>
<td>2.93</td>
</tr>
</tbody>
</table>
### Table 7
**Number of payment cards in circulation**
(in thousands)

<table>
<thead>
<tr>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Cards with a cash function</td>
<td>67.93</td>
<td>85.1</td>
<td>124.97</td>
<td>195.47</td>
<td>267.15</td>
</tr>
<tr>
<td>Cards with a debit function</td>
<td>10.00</td>
<td>20.00</td>
<td>37.00</td>
<td>71.69</td>
<td>125.56</td>
</tr>
<tr>
<td>Cards with a credit function</td>
<td>26.06</td>
<td>36.29</td>
<td>46.53</td>
<td>56.36</td>
<td>65.65</td>
</tr>
<tr>
<td>Cards with a cheque guarantee function</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Retailer cards</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>300</td>
</tr>
</tbody>
</table>

### Table 8
**Transfer instructions handled by securities settlement systems: volume of transactions**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>46,000</td>
<td>156,000</td>
<td>652,000</td>
</tr>
</tbody>
</table>

### Table 9
**Transfer instructions handled by securities settlement systems: value of transactions**
(in billions of Rupees)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>0.04</td>
<td>0.18</td>
<td>0.69</td>
</tr>
</tbody>
</table>
Table 10
Indicators of use of various cashless payment instruments
volume of transactions
(in millions)

<table>
<thead>
<tr>
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<th></th>
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<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Cheques issued</td>
<td>4.32</td>
<td>4.94</td>
<td>5.76</td>
<td>12.01</td>
<td>12.9</td>
</tr>
<tr>
<td>Payments by debit and credit cards</td>
<td>0.38</td>
<td>0.49</td>
<td>0.76</td>
<td>1.06</td>
<td>1.37</td>
</tr>
<tr>
<td>Paper-based credit transfers</td>
<td>0.42</td>
<td>0.45</td>
<td>0.51</td>
<td>0.57</td>
<td>0.64</td>
</tr>
<tr>
<td>Paperless credit transfers</td>
<td>0.55</td>
<td>0.59</td>
<td>0.67</td>
<td>0.79</td>
<td>1.61</td>
</tr>
<tr>
<td>customer initiated</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>interbank/large-value</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>direct credits</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Direct debits</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.34</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 11
Indicators of use of various cashless payment instruments
value of transactions
(in billions of Rupees)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheques issued</td>
<td>191.53</td>
<td>201.35</td>
<td>229.68</td>
<td>250.78</td>
<td>275.15</td>
</tr>
<tr>
<td>Payments by debit and credit cards</td>
<td>0.32</td>
<td>0.47</td>
<td>0.64</td>
<td>0.68</td>
<td>1.19</td>
</tr>
<tr>
<td>Paper-based credit transfers</td>
<td>1.5</td>
<td>1.64</td>
<td>2.08</td>
<td>1.98</td>
<td>2.51</td>
</tr>
<tr>
<td>Paperless credit transfers</td>
<td>1.95</td>
<td>2.25</td>
<td>2.63</td>
<td>3.42</td>
<td>7.96</td>
</tr>
<tr>
<td>customer initiated</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>interbank/large-value</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>direct credits</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Direct debits</td>
<td>-</td>
<td>0</td>
<td>0.01</td>
<td>0.04</td>
<td>0.25</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tr>
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</table>
### Table 12

**Participation in S.W.I.F.T. by domestic institutions**

<table>
<thead>
<tr>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Members</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>of which: live</strong></td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Members</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>of which: live</strong></td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td><strong>Participants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>of which: live</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total users</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>of which: live</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 13

**S.W.I.F.T. message flows to/from domestic users**

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total messages sent</strong></td>
<td></td>
<td>175.094</td>
<td>197.053</td>
<td>185.032</td>
<td>196.221</td>
</tr>
<tr>
<td><strong>of which:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>category I</strong></td>
<td>-</td>
<td>9.902</td>
<td>60.581</td>
<td>77.007</td>
<td>105.528</td>
</tr>
<tr>
<td><strong>category II</strong></td>
<td>-</td>
<td>5.175</td>
<td>38.801</td>
<td>44.997</td>
<td>53.804</td>
</tr>
<tr>
<td><strong>Total messages received</strong></td>
<td></td>
<td>154.634</td>
<td>174.091</td>
<td>163.280</td>
<td>182.228</td>
</tr>
<tr>
<td><strong>of which:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>category I</strong></td>
<td>-</td>
<td>7.289</td>
<td>64.062</td>
<td>77.147</td>
<td>94.888</td>
</tr>
<tr>
<td><strong>category II</strong></td>
<td>-</td>
<td>3.453</td>
<td>7.697</td>
<td>9.331</td>
<td>12.236</td>
</tr>
</tbody>
</table>