BANK FOR INTERNATIONAL SETTLEMENTS

PAYMENT SYSTEMS IN THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY

Prepared by:

Committee of Central Bank Governors of the Southern African Development Community

and

Committee on Payment and Settlement Systems of the central banks of the Group of Ten countries

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Foreword

The Committee on Payment and Settlement Systems (CPSS) of the central banks of the Group of Ten countries periodically publishes - under the aegis of the Bank for International Settlements - reference works on payment systems in various countries, the so-called Red Books. In December 1993 it produced the fourth version of the Red Book covering all the G-10 countries and subsequently it has also published volumes for other, non-G10 countries - most recently for Korea, the Czech Republic and Lebanon. Red Books for a number of further countries are in the course of being produced. Volumes that are similar to the Red Book format have also been issued by the European Monetary Institute (for the European Union countries) and by the Executives' Meeting of East Asia and Pacific Central Banks and Monetary Authorities (for the EMEAP member countries).

The present volume - "the Green Book", covering the countries of the Southern African Development Community (SADC) - is a further, important step towards increasing our understanding of the way that payment systems work in different countries. The Green Book has been produced by the SADC Payment System Project Team under the auspices of the SADC Committee of Central Bank Governors. As noted in the introduction which follows, the format has been changed slightly from that of the other Red Books in order to reflect the circumstances of the SADC countries.

Recognising the need for an efficient and secure financial infrastructure, the SADC countries have set themselves the ambitious task of modernising their existing payment and settlement systems, and to speed progress they have chosen to adopt a cooperative, regional approach. A prerequisite for successful cooperation is to understand the existing infrastructure in place in each country and, recognising this priority, this edition of the Green Book has been produced with commendable speed. The practical value of early publication was felt to justify the fact that it has not been possible in this version to include all the usual Red Book data or to edit all the country chapters to be consistent with normal Red Book standards.

We hope this volume will not only be of use to the SADC countries themselves in their important work, but also contribute more generally to global awareness of payment and settlement arrangements in the SADC countries.

Wendelin Hartmann,
Chairman, G-10 Committee on Payment and Settlement Systems, and Member of the Directorate of the Deutsche Bundesbank

Chris L. Stals,
Chairman, SADC Committee of Central Bank Governors, and Governor, South African Reserve Bank

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The SADC Payment System Project

An introduction by the Chairman of the Committee of Central Bank Governors of the Southern African Development Community

In August 1992, a revised Treaty for the Southern African Development Community (SADC) was approved by a Summit Meeting of the Heads of State of the participating countries. Included in the main objectives of the Community are the following economic goals:

– to achieve development and economic growth, alleviate poverty, enhance the standard and quality of life of the peoples of Southern Africa, and support the socially disadvantaged through regional integration;

– to promote and maximise productive employment and utilisation of resources of the region; and

– to achieve sustainable utilisation of natural resources and effective protection of the environment.

When South Africa was given the special task of administering the Finance and Investment Protocol for SADC, the South African Reserve Bank saw in this arrangement an opportunity for closer cooperation amongst the central banks of the region and the SADC Committee of Central Bank Governors was subsequently established. In drafting its mission statement, the Committee designed a model for financial cooperation that was described as a “bottom-up” approach.

The broad strategy of the SADC Committee of Central Bank Governors is based on the premise that a sound financial basis must first be laid within each of the participating countries before it can be extended to the region as a whole. At this stage, the main objective is therefore to learn from each other and to help each other to create appropriate structures for the central bank, the private banking sector and the financial markets in each of the members of SADC. The domestic financial sector reforms introduced in each country must, however, even at this early stage, take cognisance of the development needs of the region, and the longer-term objective of a more coordinated and integrated regional financial sector. This is regarded as the main contribution the central banks should make to the expansion of trade and investment, and to improve living conditions for the approximately 136 million people of the region.

The SADC Committee of Central Bank Governors is determined to gradually implement its plan for greater financial cooperation over the next few years in the whole region. The Committee has already embarked on the implementation stage and is now actively involved in a number of ground-work projects such as the SADC Payment System Project.

The objective of this project is to assist individual countries in SADC in defining a payment system strategy and development plan for their country. In the development of a domestic payment system, SADC countries can learn much from each other, which is what the project team aims to facilitate. Ultimately, however, it remains the responsibility of each individual SADC country to define a strategic framework to suit its particular domestic needs. At this stage, the focus is largely on the domestic payment system within each SADC country, since a sound and robust domestic system is considered to be a prerequisite for the definition of a cross-border payment strategy and a stepping stone towards regional payment systems.

This is the first edition of the reference work on payment systems in the Southern African Development Community, prepared by SADC Payment System Project Team members from the

SADC member countries. This volume, referred to as the SADC Green Book, is published under the aegis of the Bank for International Settlements.

Publication of this edition of the Green Book signifies the conclusion of the first phase of the project which included sensitisation, information gathering, stock-taking and situational analysis activities. The second phase of the project will focus on SADC's future payment systems. The plan is that this phase should include a shared vision and a documented strategic framework, which have been communicated to all stakeholders and which are widely accepted and authorised within each country, for development and deployment during subsequent phases. The goal for every SADC country is to have a documented and authorised strategic framework for its domestic payment system before the year 2000.

In this way the central bank Governors are working together in a joint effort to lay the foundation for the development of compatible and inter-linkable national payment, clearing and settlement systems for financial transactions.

Chris L. Stals
Chairman, SADC Committee of Central Bank Governors and
Governor, South African Reserve Bank

About the Green Book

The SADC Green Book is based on the Red Books published by the Bank for International Settlements. Minor changes to the usual Red Book format have been made to reflect issues that are unique to the SADC situation, the main addition being section seven of each country chapter which reflects the important influence of the infrastructural environment on the development of payment services in the SADC region.

This edition of the Green Book describes the situation in the SADC countries at the end of 1997, except in the case of Mauritius and South Africa where more recent information has been added. Given the level of economic development in the region as a whole, some information was missing or unavailable at the time of publishing. However, the intention is that this information will be incorporated in subsequent editions of the Green Book. Since the preparation of this edition, the Democratic Republic of the Congo and the Seychelles have joined SADC; information about payment systems in those countries will also be included in future editions.

Given the complexity of the arrangements and issues involved and the differences in the legal, regulatory and institutional environment it is natural that payment systems should differ from country to country. At the same time they share many similarities. The country chapters that follow provide a descriptive analysis of the various operational, financial and legal aspects of each country’s payment systems. To facilitate comparison between payment systems in different countries, the descriptions are based on a common framework.

The first section of each country chapter gives an overview of the general institutional aspects of the payment systems in the respective country. These include the relevant legislation and regulations in force, the types of financial intermediary that provide payment services and the role of the central bank and other public sector bodies.

The second section looks at the payment instruments used by non-banks and reviews recent developments in the retail payments area. The third section deals with interbank exchange and settlement circuits. It provides detailed information on the structure, operation and administration of major large-value interbank systems. Particular attention is paid to the risk in the interbank settlement systems and its management.

Reflecting the increased interest on the part of central banks in the operation of so-called exchange-for-value settlement systems, the fourth section discusses the special use of interbank transfer systems for the settlement of international transactions and for the settlement of domestic securities transactions. Section five describes the role of the central bank in interbank settlement systems, in particular in providing settlement facilities for the banking system. The relationship between payment systems and the operation of monetary policy is also considered.

Section six looks at the payment system developments in the country. All the major projects and policies in the modernisation of payment systems are discussed. The final section, section seven, gives an overview of technological and infrastructural environment within which payment systems operate in the country. This section was included to give the reader insight and context in order to understand the payment system in the respective country.

Most country chapters include a set of statistical tables. It should be borne in mind, however, that although considerate effort has been made in putting together the statistical data, it is not in all instances complete or uniform and in some cases estimates had to be made.

This edition of the SADC Green Book focuses only on the domestic payment systems in each country. Cross-border payment system arrangements are not addressed, save for section four which discusses how international transactions are effected.

THE PAYMENT SYSTEM IN ANGOLA

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OVERVIEW OF THE NATIONAL PAYMENT SYSTEM IN ANGOLA

The Angolan payments system is still in its embryonic stage, and the same can be said of the Angolan financial system. The first initiative towards organising a two-tier banking system in Angola was initiated in 1991 with the approval of decrees that enabled the opening of that sector to private initiative. Until that date, only two state-owned banks were in operation in the country, namely Banco Nacional de Angola (BNA) and Banco de Poupança e Crédito (BPC).

With the advent of peace, it was hoped that the Angolan economy and the banking system would experience a faster growth rate. This did not come about. However, from 1997 it appears that the growth of economic activities and the banking system is being readdressed. Initiatives aimed at expanding the banking service to areas in the countryside which are far away from the capital city have been taken.

In view of the precarious state of the communications infrastructure in the country, the central bank, the Ministry of Finance of Angola, the banking system and the state-owned telecommunication company decided to implement a communication network designed for the Angolan financial system, employing on an independent communication system, by satellite (VSATs), and by the X25 Protocol.

As a follow-up to this communication network and based on the prerequisite that a well-structured payment system enables better use of the available money supply in the economy, equitable sharing of risks and exchange of business transactions, as well as a full discharge of industrial and commercial activities, and provision of services in the country, the central bank established a Task Force (TF) in September 1996, with a view to designing an Angolan payments system and defining a strategy for its implementation.

The above-mentioned Task Force is made up of representatives from the various administrative segments and from all financial institutions operating in the country and the Ministry of Finance. As from September 1997, the TF has been functioning with technical advisors under the Financial Institutions Modernisation Programme (FINSEC), sponsored by the World Bank.

1. INSTITUTIONAL ASPECTS

1.1 General legal aspects

With the enactment of Decree 4/91 of 20th April, the duty of the Angolan National Bank (BNA), which under the same decree is the country's central bank, is to organise and supervise the banks' clearing houses and to approve the regulation for the Value Clearing Service (CSV). In terms of the central bank Corporate Guidebook, the Issuing and Credit Directorate is charged with the daily settlement, after clearing, of cheques, bills, promissory notes and other values presented by credit institutions.

The Statutory Instrument that regulates the use of cheques in Angola is the Uniform Law on Cheques of the Geneva Convention. Punishment for issuing cheques without funds is provided for in Articles 23 and 24 of Decree 13.004 of 12th January 1927.

There are also other relevant legal instruments which support the development of a consistent policy, namely:

- decree 6/97 of 11th June 1997, the new corporate law for BNA, which has redefined the functions of BNA as the country's central bank, and amongst other matters, regulated its relationship with the financial institutions, granting them its role of lender of the last resort of this system, and reserving itself the duty to organise and supervise the bank's Clearing House; and

– decree 5/97 of 27th June 1997, Foreign Exchange Act, which has disciplined forex operations and trade, including the transactions that are carried out.

Under the Angolan payment system, the Value Clearing System (CSV) is one of its component parts, originally regulated by Statutory Instrument 46/91 of 24th May. Currently, this service is operating under a regulation approved on 8th September 1994, incorporating amendments introduced by Statutory Instrument 81/96 of 21st November.

1.2 Roles of financial intermediaries that provide payment services

The Angolan financial system comprises the following:

– the Angolan central bank (BNA);

– six banking institutions, of which five are commercial banks and one is an investment bank; and

– one credit bank, included under special credit institutions.

Services offered to their customers by the existing seven institutions do not differ much from each other. The same can be said of the non-cash payments instruments offered to customers, which are minimal.

The main activity of banking institutions and the credit bank is to attract deposits, and the main operation is the sale of foreign currency.

Resident customers are entitled to foreign currency and individual entities are entitled to forex. Non-residents who are eligible, and some worker categories are allowed to open and access foreign exchange accounts in the financial institutions based in the Angolan territory.

The availability of credit by private institutions is scarce due to a lack of reliable facilities to carry out these operations. A major inhibiting factor to the provision of credit is the activity of public notaries which is not yet fully restored in the country.

All banking institutions can participate in the Value Clearing Service through which cheques and other documents transfer payments.

A total of 20 bureaux de change are non-financial institutions also authorised and supervised by the central bank. The objective of the exchange houses is to sell foreign currency to individuals and to companies in accordance with central bank regulations.

1.3 Roles of the central bank

The central bank's main objective is to ensure that the national currency value is sustained, and it has the sole right to issue bank notes and metal coins. The central bank also determines the conditions of issue and executes currency distribution, substitution and withdrawal. Additionally, it has authority to:

– act as the sole banker to the state;

– advise the government in monetary, financial and foreign exchange matters;

– cooperate in the definition and execution of foreign exchange policy;

– manage the country's external reserves;

– act as intermediary in the government's international monetary relations;

– strive for the stability of the national financial system ensuring, to that end, that it plays the role of lender of last resort;

- grant and ensure an information collection and processing system for monetary, financial, foreign exchange statistics and other information in areas of its activity so as to act as an efficient coordinating, management and control mechanism;
- prepare and maintain the updated external debt record of the country and carry out debt management;
- prepare the balance of payments;
- supervise the financial institutions, control their solvency and liquidity, and maintain their deposit accounts under the terms and conditions that the Board of Directors may decide; and
- organise and supervise the banks clearing houses.

With a view to achieve better performance of all these functions, the central bank has often promoted actions aimed at improving internal procedures and upgrading their officials, benefiting from the experience of other countries and training projects.

1.4 Roles of other private sector and public sector bodies

With the exception of the central bank and banks, other institutions of the private and public sectors and the credit bank participate in the payment system as users of the services provided by the financial system, excluding any obligation or participation as providers in the payments system.

Payments by the National Treasury are made by means of vouchers for clearance. The National Treasury holds deposit accounts at the central bank and this account is accessed daily for the amounts paid by the Treasury.

2. SUMMARY INFORMATION ON PAYMENT MEDIA USED BY NON-BANKS

2.1 Cash payments

The national currency is the *Kwanza reajustado (Kzr)*. There are no coins in circulation, only bank notes. The bank notes in circulation are: Kzr 5,000,000.00, Kzr 1,000,000.00, Kzr 500,000.00, Kzr 100,000.00, Kzr 50,000.00 and, in very small amounts, Kzr 10,000.00 and Kzr 5,000.00.

According to data from June 1997, the notes and coins in circulation and notes and coins in possession of the public represented respectively 38.9% and 31.1% of the M1, and 29.7% and 23.6% of the M2.[1] In the aggregate M2, the money outside the banking circuit, which in 1990 represented only 7.6% of the money supply in its broad sense, increased and in 1993, 1995 and 1996 represented 32.15%, 22.7% and 22.4% respectively. This trend of high monetary circulation witnessed in the last few years continued throughout 1997 which shows the need to use monetary policy instruments which would attract savings in order to finance economic activity.[2]

Currency is the most used payment media in commercial transactions by retailers and for low-value payments and in rural areas.

A minority of the population use banking services, with salaries being paid directly to workers in cash and kind.

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[1] Banco Nacional de Angola. Panorama Monetário Global. Luanda:1997.

[2] Banco Nacional de Angola. Boletim Estatistico-economi-n.1. Luanda:1997.

The provision of services for the payment of wages to the various bodies of the civil service in Luanda, the capital of Angola, which formerly was provided by the central bank, has since November 1997 been carried out by commercial banks. This measure is likely to increase the number of customers for the banks and obviously crediting accounts will, in the near future, be the procedure for the payment of wages to this type of worker.

2.2 Non-cash payments

2.2.1 Cheques

Commercial banks, the investment bank and the credit bank customers are allowed to access their bank accounts by using cheques. In order to reduce restrictions related to the acceptance of this payment instrument, certification of cheques was implemented. The majority of cheques in circulation in the economy are certified.

Only payments of significant value are made by means of cheques. All items passing through the CSV are higher than the equivalent of USD 200, out of which about 85% are of values higher than USD 500.

Among the non-cash payment instruments, the cheque is the most used instrument, representing about 75% of the number of items cleared daily and about 55% of the total value cleared.

2.2.2 Credit transfer orders

The credit transfer order is another payment instrument available to customers of the banks, and is a document that certifies receipt. There is also a similar document, standardised by the Ministry of Finance of Angola, exclusively issued by the Treasury, whose denomination and operation of transfer are similar to those of the transfer order available to the public. This explains why an instrument that is used in smaller quantities, about 10% of items that are cleared daily, has an average value, by order issued, equivalent to USD 70,000, which is far higher than the cheque whose average value, per issued cheque, is equivalent to USD 15,000.

2.2.3 Standing/stop order drafts

The draft is a credit transfer instrument, a document that represents receipt and standardised by the Angolan Ministry of Finance, is used exclusively for Treasury payments, making its issuance an exclusive right of the Treasury. The drafts represent about 15% of the number of items cleared daily and 15% of the total value cleared. The average value of an issued draft is equivalent to USD 20,000.

2.2.4 Other documents to be cleared

Deposit slips, debit/credit payment orders and debit transfer orders for low-value quantities and amounts pass through the CSV.

2.2.5 Other transfer documents

Direct debits. Financial institutions provide direct debits to accounts, but this product is not used extensively by their customers.

Card-based payments. Payments by means of cards are used basically in supermarkets and petrol stations.

Supermarkets accept two types of cards:

- cards for which payments to supermarkets are made directly by the companies, which in turn inform holders and supermarkets of limits loaded onto the cards; and
- cards issued by only one financial institution on which value paid by the holder is stored, in accordance with the funds available in their respective deposit accounts.

Cards accepted at petrol stations are available provided that payment of a fee for the amount to be loaded is previously made to Sonangol, the fuel utility.

Credit cards. Very few businesses, mostly hotels and restaurants, accept payments by means of credit cards. Banking institutions do not issue credit cards to customers, for use either locally or internationally.

Travellers' cheques. Travellers' cheques in foreign currency are sold by financial institutions and bureaux de change in accordance with regulations and limits that are fixed by the central bank. Customers contact the institutions which are authorised to sell and purchase foreign currency in order to acquire travellers' cheques. However, in view of the difference in the exchange rates between the official and the non-official (parallel) markets, their use by residents and foreigners differs. Foreigners and residents of Angola and Angolan citizens exchange foreign currency bank notes in the parallel market.

ATM and POS networks. There is no provision for financial transfer services by means of ATM and POS in Angola. The banking institutions intend to offer the abovementioned services as soon as the communication system for the financial system is implemented.

3. INTERBANK EXCHANGE AND SETTLEMENT CIRCUITS

3.1 General overview

As stated in the information in the introductory section, the Angolan Payments System is undergoing transformation. The basic ideas on the changes being implemented in the Value Clearing Service are presented in greater detail.

3.2 Structure, operation and administration

The operation of CSV, which is the only subsystem of the Angolan payment system in operation, is presented in this section.

The Value Clearing Service is regulated by a regulation approved in 8th September 1994, with amendments introduced by Statutory Instrument 8/96 of 21st November and executed by the central bank, which bears all the costs of this system.

Eligibility for membership of the system is extended to banking institutions that keep Reserve Accounts at the central bank. These institutions are entitled to direct participation in CSV, although indirect participation by proxy is permitted, with all obligations being borne by the delegated party, including settlement of the delegating bank's position at the clearing house.

Cheques, drafts and payment orders, transfer orders and deposit vouchers are cleared through the CSV.

The clearing sessions, covering exchange and return of vouchers, are carried out once a day in the morning at the clearing houses in the various places, all of them installed at central bank branches.

The process of exchange and return of vouchers is undergoing computerisation. Implementation is in the initial stage. This process makes the closing of the positions of the participants faster, and it also enables the acquisition of data for the formulation of statistics on clearing. In this system, the closing of participants’ positions are made automatically with the data processed. Participants submit a copy of the list of presented/returned documents to all other participants.

The central bank processes the received data by means of a specific application which shows the net credit/debit position of each participant. This position is recorded in a specific voucher which is then sent to BNA’s section in charge of the management of the participants’ Reserve Accounts to be posted to the participants’ accounts. There is a physical exchange of all documents, from participant to participant.

Settlement of credit/debit position of the banks is performed on a daily basis, after the clearing session, by effecting the appropriate entries, either debit or credit, to the Reserve Accounts of the respective participants at the central bank.

In the case of insufficient funds in the participating institution’s account, the existing CSV Regulation provides for the annulment of the session that has been held, and the staging of a new session from which the defaulting institution is banned, both for payments and for receipts.

Additionally, the same regulation provides for the suspension and exclusion from the clearing service as a sanction against participants who do not comply with the security and liquidity requirements for maintaining the good quality of the clearing exercise. These sanctions are justified by the recurrent violation of the regulation.

The Value Clearing Service has installed clearing houses in:

– Luanda, where all financial institutions own branches and where documents received and circulated in bank branches in Luanda, Caxito, Cacuaco and Viana, are cleared as if they were received and circulated within one single banking area;

– Benguela, where five financial institutions own branches and where documents received and circulated in bank branches in Benguela, Lobito, Baía Farta and Catumbela are cleared as if they are received and circulated within one single banking area;

– Cabinda, where three financial institutions own branches, and where documents received and circulated in bank branches in Cabinda are cleared; and

– Lubango, where four financial institutions own branches, and where documents received and circulated in bank branches in Lubango and Namibe, are cleared as if they are received and circulated within one single banking area.

Regulation will make it compulsory that all documents presented at branches of financial institutions across the country for clearing be settled through the CSV (Value Clearing Service), with the following maximum periods for clearing and settlement of vouchers:

– in those areas where there is a clearing house and the drawee and drawer institutions are located in the same banking area as the clearing house, a period of three business days is allowed for presentation, starting from the business day after receipt of the voucher at the bank branch, and a further three business days for returns, starting from the first business day after presentation of the document to the clearing house;

– in those areas with a clearing house and where the drawee and the drawer institutions are located in different banking areas but in the same province as the clearing house, the allowed periods are four business days, both for the presentation and for returns; and

– in areas where there is no clearing house, the allowed periods cover 15 business days for presentation and from the end of this period an additional fifteen business days for returns.

The CSV's operation, including clearing periods, is undergoing reassessment because it is difficult to comply with the existing rules, due to absence of shared transportation system for vouchers for clearance and previously defined routes.

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

4.1 Exchange and settlement systems for international transactions

The selling of foreign currency to financial institutions by the central bank is carried out at fixing sessions. It is necessary that payment of the "counter value" in the national currency is debited to a bank's reserve account at the central bank and a correspondent bank is instructed to make payment of the foreign currency to an overseas bank within a period specified by the central bank.

International transfers are made through correspondent banks using instructions transmitted by telex.

The main currencies traded are: US dollar, German Mark, Swedish krona, Netherlands guilder, pound sterling, Belgian franc, French franc, Swiss franc, yen, escudos and pesetas.

4.2 Exchange and settlement systems for securities transactions

The existing securities market is for the securities of the National Treasury. However, this market has been inactive for more than a year because the National Treasury liquidated its issued securities and it is not now financing itself by means of these instruments.

5. THE ROLE OF THE CENTRAL BANK IN INTERBANK SYSTEMS

5.1 General responsibilities

The central bank, as provided for by law, is the exchange authority in Angola and is empowered to organise and supervise the bankers' clearing houses.

Thus, the central bank manages and carries out sales of foreign currency to commercial banks, regulates and operates the Value Clearing Service. As a result the central bank posts the debits corresponding to the counter value of the foreign currencies in the local currency sold to commercial banks to their respective reserve accounts as well as credits or debits from the daily closing position of the clearing.

5.2 Provision of settlement and credit facilities

The central bank provides financial institutions with rediscount facilities (treasury credit) to utilise the liquidity of short term assets to meet the cash needs of institutions. The central bank also provides guaranteed loans (against collateral) to correct short term liquidity imbalances.

Thus, problems of liquidity of financial institutions can be reduced by using these facilities, which are regulated by Statutory Instrument 03/97 of 28th June 1997.

5.3 Monetary policy and payment systems

The main objective of monetary policy is to preserve the value of national currency, and this is executed by means of conventional instruments such as:

- maintenance by commercial banks of compulsory primary reserves at the central bank;
- interests rates exercised in rediscount operations;
- fixing of credit limits for financial institutions; and
- fixing of maximum interest rates to be used by financial institutions in operations with their customers.

Another conventional procedure in the execution of the monetary policy, the selling of public securities, has not been used by the central bank for more than a year owing to the fact that the National Treasury has redeemed issued treasury bills and it is not financing itself by the issue of treasury bills.

In respect of the development of the Angolan payment system one of the major concerns is that the system should provide the central bank with accurate and timely information on the flow and settlement of transfers and on the reduction of the float, so as to give the central bank a real understanding of the liquidity situation of the banks to enable it to execute monetary policy in a more effective and secure manner.

Execution of monetary policy has typical implications on the payment system. When measures aimed at restricting credit are implemented it is obvious that the volume of cheques returned because of insufficient funds, and the associated documentation for clearance, increases. There is an increase of vouchers in the clearing system particularly when the periods for clearance of these vouchers are long. In such cases, people tend to manage their payments by using the float as much as possible for their own benefit. However, since there is no coordination between the performance of the CSV and the implementation of monetary policy measures there are no grounds on which to either confirm or deny the occurrence of these practices.

5.4 Risk-reducing measures

With regard to reducing credit risk, three initiatives are under way: the establishment of a credit risk centre, the establishment of a centre for complaints regarding bills and promissory notes, and the establishment of a register which includes information on issuers of cheques without sufficient funds.

6. RECENT DEVELOPMENTS IN THE PAYMENT SYSTEM

6.1 General overview

The task force established to design the Angolan payments systems has decided, initially, to reorganise the Value Clearing Service (CSV) before submitting a proposal for the Angolan payments system. This course of action was based on the following:

- all non-cash payment instruments available in Angola are paper instruments, and their settlement requires more security and speed;
- the substitution of these instruments with electronic transfers, particularly in bank branches situated in the provinces, may take some time before the communication system being implemented stabilises; and

- it is assumed that a reorganised CSV will be a motivating factor for participants in the CSV to become involved in the discussions on the design of the Angolan payment system, particularly where an efficient communication system for the banking system is already envisaged.

6.2 Description of the new system

6.2.1 Operation of the Value Clearing Service

The major ongoing actions for the improvement of the Value Clearing Service, which will initially only affect the clearing house in Luanda, are as follows:

- the implementation of phase II of the computerised system of the CSV, which involves exchange of information on the documents to be cleared between participants by means of diskettes. This will enable the time spent on clearing documents to be reduced by retaining only the physical exchange of vouchers. The information on vouchers for clearance contained on diskettes will also reduce the time required for processing vouchers during clearance because the drawee bank can use this information to access the respective accounts of its customers;
- the setting of a period of two business days for clearing in Luanda, starting from the business day after receipt of documents at bank counters and making it compulsory for banks to communicate this measure to their customers. The measure implements the actual period foreseen for the clearing of vouchers circulated in Luanda;
- the physical presenting of vouchers, in sealed envelopes, at the exchange/return sessions will be compulsory;
- prohibiting participants from opening the sealed envelopes in the clearing house;
- establishing rules for corrections resulting from exchange of misaddressed documents (copying and calculation errors, non-delivery of related document, etc.) by the use of the Differentials Regularisation Document (DR), which is a standardised procedure for handling and confirming these corrections at subsequent clearing sessions.

The interconnection of clearing between bank branches with shared air transportation of documents is one of the measures being implemented in the Value Clearing Service. This system will enable varying clearing periods of four to twelve business days, according to the banking areas involved, including the Luanda banking area (covering Caxito, Cacuaco and Viana), and the Benguela banking area (covering Lobito, Baía Farta and Catumbela), Cabinda, Lubango, Huambo, Uíge, Malange, Soyo, Namibe and Tombua. Ten banking areas (Buco Zau, Chitato, Porto Amboim, Sumbe, Gabela, Saurimo, Luena, Menongue and Ondjiva) will not be covered by the CSV, although they can be added to the interconnected system in the near future.

6.2.2 Prospects for the Angolan payment system

The financial institutions’ communication system is in its final implementation stage and the system is expected to be up-to-date, reliable, fast and secure. Two fundamental rules for the Angolan payment system are envisaged:

- the first rule states that all interbank electronic transfers, directly between institutions or through appropriate electronic systems, should have the positions at the financial closing of each banking institution settled, by electronic control, in the reserve accounts at the central bank;

– The second rule states that it is compulsory for any system that performs financial electronic transfers to be available to all banking institutions and not limited in its scope to one institution.

7. INFRASTRUCTURE

7.1 Telecommunications infrastructure

The telecommunications infrastructure is very precarious in urban areas, and almost non-existent in rural areas.

In order to ensure the feasibility of the communication system for use by the banking system, the central bank and the Ministry of Finance a communications network for the financial system in Angola is being implemented. It relies on a private communication system and is to be implemented in two phases.

The first phase will comprise the interconnection, by satellite communication, of the central bank with regional branches and of the headquarters of the financial institutions based in Luanda with their branches in the provinces. The status of the work related to the implementation of this phase is as follows:

– the central bank and three commercial banks have decided to acquire VSAT terminals from SRC (Services, Networks and Communications), using HUB station services which are installed in South Africa and which enable the transmission of data, voice and image.

– the remaining banks have decided to acquire terminals from Portugal Telecom (Marconi), using the services of the same HUB station in South Africa:

– aerials have already been installed at the central bank, both in Luanda and in Benguela, and it is expected that by the end of 1997 this will have been extended to Cabinda and Lubango. Four commercial banks have already started installing their own terminals;

– configuration of the infrastructure for communication at the branches of the central bank, started in November 1997, and the alignment and the configuration of the VSAT terminal for one of the commercial banks in Luanda;

– according to conservative estimates, the communication system for this first phase will have been implemented in the central bank by the end of the first quarter of 1998.

In the second phase, the central bank in Luanda is expected to be interconnected with the headquarters of the commercial banks and the latter to their respective branches in Luanda. The communication system will have the infrastructure of Protocol X.25, managed by the Angola Telecom as national operator.

Under this Protocol, communications will be processed by means of public telephone lines and access will be strictly for users of Protocol X.25. The status of the work involved is as follows:

– the lines installed at the central bank and in one of the commercial banks are being configured, the lines that were installed at the Ministry of Finance have already been configured;

– it is expected that by the end of the first quarter of 1998, the second phase of the communication system will have been implemented in the central bank.

According to evaluations carried out, the costs of communication by means of this type of system are far lower than the costs of communication by means of leased telephone lines.

It is hoped that, within the short term, the Angolan payment system will be made up of a Value Clearing System, which must be effective and fast, covering most banking areas which are economically viable for the country, with a short term system of fast and effective system for electronic financial transfers.

7.2 Availability of electricity

The availability of electricity in urban areas is precarious, whereas it is almost non-existent in rural areas.

7.3 Road infrastructure

The road infrastructure is precarious. It is expected that recovery of this sector will take place within a shorter time than that of the telecommunication and electricity sectors. As a result of an inadequate road network, air transport was the only option left for the transport of instruments for the clearing of payments.

In order to have an efficient payment system, it is required that an adequate telecommunications infrastructure, road network and electricity network be available. However, since the ideal facilities in the sectors referred to are not available, there must be more inventiveness in designing and implementing an efficient payment system in spite of the prevailing conditions. This is another challenge for the task force that is addressing the Angolan payments system.

Table 1

Basic statistical data

	1992	1993	1994	1995	1996
Population (millions)	10.60	10.90	11.20	11.60	11.80
GDP (billions of Kwanza) .	778.00	2,741.00	30,647.00	736,491.00	15,723,136.00
GDP per capita (Kwanza) ..	73,396.23	251,467.89	2,736,339.29	63,490,603.45	1,332,469,152.54
Exchange rate (vis-à-vis USD)					
Year end	550.00	6,500.00	513,627.00	5,749.00	203,009.00

Source: Statistical - Economic Bulletin.

THE PAYMENT SYSTEM IN BOTSWANA

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OVERVIEW OF THE NATIONAL PAYMENT SYSTEM IN BOTSWANA

Most of the population is served by cash as part of the formal payment system. A small percentage of the population, mainly on farms and cattle posts and in the informal sector, is served by non-cash payment services such as cheques. Cash (notes and coin) is the most widely used instrument of payment for most goods and services.

The payment system in the rural areas is mainly characterised by the use of notes and coin. Rudiments of the bartering system are still evident in the most remote of the rural areas. There is also still noticeable “in kind” modes of payments, in the form of agricultural produce and the like. In general terms, the commercial banks branch network is virtually non-existent in most of the rural areas, much less the most remote ones, as determined by the cost effectiveness of such a presence. That notwithstanding, in some cases the network outlets of some of the banks offer banking services to a reasonable size of the population.

In rural areas cheque payments are sometimes made, but people still have to travel to urban areas or major villages in order to encash their cheques. In some cases, shopkeepers or local business people may encash cheques for customers, but the fee paid for this service is usually higher than that in the formal banking sector.

In the urban areas, including most cities, towns and some major villages, the payment system is more sophisticated in that the use of cash, cheques, ATMs and the electronic payment system at point of sale, are prevalent. Indeed, more than half of the country’s population lives on the eastern flank, a well banked strip, stretching from Francistown in the north to Lobatse in the south.

1. INSTITUTIONAL ASPECTS

1.1 General legal aspects

The Roman Dutch Law is the common law in Botswana. In 1885, Botswana, then Bechuanaland, sought the protection of the British government. At the time, the Cape Colony was under British rule, with the latter’s High Commissioner resident at the Cape of Good Hope. In granting Bechuanaland protection, Britain decided, by an Order-in-Council in 1885, that the territory would be governed by the High Commissioner from the Cape. A proclamation passed by the British High Commissioner in the Cape of Good Hope, decreed that for administrative convenience, the civil law applicable in the Cape Colony would be applied to the Bechuanaland Protectorate. From that point, Botswana has always followed the civil law applicable in South Africa. The common law that was applicable at the Cape Colony then, was, and still is, the Roman Dutch law. Hence, the civil law (which includes commercial law) in Botswana is the Roman Dutch law. It should be recognised that the Roman Dutch law applicable in South Africa has undergone extensive change due to the influence of English common law. Therefore, commercial law in Botswana is reliant on South African law. In this regard, where there is conflict between the South African law and the English law, the courts in Botswana have tended to rely on the South African authorities as opposed to the English authorities. Recourse is made to English law where South African law is silent on an issue.

1.2 Financial intermediaries that provide payment services

The Botswana financial system includes a number of different types of intermediaries or institutions, such as commercial banks, other deposit-taking institutions, insurance companies, investment dealers, development finance institutions, and so forth as listed in Appendix 1. Non-deposit-taking financial institutions are, however, users of the payment services that are provided by deposit-taking institutions, rather than providers of payment services themselves. Accordingly, it is deposit-taking institutions (i.e. those financial institutions that typically accept deposits transferable by order to a third party) that are the most important financial institutions in the context of the payments system in Botswana.

Deposit-taking institutions in Botswana comprise commercial banks, cooperative credit institutions, a building society and governmental savings institutions. Each type of deposit-taking institution is described separately below.

1.2.1 Commercial banks

Commercial banks accept demand and time deposits, make commercial bank loans, and provide other banking services, including payment services, to the public. Assets of commercial banks as at 31st December 1996, amounted to approximately Pula 4,586.5 million. At the end of 30th September 1997, there were four commercial banks in Botswana. Between them, the four banks had 51 branches and 28 sub-branches, agencies and encashment points. Other contact points of banks included 76 ATMs and 782 point of sale/speed points, installed in cities, towns and some major villages. The banks also have plans to install at least 16 more ATMs in the very near future. (See Appendix 2.)

Commercial banks are licenced under the Banking Act: 1995 and are supervised and regulated by the Bank of Botswana. The banks are subject to reserve requirements, established by the Bank of Botswana. The banks also hold settlement accounts with the Bank of Botswana.

In addition to holding a portfolio of securities, banks make loans under a variety of conditions, for agricultural, commercial, consumer, and industrial purposes. Banks also deal in foreign exchange, provide safekeeping facilities, and perform various other services. In the case of the largest banks, these operations are, for the most part, carried out through their network of branches. The head offices of the banks typically confine their activities to general administration, policy functions, the management of investment portfolios, administration of high value loans to corporate customers and similar matters.

1.2.2 Other financial and non-financial institutions

Worthy of special mention here are the following financial and non-financial institutions, who although not parties to the clearing arrangements, provide some form of payment services.

The Post Office. The Botswana Postal Services has a network of some 112 Post Offices/Postal Agencies. They provide a range of payment instruments as well as agency services for the Botswana Savings Bank. Deposit and withdrawal transactions from the Botswana Savings Bank agency services are reported to be of significant magnitude, both in terms of volume and value. Post Offices are also used by the Accountant General's office for old age pension payments, as well as for the collection of revenue relating to motor vehicle, road transport and driver's licence fees.

Agency services are also provided for both the Botswana Housing Corporation and the Botswana Power Corporation, albeit currently on a small scale. In this regard, customers of the two corporations, in some villages, make payment of their rentals and/or electricity bills through Post Office counters. The Post Office in turn issues them with receipts on behalf of the corporations and subsequently pays such revenue over to the respective corporations.

Credit card companies. So far only one bank issues credit cards in Botswana. The card issued is affiliated to a major credit card institution abroad and is for use both locally and internationally. As there are no laws nor regulations relating to the issuing of credit cards in Botswana, issuance is subject to an agreement between the issuing bank and the cardholder/person to whom the card is issued. It is perhaps appropriate to make the point that these agreements are in compliance with appropriate legislation of the country in which the parent bank of the issuing bank in

Botswana is located. Thus, in this case, issuance is in accordance with the provisions of the Credit Agreement Act of the Republic of South Africa.

1.2.3 Other institutions/intermediaries offering payment services

The one known institution offering payment services is the Western Union Transmittal Services, which operates electronic funds transfers.

1.3 Role of the central bank

1.3.1 Establishment of the Central Bank

The Bank of Botswana came into existence on 1st July 1975, under the provisions of the Bank of Botswana Act of 1975, which provided for its establishment, constitution, objectives and powers to regulate the issue of Bank notes and coin. It also provided for the Bank to handle certain matters connected with banking, currency and coinage, for matters connected therewith and incidental thereto. The Bank of Botswana is a body corporate with perpetual succession and a common seal, capable of suing and being sued in its corporate name and which, subject to the provisions of the Bank of Botswana Act, may do all things necessary for, or conducive to, the proper carrying out of its objectives and the performance of its functions as a central bank.

See Appendix 3 for the principal objectives of the Bank of Botswana.

1.3.2 Role of the central bank in the payment system

The role played by the Bank of Botswana in the payment system is central but operationally relatively limited. The Bank of Botswana does not accept deposits from individuals or non-financial business corporations or compete with institutions in the lending field. The Bank of Botswana does, however, interact in the payment system in at least two different ways viz:

- it facilitates and effects the final settlement of balances for the national clearing and settlement system; and
- it acts as banker to Government, which is the largest payer in the country.

See Appendix 4 for overall functions of the Bank of Botswana.

1.3.3 Banking services provided by the central bank

The Bank of Botswana provides the following banking services to the Government and commercial banks as well as the Botswana Savings Bank:

- the Bank of Botswana is the official depository of Government funds. That notwithstanding, the Government maintains small disbursement accounts with some commercial banks where the Bank of Botswana is not represented and generally uses their services in such cases and on such terms and conditions as may be agreed between the Minister of Finance and Development Planning and the Bank of Botswana;
- the Bank of Botswana receives from Government, and disburses on its behalf, Government moneys and keeps account thereof without remuneration for such services. No interest is paid by the Bank of Botswana on Government balances held, unless the Bank and the Government otherwise agree;
- the Bank of Botswana may act as banker and fiscal agent to statutory and wholly-owned Government corporations or Government controlled corporations and to local authorities

on such terms and conditions as may be agreed between the parties concerned, with the approval of the Minister of Finance and Development Planning.

The Bank of Botswana may open accounts for, and accept deposits from domestic financial institutions and other domestic statutory persons under such terms and conditions as the Board may from time to time determine. It may also open accounts for, and accept deposits from:

– foreign financial institutions, foreign governments, international and regional organisations; and

– other persons authorised to tender for auctions of the Bank of Botswana, Government or other public securities.

See Appendix 5 for types of accounts held by the Bank of Botswana.

1.3.4 Money markets

Botswana has a money market which has developed considerably over the past number of years. The main instrument used in the money market are Bank of Botswana Certificates (BoBCs), to mop up excess liquidity. This is the principal instrument through which interest rate policy is implemented. BoBCs are auctioned to "primary counterparties", who are so designated by the Bank of Botswana, in view of their potential to influence liquidity in the economy.

Participation at BoBC auctions is not confined to banks. In addition to the four commercial banks, there are other counterparties entitled to bid directly for the BoBCs as listed at Appendix 6 hereof, who also are players in the secondary market.

Other investors interested in bidding for BoBCs do so indirectly through the primary counterparties; thus, members of the public would, for example, use their respective bankers. Primary counterparties each have two types of accounts in respect of BoBCs holdings. The one type is in respect of their own holdings and the other is in respect of holdings on behalf of their customers, where applicable.

There is also trade between the commercial banks who trade in the domestic money market on short term or on an overnight basis and settlements take place via their respective current accounts at Bank of Botswana.

1.3.5 Correspondent banking arrangements

The Bank of Botswana also has correspondent banking arrangements with the World Bank and other central banks. Foreign commercial banks use local banks for their correspondent banking activities.

1.3.6 Payment services for the government

The Bank of Botswana provides the under listed payment services for the Government:

– Administration of accounts for the Accountant General;

– Public Debt Management operations to finance deficit before borrowing and debt repayment by Ministry of Finance and Development Planning.

The Bank of Botswana processes retail payments for Government. In this regard there is the encashment of salaries and wages cheques of some Government employees. Accountant General's paymasters, based at various Government Departments, also draw cash from Bank of Botswana for the payment of the mjority of daily rated employees' wages.

1.3.7 Banking supervision

The Banking Act 1996 forms the legal basis for banking supervision. The purpose of the Act is to safeguard the viability of the banking industry, by providing protection for depositors. The Act seeks to achieve this objective while respecting free market principles.

Banking supervision in Botswana is carried out by the Bank of Botswana which enforces the recommendations of the Basle Committee on Banking Supervision. This function is carried out through its Financial Institutions Department, whose major responsibility is the autonomous administration of the Banking Act. Pursuant thereto, the Bank of Botswana seeks to ensure that banks are in a sound financial condition and that they observe the requirements of the banking legislation. In this regard, the Bank of Botswana supervises commercial banks, credit institutions (finance/lease) and development finance institutions, as specified under the relevant legislation.

Banking supervision aims to reduce systemic risk in the banking system by promoting sound risk management within banks. Since banks perform a core function as the backbone of the payment system, there is a close relationship between the payment system and banking supervision. Bearing in mind the advent of technology and globalisation of the banking systems, examination of banks focuses on operational risk and adoption of key prudential standards

1.4 Banking associations/groupings

1.4.1 Interbank structures - committees

Currently there are four commercial banks in Botswana and interaction amongst themselves and with the Bank of Botswana is possible without a multiplicity of formal interbank structures. That notwithstanding, there are a few formal structures in place worth mentioning, viz;

Clearing House Committee. Currently membership of the Clearing House Committee comprises the Bank of Botswana and the four clearing commercial banks. Membership would be open to any other bank that gets licenced henceforth. This committee manages the business of the Clearing House.

Technical Committee. Membership of this committee is the same as above. The Technical Committee addresses issues of a technical nature, which include policy rules, formulation of regulations, other legal issues, etc.

Banking Committee. The Banking Committee was established as a consultative forum, with all institutions licensed and/or supervised by the Bank of Botswana, on industry wide matters. Its agenda often includes items such as policy developments in the financial or monetary sector, interest rates, exchange rate policies, exchange controls, money market operations, quality and cost of banking services, clearing and settlement issues, frauds, security and crime, etc. as they impact the banking sector. The Committee has no formal executive powers and meets in March and in October each year, under the chairmanship of the Governor.

1.4.2 Interbank structures - other arrangements

The commercial banks occasionally meet bilaterally, with no Bank of Botswana involvement, to address issues of common interest. Such meetings are on an as and when necessary basis.

The Bank of Botswana and the banks meet regularly under the auspices of:

Tier I bilateral meetings with banks. These meetings are convened to address policy issues relating to the banking industry and are chaired by the Governor.

Tier II meetings. These meetings focus on operational issues relating to the banking industry and are chaired by the Director responsible for Banking Supervision.

Trilateral meetings. These meetings are held once a year with each bank and its auditors, to discuss matters arising from statutory audits of that bank, including relevant aspects of the bank's business, accounting and internal control systems, annual balance sheet and profit and loss accounts. These meetings are chaired by the Director responsible for Banking Supervision.

2. SUMMARY INFORMATION ON PAYMENT MEDIA USED BY NON-BANKS

2.1 Cash payments

2.1.1 Background

Currency notes and coin. Effective 23rd August 1976, the Pula was established as the monetary unit of Botswana. The Pula is divided into one hundred Thebe and the symbols for the monetary unit are "P" and "t" respectively. The Bank of Botswana has the sole right to procure services for the printing of notes and the minting of coins denominated in Pula and Thebe and to issue them into circulation. Notes and coin issued by the Bank are legal tender within Botswana and are valid:

- in the case of notes, for the payment of any amount;
- in the case of coins, for payment of an amount not exceeding one hundred Pula.

The Bank of Botswana arranges for the printing of notes and minting of coins and for all matters relating thereto. It also arranges for the security and safekeeping of unissued notes and coin as well as for the custody of and destruction, as necessary, of plates, dies and retired or soiled or torn notes or soiled or damaged coins. In this regard no person other than the Bank of Botswana or an entity duly authorised by the Bank of Botswana shall issue, in Botswana, notes and or coins, or any documents or tokens payable to bearer on demand, having the appearance of or purporting to be or which are likely to pass as or be confused with legal tender.

Notes and coins on issue in Botswana are of such denominations, composition, form and design as approved by the Minister of Finance and Development Planning. Pursuant thereto currently denominations of notes are: P5, P10, P20, P50 and P100, whilst for the coins the denominations are: 1t, 5t, 10t, 25t, 50t, P1 and P2.

At the end of October 1997, notes in circulation totalled P364.1 million and coin stood at P20.4 million. Currency in circulation is composed of notes and coin only and the ratio between the two at 31st October 1997 was 94.7% and 5.3% respectively.

See Table 4 for data on notes in circulation.

2.1.2 Cash distribution and handling

The main distributors of Botswana currency notes and coin are the four commercial banks. Distribution to the public normally takes place through encashment of cheques or through cash withdrawals by depositors. The banks replenish the supplies of their respective branches through what are called Treasury Depots, which maintain stocks of currency at strategic places in towns or regionally.

Equally, notes and coin surplus to the needs of a bank are taken in by a Treasury Depot and redeposited with the Bank of Botswana. Surplus notes, even if fit for reissuing, may be returned to the Bank of Botswana for immediate credit of the account of the bank returning them. Such notes are processed, held and get reissued as and when the need arises. The Bank of Botswana also redeems unissuable notes, that is to say those that are soiled or worn out or otherwise unfit for further circulation.

2.1.3 Cash usage

Although there is a wide variety of payment instruments available in Botswana, notes and coin continue to be the most common and frequently used means of effecting everyday small-value transactions. Indications are that levels of cash have fluctuated considerably, and are higher than in 1992. Unfortunately, there are no precise data or other information on the number or the value of cash payments.

2.1.4 Cash as proportion of M1 and M2

As at August 1997, the proportion of M1 which consisted of cash was about 55.8%, that is to say P305.8 million out of P548.3 million. For M2, the proportion was roughly 10.25%, being P305.8 million out of P2,984.8 million.

The value of cash in circulation as a percentage of GDP at current prices as at 1995/96 was 1.64%.

2.2 Non-cash payment media and instruments[3]

2.2.1 Types of bank accounts[4]

The banks offer at least six types of deposit accounts, some interest bearing. Some are subject to minimum balance as well as notice of withdrawal requirements. Of the six, types four can be used for non-cash payments, as customers may arrange to have funds transferred out of such accounts through ***Standing/Stop Orders, Direct Debits***, etc. for the payment of liabilities with third parties. Depending on the nature of the transaction banks may charge a fee for this service. The other accounts such as demand or time deposits are not used for making non-cash payments.

Savings accounts. This is the type of account intended to give customers the facility to save money in excess of their daily requirements. These accounts are subject to a minimum balance requirement as well as service charges, prescribed by the institutions providing the facility. In some cases, there are limits on the amount that can be withdrawn without giving prior notice.

Payroll accounts. Some financial institutions provide an account facility distinct from the savings account, which is intended to facilitate the payment of the account holders salary/wages. These accounts are subject to a minimum balance ranging from zero to P100. These accounts offer access by electronic means only (i.e. via ATMs or point of sale terminals) and access via branch counters is discouraged.

Cheque accounts. These accounts are normally referred to as current accounts and access to money in such accounts is on demand, subject to there being no uncleared effects. Normally account holders get issued with a cheque book to use in accessing funds in such accounts. Other forms of accessing the funds, such as direct debits and standing orders, are permissible.

Credit card accounts. These are accounts for the recording of transactions resultant from the use of credit cards by holders of such cards. A person issued with a credit card may use it to

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3 Please see Appendix 8 for the range of payment instruments in use in Botswana.

4 Please see Appendix 7 for the volume of accounts in the banking industry.

obtain advances of money from a bank through the purchase of goods, services and or other facilities or cash advances and for any other purpose which a bank may permit from time to time. These accounts are subject to credit limits prescribed by the issuing banks and also attract interest, fees and other charges set by the issuing bank. In some cases, the cardholder will be paid interest on a credit balance in such an account.

Demand deposit accounts. These are accounts in which money is deposited, interest is paid and funds are available, with interest earned, on demand.

Time deposit accounts. These accounts serve the same purpose as for demand deposits above, save that notice of withdrawal of the funds is required. Where withdrawals have to be made before maturity, interest earned would normally be forfeited or discounted.

Electronic banking. Electronic banking is conducted by individuals and corporates through a modem link to banks. Electronic payments and transfers take place between accounts within some banks. In addition, certain corporates are linked via the computer network, called Value Added Networks (VANS), through to their parent companies in South Africa. This will, in time, permit these companies to link up with full Electronic Data Interchange (EDI).

2.2.2 Cheques and other paper payment instruments

Background. The legal framework for cheques and other paper payment instruments consists primarily of the Bills of Exchange Act, common law, Clearing House rules, and agreements between a deposit-taking institution and its customers.

The Bills of Exchange Act. The Bills of Exchange Act represents the legislative source of the legal framework that governs cheques and other bills of exchange. It was passed by Parliament in 1964 and has since had three amendments in 1966, 1983 and 1984. It has remained in substantially the same form since promulgation of Statutory Instrument Number 83 of 1984.

The Clearing House rules. Within the broad framework provided by the Bank of Botswana Act, Section 42, the Clearing House rules set out the procedures and standards that govern the national clearing and settlement system processes.

The rules facilitate the exchange of cheques and other payment items between clearing banks. They establish when the participating institutions will be reimbursed and when the unpaid items are to be returned to the presenting institution. These rules touch upon many aspects that affect the treatment of cheques and other payment items, including provisions that:

- determine which items are eligible for presentation through the clearing and settlement system as well as those that are not eligible;
- set out which items may be returned by branches;
- set out the time limits for the exchange or return of unpaid items through the system;
- set out procedures for the treatment of large value items.

The agreement between a deposit-taking institution and a customer. Most deposit-taking institutions require a customer, on opening an account, to sign some kind of standard agreement. The agreement covers a variety of subjects, including the following:

- the authority to pass charges to accounts;
- the issuance of cheques, bills of exchange, promissory and other negotiable instruments;
- the issuance of statements of account, and certificates of balance;
- the customer’s signing arrangements;
- an authority for the bank to comply with instructions initiated by the customer by electronic means;

– an undertaking to advise the bank of any changes to signing arrangements from time to time.

Cheques usage. Following on cash, the other most used instrument for making payments is cheques. According to a partial survey conducted in 1996, the volumes of cheques processed in Botswana averages 24,000 to 30,000 per day. Cheques are used to facilitate access to funds in current accounts at banks. Banks will normally have cheques printed for issuance to their customers. Where customers prefer to privately print their own customised cheques, banks insist on their customers using cheque forms which conform to the specifications agreed to between banks, namely the paper format and size; the paper quality and related security features; the layout as well as encoding of cheques to facilitate reading by high speed equipment. For some banks the cheque format is capable of being read by high speed readers/sorters while other banks are working towards that capability for their cheques.

2.2.3 Direct debits

Direct debits are commonly used for the payment of insurance premiums, security monitoring fees, other utilities, etc. Data on the volume and value relating to usage are not available.

2.2.4 Credit transfers

Credit transfers are used for interbank and foreign exchange transfers and have a wide ranging usage, which includes low and high value transactions, typically payments of salaries, pensions and retail payments at the low end. The main users are the banks, Government and large corporations. The predominant types of such transfers are mail and credit transfers including the use of S.W.I.F.T. Data on the volume and value relating to usage are not available.

2.2.5 Card-based payments

Cards in use include:

Automated Teller Machine (ATM) cards. ATMs are widely used in most cities and towns including some major villages, where the payment system is relatively sophisticated. A partial survey shows that some 76 ATM machines have been installed, by three of the banks, in cities, towns and major villages and there are plans to install 16 more in due course. ATMs are used extensively for cash withdrawal as well as for making deposits to the holder's account. In the case of one of the major banks, total ATM cards issued have been advised as being over 70,000, with an average of P35 million monthly cash distribution through ATMs. Currently there is no ATM switch in place, nonetheless discussion relating thereto are taking place between two of the banks.

EFTPOS (Electronic Funds Transfer at Point of Sale). Some ATM cards are used for consumer payments at point of sale. In the case of one of the major banks, statistics provided show average monthly purchase transactions were in the region of 180,000 from a network of some 550 POS terminals, throughout the country.

Debit card. ATM cards of some banks also serve this purpose. Details on usage of debit cards not available.

Credit card. Only one of the four banks issues credit cards in Botswana. The cards are affiliated to a major credit card institution abroad and are used both locally and internationally.

Prepaid card. Both Botswana Telecommunications Corporation and Botswana Power Corporation are known to provide this service in the form of telephone and electricity cards, respectively.

Retailers card. A few retailers, particularly clothing shops, have introduced this instrument. Two categories of cards have been noticed viz:

(a) In some stores, the card is used for facilitating payment by cheque, but the card cannot be used for accessing the bank account of the holder.

(b) In other stores, possession entitles holders to special discounts or access to credit up to a credit level computed in some way. Again the card cannot be used for accessing a bank account.

2.2.6 Electronic banking

One of the major banks has advised that facilities are in place for electronic banking, which can be conducted by individuals and corporates through a modem link to the bank. Notwithstanding the absence of a Clearing Bureau to facilitate transfers between banks, electronic payments and transfers between accounts within some banks can take place. With access to S.W.I.F.T., the Bank of Botswana and the four banks use the facility to transmit domestic and international payments. There is, however, as yet no direct S.W.I.F.T. link between the banks and their accounts at Bank of Botswana.

2.3 Post Office instruments

The underlisted payment services are available from the Post Office for both local and international purposes:

– Mail Order;
– Money Order;
– Telegraphic/fax money order;
– Telephone Money Cards;
– Postal Order.

2.4 Government/treasury instruments

The government is using the following instruments:

– Cheques;
– Drafts;
– S.W.I.F.T.

2.5 Other non-bank instruments

There is no information available on the value nor the volumes of payments made through the following non-bank instruments:

– Coupons;
– Tokens;
– Postal Orders;
– Money Orders - Ordinary and Telegraphic;
– Botswana Telecommunications Corporation Telephone Cards;

– Botswana Power Corporation Electricity Cards.

2.6 Cheque system

2.6.1 Standardisation of cheque forms

Banks will normally have cheques printed for issuance to their customers. Where customers prefer to privately print their own customised cheques, banks insist on their customers using cheque forms which conform to the specifications agreed to between banks, namely the paper format and size; the paper quality and related security features; the layout as well as encoding of cheques to facilitate reading by high-speed readers/sorters. Viz:

Paper format and size. There are two standards used, one being for small personal cheques and the other for corporate cheques viz:

Personal cheques: minimum length (width) 152 mm; minimum width (depth) 76 mm.

Corporate cheques: maximum length (width) 203 mm; maximum width (depth) 102 mm.

Paper quality and security features. Cheques must be printed on paper of 95 or 96 gms/sq.meter to CBS 1 standard paper. Micro lettering is widely used to provide background light colours.

Layout. The branch sorting code number must printed in the top right-hand corner of the cheque in figures not less than 3 mm high.

2.6.2 MICR encoding of cheques

For some banks, the cheque format is capable of being read by high-speed readers/sorters. Other banks are progressing towards that status. The major specific requirement relating thereto is that the approved font is E-13B. All MICR characters must be printed in magnetic link (i.e. ink capable of being magnetised and sensitised). The MICR E-13B code line is to be printed so that the bottom edges of the characters are nominally 6.4 mm from the bottom reference edge of the trimmed voucher.

3. INTERBANK EXCHANGE AND SETTLEMENT

3.1 General overview

Interbank transactions on current accounts with the Bank of Botswana are effected through credit transfers, clearance vouchers, cheques and S.W.I.F.T. instructions.

S.W.I.F.T. is the electronic transfer system used. It is currently used to send messages/instructions. There is no automatic electronic data transfer.

Credit items may be cleared at any of the clearing times referred to above, and should be accompanied by an Inter Bank Clearing payment voucher in the event of direct delivery. Where necessary, in an emergency, and with the consent of the recipient bank, credit items accompanied by a clearance voucher for the total value may be delivered to the recipient bank after the last clearing, but not later than the closing time of the receiving bank or the presenting bank, whichever is the earlier.

Where the local branch of the beneficiary experiences difficulty in dealing with volumes of credit transfers, they should approach their administrative/head office.

Banks may not send credits through the post, direct to the beneficiary bank/branch. In cases where the beneficiary bank is not represented at point of deposit and the depositing bank is not represented at point of payment, the transfer must be cleared through an intermediary point in accordance with the internal instructions of the depositing bank.

Beneficiary banks should regard all cheques included in the mail and credit transfers as representing uncleared effects, unless otherwise indicated in the transfer.

Inter branch transactions are effected through the respective bank's internal processing and accounting systems. Some of the banks use electronic real time on line gross posting.

3.2 Structure, operation and administration of large-value systems

3.2.1 Clearing

Clearing structure. The clearing system in Botswana is manual, with paper exchanged by representatives of participating banks, at Bank of Botswana premises both in Gaborone and in Francistown. In this regard, there is one Clearing House at the Bank of Botswana Head Office and another at the Bank of Botswana branch in Francistown. The clearing houses are controlled in terms of the Clearing House rules agreed to by the four banks and the Bank of Botswana. In addition, in towns and major villages where there is more than one bank represented, the banks concerned have local clearing houses from which clearing settlement figures are sent to their respective head offices to effect interbank settlements. Each bank has a Clearances Centre at their respective headquarters, to process cheques from their outlying branches, prior to getting them to the Clearing House(s).

The business of the Clearing House(s) both at Bank of Botswana headquarters and at the Francistown branch is managed by a Clearing House Committee composed of a representative from each member bank and is presided over by a Chairman, who is representative of the Bank of Botswana. The exchange of items at the Clearing House(s) is conducted under the supervision of an Inspector of Clearing, appointed by the Bank of Botswana, who is responsible for the discipline of the Clearing House. The exchange of items process is that the paying bank receives cheques and bank paper through the local clearing and forwards this paper to paying bank branches for processing payment and fating. The collecting bank provides final funds if the paying bank does not return the cheque unpaid in the time allowed in the Clearing House rules. The time delay, following deposit, for providing final funds varies in accordance with the Clearing House rules. For cheques collected and payable on bank branches both in a local clearing area, paying banks should return unpaid cheques no later than the fourth business day after exchange at the clearing point. For cheques drawn on banks outside the local clearing area final funds should be provided to the depositor not later than the tenth business day after the exchange at the clearing point.

Bank of Botswana and the commercial banks have reached an agreement in principle to reduce the effects not cleared period for local and non local cheques to four and six days, respectively.

Clearing times. Clearing takes place Monday to Saturday (except on public holidays) as hereunder:

– morning clearing is at 9.30 a.m.

– afternoon clearing is at 2.30 p.m. (except on Saturdays).

Items eligible for presentation through the clearing system. Items eligible for presentation through the Clearing System are limited to the following:

– cheques payable in Botswana, excluding those mentioned hereunder;

– clearance vouchers;

– credit slips;

- debit slips bearing an authorised signature and a bank stamp;
- debit/credit order system items;
- unpaid items;
- demand drafts and bills payable within the local clearing area;
- credit card vouchers.

Items NOT eligible for presentation through the clearing system. The following items are not eligible for presentation through the Clearing System and must be presented to the paying banker directly for settlement by clearance voucher:

- guarantees;
- coupons;
- country bills payable outside the local clearing area;
- items expressed in foreign currency, even if converted into Pula;
- items to which charges or expenses have been added.

Presentation of large value items and return of dishoured items. Large value items should be presented through the afternoon clearing which consist ***only*** of the following:

- individual items of P 50,000 and above;
- local clearing settlements;
- items returned for reasons either of non-payment or wrong delivery.

These items may also be presented at the morning clearing if required.

Treatment of cheques returned because of insufficient funds. The drawee branch must return dishonoured cheques as soon as possible. The time limit allowed to dishonour and return cheques drawn within the local clearing area is no later than the fourth business day after the exchange at the clearing point. The time limit allowed to dishonour and return cheques drawn outside the local clearing area is no later than the tenth business day after the exchange at the clearing point. The commercial banks charge an activity fee to their respective customers for cheques returned because of insufficient funds.

3.2.2 Settlement

The settlement process in Botswana is a centralised operation, with the commercial banks maintaining clearing accounts with the Bank of Botswana. In this respect multilateral netting is in use, with each clearing bank facilitating, at the Clearing House, the net payment due to other members and in turn receiving net amounts due from the other banks. The banks are then notified of these positions by their representatives at the clearing house. The banks are then expected to take action to fund the accounts if need be, to facilitate successful settlement. The Bank of Botswana serves as the settlement agent for payment transactions.

Pursuant to the foregoing, on the same day as the clearances take place, at 4.30 p.m., the Inspector of Clearing passes the appropriate entries, either debit or credit, to the accounts of the respective banks. Needless to say, such posting could result in an overdraft if a bank fails to fund the amount before close of business. In this regard settlement is to all intents and purposes automatic, with no constraints and with the potential to expose the Bank of Botswana to undue risk.

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

4.1 Exchange and settlement systems for international transactions

4.1.1 Exchange controls

Some exchange controls still exist and they are administered by the Bank of Botswana through the Financial Institutions Department. This function is carried out on an agency basis for the Ministry of Finance and Development Planning. Over the last few years, there has been a progressive liberalisation of exchange controls, amongst which has been the abolition of controls on current payments. The effect of the remaining controls is insignificant, because of the highly liberalised exchange control regime. Botswana has acceded to the conditions of IMF Article VIII status under the IMF Articles of Agreement.

4.1.2 Monetary cooperation

Botswana does not have any formal monetary cooperation with any country. However, Botswana accepts repatriated Pula currency notes from other countries in exchange for other convertible currencies.

Banks usually use their own correspondent banks to pay foreign counterparties, using convertible currency. In most cases, banks make use of correspondent agreements to effect such payments. These agreements allow a bank to hold a foreign-currency-denominated account with an overseas bank. In order to effect payment, a bank will instruct its correspondent bank to make payment to its foreign counterparty, in the foreign currency, by debiting its account and transferring the funds to the account of the counterparty. S.W.I.F.T. is the system mainly used for these types of payment.

5. THE ROLE OF THE CENTRAL BANK IN INTERBANK SETTLEMENT SYSTEMS

5.1 General responsibilities

5.1.1 Statutory responsibilities

The current banking laws do not cover the regulation and supervision of the payment system. That notwithstanding, the Bank of Botswana has a vested interest in overseeing the payment system to ensure its soundness, efficiency, safety and effectiveness. Only licensed banks are entitled to participate in the clearing system and such banks are licensed and supervised by the Bank of Botswana.

5.1.2 Establishment of common rules

Botswana does not have legislation specific to the payment system. The Clearing House rules are about the nearest one can get to regulations intended to supervise and/or regulate a component of the payment system. The basic objectives of these rules are to ensure the efficiency, reliability, safety and effectiveness of the clearing system in the country by providing guidance to the clearing banks. Pursuant thereto, certain basic requirements and procedures are prescribed therein. These include the management of the business of the Clearing House, conduct and supervision, definition of clearing areas, stationery to be used, standardisation of cheque forms, items eligible for presentation through the Clearing House, etc.

There are, however, some sections in banking and other legislation, which can be referred to on payment system related issues. See Appendix 10 for the list of current banking law and regulations as well as for other related legislation.

5.1.3 Regulation of non-bank institutions

There are no specific regulations aimed at controlling activities of non-bank entities. That notwithstanding, the provisions of the Banking Act, generally those ensuring prudence in banking, shall apply to certain institutions authorised by any other legislation, to engage in banking business, notwithstanding such other legislation, unless otherwise prescribed.

5.1.4 Interest rate(s) setting

Interest rate setting for loans is free-market driven. Banks are not regulated on the interest rates they wish to charge for loans. The Bank of Botswana sets the Bank Rate which is the rate at which it makes loans to commercial banks. The Bank Rate in turn influences the interest rates set by commercial banks.

5.2 Provision of settlement facilities

After receiving a letter/S.W.I.F.T. message from a commercial bank, a transfer is made across the current accounts of clearing banks held at Bank of Botswana. Usually settlement is made on the same day.

The Bank of Botswana provides overnight loans to banks against approved collateral, e.g. Bank of Botswana Certificates. Other provisions include:

- commercial banks are subject to primary reserve requirements as set out in the Bank of Botswana Act. The reserves are not utilised for settlement purposes. The reserve requirement currently is 3.25% of deposit liability, excluding foreign currency accounts;
- in addition, for prudential reasons there is, a liquidity assets reserve requirement. Currently set at 10% of deposit liabilities for commercial banks and 3% for credit institutions;
- the Bank of Botswana is the settlement bank in the interbank market;
- the Bank of Botswana owns and provides the settlement facilities. Settlement takes place at Bank of Botswana, daily on a net basis over the clearing accounts of the banks;
- banks are not charged to use settlement facilities.

5.3 Monetary policy and payment systems

- The Bank of Botswana formulates and implements monetary policy.
- The Bank of Botswana may act as Government's agent in the issuing of Government Debt.
- The Bank of Botswana is restricted in the extent to which it can lend to Government.

6. RECENT DEVELOPMENTS IN THE PAYMENT SYSTEM

6.1 Description of the new system

The Bank of Botswana is central to payment services of the country and therefore has an undeniable interest in the soundness and safety of the payment system. Conscious of this role, the Bank has, of its own accord, as well as under the auspices of the SADC Payment System Project, taken a wide range of actions, the collective objective of which is to work towards the improvement of the payment system. In this regard the Bank of Botswana has:

- participated in payment system related workshops held under the auspices of the SADC Payment System Project. These include the Technical/Orientation Workshop, the Comparative Workshop as well as Focus Groups Workshops. As a result of attendance of the Focus Groups Workshop, Bank of Botswana will now spearhead the establishment of country Focus Groups to concentrate on areas of specialisation, to chart out courses of action. In this regard, the Legal Focus Group would, for example, look into drawing up a legal framework to harmonise laws relating to the payment system;
- given the magnitude of the tasks of the project and in keeping with the SADC Project Team recommendations, the Bank has assigned two senior members of staff on a full-time basis to oversee and direct the project in Botswana;
- established an in-house Payment System Committee, comprising senior staff from the Banking, Finance and Financial Institutions Departments. Its purpose is to involve all relevant departments of the Bank in the review and improvement of the payment system. The committee also has the responsibility to oversee and monitor the work progress of the Focus Groups. This committee will work in close liaison with the country "Working Group to Review Payment Systems";
- in April 1997, at the behest of the Governor of the Bank of Botswana, established a joint Working Group, comprising senior representatives from the commercial banks and the central bank. The purpose of the working group is to look into possible strategies for Botswana's Payment System modernisation and the development of appropriate plans in line with the SADC initiative on payment system modernisation. The Working Group is also to develop a clear understanding between banks and other participants in the payment system in respect of their responsibilities thereto, and to work with the Bank of Botswana Payment System Committee;
- the Clearing House Committee, which regularly reviews clearing arrangements, has in principle, agreed to shorten the value date for both local and country cheques;
- recently completed a Payment System Sensitisation Workshop, under the auspices of the SADC Payment System Project. The workshop was successful in its objective of sensitising the main participants in the payment system about current and future developments.

6.2 Technical assistance

In October 1997, the Bank of Botswana procured the services of an International Monetary Fund Payment Systems Expert to review the current payment arrangements in Botswana and to make recommendations for improvement.

The Bank is also actively giving consideration to procuring the services of a Payment Systems Project Advisor to work in liaison with the Bank of Botswana in, among other things:

– assessing the available capacity and commitment of those involved in the payment system in Botswana;
– developing an action plan and assigning responsibilities;
– assessing the need for local and foreign consultations to speed up the payment system improvement process;
– assess the usefulness, to Botswana, of work that has already been carried out in SADC and other countries and so reduce the effort required.

The primary purpose of providing such services being to maintain the momentum gained at the sensitisation workshop, referred to in 6.1 above.

7. INFRASTRUCTURE

7.1 Telecommunications infrastructure

The current all-digital network comprises 5,300 kilometres of microwave radio and fibre optic links between 13 main processors. The network layout allows for alternative routing of traffic, via the microwave fibre rings if faults occur on direct routes.

Botswana Telecommunication Corporation (BTC) has embarked on expansions to the network to cater for increased demand for new services. Botswana Telecommunications Corporation has also been engaged in discussions to improve links with telecommunications operators in neighbouring countries. Among other things, Botswana Telecommunications Corporation customers can now lease high capacity data circuits between Botswana and South Africa. Botswana Telecommunications Corporation’s commitment to upgrading services and provision of additional services throughout Botswana prompted a major network expansion on to around 130,000 lines in the next three years. As part of the programme, a second international exchange is also planned for Francistown.

Broad-band ISDN (Integrated Services Digital Network) services are to be introduced. Data networks with digital links to neighbouring countries will be expanded and so enable Botswana Telecommunications Corporation to provide digital leased lines throughout Botswana and Southern Africa. In view of an anticipated large scale customer switch from low-speed to high-speed data circuits, Botswana Telecommunications Corporation is implementing a Managed Data network which will allow centralised monitoring of all equipment up to customer premises. This is a prerequisite for giving customers different levels of service.

Finally, Botswana Telecommunications Corporation is introducing VSAT (Very Small Aperture Terminals Network), which is a point-to-point and or point-to-multiple points, two way data and voice satellite based communications network that connects a company’s head office with remote or branch offices. This network would be independent of existing telecommunications infrastructure. Being a satellite based system it has advantages of wide coverage and is cost independent of distance and difficult terrain.

7.2 Roads infrastructure

There is a national road network connecting all urban and major village settlements with bitumised roads. In the urban areas, most of the roads are tarred including those which join the urban areas. In remote rural areas, many roads are still under-developed.

7.3 Domestic air infrastructure

Air Botswana is the main local air service, which is supplemented by a few small charter aircraft companies. On international standards, our airline infrastructure is small, but the few services that it offers are reliable.

Table 1

Basic statistical data

	1992	1993	1994	1995	1996
Population (millions)[1]	1.358	1.391	1.425	1.460	1.500
GDP (millions of Pula)[2]	8,372.5	9,126.0	11,115.0	12,530.3	14,631.0
GDP per capita (thousands of Pula)[2]	6,190	6,587	7,828	8,609	9,807
Exchange rate (domestic vis-à-vis USD)					
year ending	*0.4431*	*0.3899*	*0.3680*	*0.3544*	*0.2744*
average[2]	*0.4651*	*0.4053*	*0.3723*	*0.3607*	*0.2994*

[1] As per Statistical Bulletin Volume 20, Number 4 and Volume 3, Number 1: Central Statistics Office. [2] As per Botswana Financial Statistics Volume 4, Number 9: Bank of Botswana.

Table 2

Settlement media used by non-banks

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

	1992	1993	1994	1995	1996
Notes and coins	233.1	274.8	302.6	318.5	363.8
Transferable deposits:					
Corporate sector	900.2	1,015.9	1,168.7	1,231.6	1,637.2
Household	454.1	558.5	609.5	641.2	770.1
Other (see Appendix 9)	396.2	431.4	439.3	592.5	564.9
Narrow money supply (M1)	589.2	666.9	623.2	532.0	513.6
Broad money supply (M3)	2,428.1	2,566.0	2,718.3	3,251.1	4,116.2

Source: Botswana Financial Statistics Volume 4, Number 9 - 1997: Bank of Botswana.

Table 3

Settlement media used by banks

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

	1992	1993	1994	1995	1996
Reserve balances held at central bank	91.9	99.0	52.8	70.3	67.9
Transferable deposits at other institutions	[1]	[1]	[1]	[1]	[1]
Accounts at the Post Office	n.a.	n.a.	n.a.	n.a.	n.a.
Accounts at the Treasury	n.a.	n.a.	n.a.	n.a.	n.a.
Required reserves	83.5	91.0	70.7	80.0	85.6
Institutions' borrowing from central bank[2]	50.0	Nil	Nil	Nil	Nil

[1] Data not available. [2] During some months of 1995 and 1996 there was some borrowing.

Source: Botswana Financial Statistics Volume 4, Number 9 - 1997: Bank of Botswana.

Table 4

Banknotes and coins

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

	1992	1993	1994	1995	1996	1997[1]
Total banknotes in circulation	221.7	262.1	286.3	300.7	343.8	364.1
Total coins in circulation	11.4	12.7	16.3	17.8	20.0	20.4
Denomination of banknotes:						
100 Pula	Nil	59.5	103.2	133.6	167.3	208.8
50 Pula	130.0	110.8	99.1	83.9	95.5	78.7
20 Pula	52.4	49.8	48.3	47.6	45.1	41.5
10 Pula	27.2	28.3	25.5	25.4	24.7	24.5
5 Pula	7.0	7.8	8.1	8.4	9.4	8.8
2 Pula..........................	4.2	5.1	1.3	1.0	1.0	1.0
1 Pula	0.9	0.9	0.8	0.8	0.8	0.8

[1] As at 31st October 1997.

Source: Botswana Financial Statistics Volume 4, Number 9 - 1997: Bank of Botswana.

Table 5

Institutional framework

(as at 30th September 1997)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (millions of Pula)
Central bank	1	1	2.3	-
Commercial banks	4	51	286.0	3,832.8
Savings banks[1]	1	0	-	-
Public credit institutions	2	14	-	-
Post Office	1	112	n.a.	n.a.

[1] Botswana Savings Bank does not have branches but operates through Post Offices and Postal Agencies located in many parts of the country. Data on number and value of accounts are not available.

Source: Financial Institutions Department: Bank of Botswana.

Appendix 1

Financial institutions operating in Botswana as at 30th September 1997

Central Bank	Bank of Botswana
Commercial banks	Barclays Bank of Botswana Ltd First National Bank of Botswana Ltd Stanbic Bank Botswana Ltd Standard Chartered Bank Botswana Ltd
Credit institution (finance leases & hire purchase)	ULC (Pty) Ltd
Development finance institutions	Botswana Savings Bank National Development Bank Tswelelo (Pty) Ltd
Building society	Botswana Building Society
Insurance companies	Botswana Insurance Holdings Ltd Mutual & Federal Insurance Company of Botswana Ltd Botswana Eagle Insurance Company Ltd
Stockbroking company	Stockbrokers Botswana Ltd

Appendix 2

Branch network and other contact points of the commercial banks

	Barclays	**First National Bank**	**Stanbic**	**Stanchart**	**Total**
Branches	19	11	6	15	**51**
Agencies	13	2	-	5	**20**
Encashment points	7	-	-	1	**8**
ATMs installed	30	23	-	23	**76**
ATMs due	5	5	-	6*	**16**
POS/Speed points	550	232*	-	-	**782**

* Estimate figures only.

Appendix 3

Principal objectives of the Bank of Botswana

1. The principal objectives of the Bank of Botswana are: (a) first and foremost to promote and maintain monetary stability, an efficient payments mechanism and the liquidity, solvency and proper functioning of a soundly based monetary, credit and financial system in Botswana; (b) secondly, in so far as it is not inconsistent with the objectives set out in paragraph (a), to foster monetary, credit and financial conditions conducive to the orderly, balanced and sustained economic development of Botswana; and (c) thirdly, to assist in so far as it is not inconsistent with the objectives as set out in paragraphs (a) and (b), in the attainment of national economic development goals.
2. In the attainment of the objectives set out in subsection (1), the Bank of Botswana has and may exercise all the powers generally conferred upon a central bank.

Appendix 4

Overall functions of the Bank of Botswana

The Bank of Botswana functions include the underlisted:			
(a)	Advisor to Government	(f)	Administer Exchange Controls
(b)	Implementation of Monetary Policy	(g)	Management of FOREX Reserves
(c)	Banking Supervision	(h)	Central Banking Services
(d)	Issuance of Notes and Coin	(i)	Collection and Dissemination of Statistics
(e)	Implementation of Exchange Rate Policy	(j)	Lender of Last Resort

Appendix 5

Types of accounts held by the Bank of Botswana

Type of accounts:			
(a)	Remittances Account	(d)	Old Age Pensions Account
(b)	Central Account	(e)	Current Accounts
(c)	Salaries Account	(f)	Required Reserve Accounts

Appendix 6

Other counterparties entitled to bid directly for BOBCs

Other counterparties:			
(a)	Debswana Diamond Company (Pty) Ltd	(e)	Investec Asset Management Botswana
(b)	Botswana Savings	(f)	Stockbrokers Botswana Limited
(c)	Botswana Postal Services	(g)	Water Utilities Corporation
(d)	ULC (Pty) Ltd	(h)	Botswana Railways

Appendix 7

Volume of accounts in the banking industry

Account type	31st December 1996
Current	106,918
Savings	159,568
Deposit	11,644

Appendix 8

Payments instruments in use in Botswana

(a) Cheques	(f) Credit cards	(k) Prepaid cards
(b) Bank cheques	(g) Debit cards	(l) Gift vouchers
(c) Clearance vouchers	(h) Coupons	(m) Credit transfers (S.W.I.F.T.)
(d) Local promissory notes	(i) Travellers cheques	(n) Direct debits
(e) Money orders	(j) Mail transfers	(o) Standing order/Stop order drafts

Note: The above list has been compiled from common knowledge, as there is no formal list, and is therefore not conclusive.

Appendix 9

Other transferable deposits

(ref. Table 2)

	1992	1993	1994	1995	1996
Central government	8.8	31.3	16.1	19.4	40.4
Local government	122.2	183.1	172.9	249.6	217.9
Parastatals	265.2	217.0	250.3	323.5	306.6
Total	396.2	431.4	439.3	592.5	564.9

Appendix 10

Banking and other related legislation

(banking and other related legislation which can be referred to on payment related issues)

	Cap	Amended
Current Banking Laws		
Banking Act, 1995[1]	46:01	n.a.
Bank of Botswana Act, 1996[2]	55:01	n.a.
Exchange Control Act, 1964	55:03	Act 19, 1976
Current Banking Regulations		
Banking Regulations 1995 - Statutory Instrument 73 of 1995		n.a.
Other related legislation		
Botswana Savings Bank Act, 1962	56:03	1992
Bills of Exchange Act, 1964	46:02	Act 12, 1979
Companies Act, 1959	14:01	Act 34, 1982
Finance and Audit Act, 1970	54:01	None
Insolvency Act, 1929	42:02	Act 3, 1981
Botswana Postal Services Act, 1989[3]	72:01	n.a.
Registered Bonds Act, 1976	56:06	None
Registrar of Government Securities Act, 1972	56:05	None
Stock Bonds and Treasury Bills Act, 1976	56:07	Act 8, 1982

[1] This Act was amended and substituted the Financial Institutions Act. [2] This Act amended the Bank of Botswana Act, 1975.
[3] This Act was amended and substituted the Post Office Act, 1980.

Note: This list is based on the Law Revision as at 31st December 1987 and incorporates acts passed during 1988 and 1989. The above list is by no means exhaustive. The heading AMENDED merely reflects amendments of the various legislation up to the date indicated.

THE PAYMENT SYSTEM IN LESOTHO

Table of Contents

1. INSTITUTIONAL ASPECTS

1.1 General legal aspects

The supervision of banks and any other financial institutions is carried out by the Central Bank of Lesotho in accordance with the provisions contained in the Financial Institutions Act, 1973.

Netting arrangements are carried out using the Central Bank of Lesotho Clearing House rules. There is no law as such.

The Central Bank can appoint persons, acting with the prior written approval of the Minister, if a bank's condition is unsound or its business is being conducted in an unlawful or imprudent manner. The central bank's appointee shall take an inventory of assets and property of the institution and this shall be available for examination by interested parties at the office of the commissioner (Central Bank).

Payment instruments such as cheques and credit cards are issued to those people who fall into a certain category of salary.

Other institutions providing payment services by law are the Post Office and development banks. The Post Office issues postal orders and these are acceptable everywhere and are treated the same way as cheques.

1.2 Financial intermediaries that provide payment services

Financial intermediaries such as commercial banks also act as savings banks because they provide banking services to the public by accepting saving deposits as well as demand deposits. They operate according to the Financial Services Act.

Partial financial institutions exist in the form of development banks (non-banks because they do not offer the full services of commercial banks, such as cheque accounts) and also The Employment Bureau of Africa (TEBA) which makes payments on behalf of migrant mine workers. Other types of financial institutions which accept deposits from the public are insurance companies.

1.3 Role of the central bank

The Central Bank is responsible for issuing maloti notes and coin to settle legal payments and the loti is thus legal tender. It takes the form of token money or paper which has no commodity value but is acceptable as a medium of exchange.

The Central Bank operates accounts for banks to enable speedy settlement between themselves. It also operates accounts for certain international agencies. The Central Bank also fulfils its obligations as banker to the government by operating accounts and tellers' facilities for the government departments and agencies. Usually the Treasury will instruct the Central Bank to make payments on its behalf per letter with the designated signatories.

The Central Bank executes monetary policy via several monetary policy instruments such as interest rates, reserve requirements, open market operations, credit ceilings and moral suasion. The discount rate is rarely used as most commercial banks usually have excess liquidity.

The Central Bank, through the Bank Supervision Division, keeps an eye on banks to ensure they adhere to the set rules contained in the Financial Institutions Act.

1.4 Role of other private sector and public sector bodies

The Treasury’s role is to issue instructions authorising payments on behalf of the Government by the Central Bank.

2. SUMMARY INFORMATION ON PAYMENT MEDIA USED BY NON BANKS

2.1 Cash payments

Denominations of bank notes used are the M200, M100, M50, M20, M10 and M5 including coins (the loti and M2 coins).

2.2 Non-cash payments

2.2.1 Credit transfer

– Telegraphic transfer (S.W.I.F.T.) which is quite efficient.
– Mail transfer.

Users of these credit transfers are mainly the commercial banks and the Forex Division of the Central Bank. The Post Office also operates this facility.

2.2.2 Cheques

Only commercial banks are allowed to issue cheques. Their acceptability as a payment medium is quite good. Types of payments made by cheque are for goods and services, salaries, pensions, etc.

2.2.3 Direct debits

Commercial banks use direct debits for making payments on behalf of cheque account holders to pay stop orders, usually to insurance companies. These are normally quite efficient.

2.2.4 Payment cards

The card that is the most commonly used is the credit card and is acceptable everywhere and is used widely to make all types of payments.

The other card that is widely used is the Automatic Teller Machine (ATM) card. This card operates via a network known as Saswitch, which is an association of banks which have agreed to facilitate banking transactions amongst themselves.

The smooth operation of ATMs relies on the telecommunication systems being functional, as this is the mode of transmission. Transmission lines have recently been increased in order to improve their efficiency. Several ATMs exist in a few of the districts such as Butha-Buthe, Leribe and Roma and they operate normally for as long as the telecommunication lines are working normally.

2.2.5 Other payment instruments

Travellers' cheques are normally exchanged for the local currency at any commercial bank, but are generally acceptable, especially at hotels.

3. INTERBANK EXCHANGE AND SETTLEMENT SERVICES

3.1 General overview

Interbank transfers are effected through the Central Bank which operates as a clearing house for the banking system in Lesotho by participating in the exchange of cheques with the commercial banks on a daily basis.

Since the Central Bank holds settlement accounts for all the banks, the system of interbank exchange and settlement is quite efficient.

There is no legislation governing clearing and settlement, but clearing house rules exist which the commercial banks have to abide by. The Central Bank is responsible for ensuring that these rules are adhered to.

The main criteria for participation is that an institution should be a fully fledged commercial bank carrying out the business of banking.

The transactions handled are:

- Table clearing which involves preparation and accounting for outward clearing of cheques deposited at the Central Bank of Lesotho (CBL) but drawn on customers' accounts at commercial banks, and inward clearing of cheques deposited at commercial banks but drawn on customers' accounts at the Central Bank.
- Outward clearing cheques are put in an envelope for each commercial bank, and the total amount to be cleared is written on the surface of the envelope.
- Amounts to be cleared (in and out) are recorded in the CBL Clearing House Register. Similarly, each bank should record the amount cleared in and out in their respective registers. The difference between the amounts cleared in and the amounts cleared out is the net settlement figure and can be in favour or against a bank.
- The settlement figure is recorded in the clearing house register under, against or in favour.
- CBL Clearing House account will be credited if it is in favour or debited if it is against. The same will be done for individual banks depending on whether they are in favour or against.
- A batch will be prepared for the settlement entries.

Clearances normally start at 9.30 a.m. and end at about 10 a.m.

The clearing process is done manually, that is, using simple adding machines, on a clearing table. The exchange process takes place on the table.

Afterwards, settlement figures representing vouchers debits and credits must be accurately posted to the correct accounts. These postings are the source data for the production of banks' financial statements.

In the case of participant failure, losses are incurred in the form of interest lost had the bank been in favour, because this would mean that there is no outward clearance for that particular day.

Commercial banks rarely resort to borrowing from the Central Bank because most of them have excess liquidity.

3.2 Settlement

The net settlement is effected by debiting or crediting the accounts of affected Banks held with the Central Bank. So far the banks in Lesotho have been liquid and have not encountered any difficulty meeting their debt obligations.

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

International payments are effected through S.W.I.F.T. The foreign currencies traded in the country are US dollar, pound sterling, Swiss franc and others, but on a very small scale. The payments are processed directly to the payee and arrangements are made with foreign banks to process payments on their behalf. For example, the South African Reserve Bank and the Federal Reserve Bank of New York act in this capacity for the Central Bank of Lesotho because they have accounts with them.

The present situation with securities markets is that they operate with cash mostly or transfer of funds from commercial banks' call accounts in CBL.

5. THE ROLE OF THE CENTRAL BANK IN INTERBANK SETTLEMENT SYSTEMS

The Central Bank supervises interbank settlement system and chairs the Clearing Bankers monthly meetings at which issues of common interest are handled.

6. RECENT DEVELOPMENTS IN THE PAYMENT SYSTEM

There is no new system as yet. We are still operating manually.

7. INFRASTRUCTURE

The Lesotho Telecommunication Corporation has covered the whole of Lesotho with telephone facilities.

The whole of Lesotho is working on new roads in the rural areas. The roads in urban areas are good.

In urban areas electricity is available. The Lesotho Electricity Corporation is working on introducing group schemes in the rural areas.

Table 1

Basic statistical data

	1992	1993	1994	1995	1996
Population (millions)	1.89	1.95	2.00	2.06	2.11
GDP (millions of Maloti)	1.89	2.29	2.69	3.05	3.60
GDP per capita (thousands of Maloti)	241	244	267	284	312
Exchange rate (domestic vis-à-vis US$)					
year-end	*3.053*	*3.397*	*3.543*	*3.647*	*4.683*
average	*2.847*	*3.252*	*3.552*	*4.550*	*4.271*

Table 2

Settlement media used by banks

(in billions of Maloti)

	1992	1993	1994	1995	1996
Reserve balances held at central bank	19.29	24.63	3.57	4.91	5.64
Transferable deposits at other institutions	-	-	-	-	-
Accounts at the Post Office	-	-	-	-	-
Accounts at the Treasury	-	-	-	-	-
Required reserves	34.74	41.39	6.65	8.39	9.73
Institutions’ borrowing from central bank	-	-	-	-	-

Table 3

Banknotes and coin

	1992	1993	1994	1995	1996
Denomination of banknotes:					
200 notes	-	-	-	*6,355,800*	*3,651,600*
100 notes	-	-	-	*23,694,500*	*39,053,500*
50 notes	*14,550,250*	*24,602, 950*	*31,104,350*	*36,957,750*	*40,826,150*
20 notes	*19,320,600*	*19,761,900*	*25,081, 940*	*18,360,560*	*12,470,840*
10 notes	*8,383,070*	*6,905,770*	*12,427,390*	*6,824,780*	*5,610,790*
Denomination of coin:					
100 coins					
50 coins	*993,400*	*1,100,400*	*1,215,400*	*1,243,900*	*1,410,400*
25 coins	*538,300*	*627,350*	*668,050*	*674,650*	*780,900*
20 coins	*297,550*	*404,375*	*345,025*	*339,900*	*373,825*
5 coins	*397,389*	*461,789*	*499,589*	*533,689*	*589,889*
2 coins	*103,019*	*120,944*	*137,694*	*157,044*	*184,369*
1 coins	*92,097*	*1,030,770*	*119,817*	*139,737*	*160,317*
½ coins	*155,361*	*166,841*	*197,261*	*228,991*	*239,681*

Table 4

Institutional framework

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (millions of Maloti)
Central bank	1	-	-	-
Commercial banks	3	16	372	151
Public credit institutions	1	8	-	-
Post Office	1	47	-	-

THE PAYMENT SYSTEM IN MALAWI

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OVERVIEW OF THE NATIONAL PAYMENT SYSTEM IN MALAWI

The development of the payment system in Malawi has been influenced to a great extent by the structural reforms that have been implemented in the financial sector since the early 1980s. These reforms were initiated by the Malawi Government as part of the overall structural adjustment programmes the country has implemented since 1981 with the help of the International Monetary Fund and the World Bank. They are aimed at making the whole financial system more responsive and efficient so that it can adequately support the development requirements of the country by providing the required financial resources.

The financial system in Malawi, like in many developing countries, is relatively small, underdeveloped and dominated by a few financial institutions who offer a limited range of services. The economy is predominantly rural-based with only about 15% of the population living in cities and towns. Cash is the dominant mode of payment, but the authorities are now trying to promote the use of cashless instruments such as cheques. The importance of cash in payments processes is reflected in the share of (M1) in the aggregate money supply which averaged 53% between 1992 and 1996. Few people maintain bank accounts. Automated Teller Machines (ATM) facilities are offered on a small scale by one commercial bank (Commercial Bank of Malawi).

A number of factors have a limiting effect on the process of modernisation in Malawi. Some of these factors are:

- lack of commitment by the individual commercial banks to the modernisation programme due to high cost implications;
- low level of computerisation in the banking sector;
- legal and technological shortfalls; and
- differences in corporate strategies among banks.

Despite these problems, the Reserve Bank of Malawi has provided very strong leadership and is a major driving force in the change process. In addition, there is a National Payments Council (NPC) which provides a forum through which the central bank and the commercial banks adequately discuss issues on the modernisation programme and agree on common strategies. Further, the banking sector is relatively small and it has often been very easy for the central bank to bring all parties together and agree on certain issues. There is also global and regional pressure to modernise the payment system to be in line with international standards in order for Malawi to continue transacting with the rest of the world.

1. INSTITUTIONAL ASPECTS

1.1 General legal aspects

There is no specific legislation that currently governs the payment systems in Malawi, but the following legislation is relevant to the payment and clearing system in the country:

- Reserve Bank of Malawi Act 1989;
- Banking Act 1989;
- Bills of Exchange Act 1967;
- Bank Supervision Act 1989;
- Building Societies Act 1964;
- Capital Markets Development Act 1990.

The new Reserve Bank of Malawi Act and the Banking Act were amended in 1989. These changes were aimed at instituting necessary reforms in the financial system. The Reserve Bank of Malawi Act provides the legal basis for the existence of the central bank and its functions. It also provides the basis for the establishment of the Clearing House and confers upon the Reserve Bank of Malawi certain powers and duties connected with Banking, Currency and Coinage functions. The Banking Act provides for the regulation of the business of banking in Malawi conducted by commercial banks and other financial institutions and also provides a mandate to the Reserve Bank for the supervision of banking business. In addition to these, the Capital Market Development Act was also enacted in 1990.

This legislation is primarily aimed at laying adequate foundations for the development of a sound banking system and financial markets in Malawi as well as ensuring adequate supervisory provisions. Secondly, they were aimed at protecting the savings of the public and safeguarding the smooth functioning of the commercial banks through laid down rules and regulations for their operations. In particular, the Capital Markets Development Act laid a foundation upon which the Malawi Stock Exchange was established.

The Bills of Exchange Act primarily focuses on a few paper-based instruments such as cheques, promissory notes and bills of exchange. The Act sets out the rights and uses of different types of payment instruments. Apart from the above legislation, there is also no specific legal provision governing other "traditional" payment media or electronic payment systems. Relations between financial institutions, consumers and retailers are governed by private contracts.

1.2 Role of financial intermediaries that provide payment services

The financial system in Malawi, like in many developing countries is relatively small, underdeveloped and dominated by a few financial institutions that offer a limited range of services. For this reason, the banking sector is also relatively small. It comprises four commercial banks, three leasing companies, one building society, one savings bank and several finance houses with the central bank at the apex. These institutions provide financial services in the economy. There are also a number of foreign exchange dealers that offer foreign exchange services. These are governed by the Exchange Control (Forex Bureaux and Foreign Exchange Fixing Sessions) Regulation of 1994.

1.2.1 Commercial banks

There are no branches of foreign banks in Malawi and the four commercial banks are therefore all locally incorporated. The two largest banks, namely National Bank of Malawi Limited and Commercial Bank of Malawi Limited, have a wide network of branches including mobile and static agencies throughout the country. The other two banks, First Merchant Bank Limited and Finance Bank Malawi Limited, have established a small number of branches in the major cities. These banks offer a wide range of services to their customers which include payment facilities, loans, foreign exchange transactions, etc. The banks also facilitate payments for the acquisition of Government Treasury bills and Local Registered Stocks by their clients. These banks offer both corporate and retail banking services. Presently, the four commercial banks have a total number of 32 branches and 20 static agencies throughout the country.

Competition among the banks is very low with all of them offering almost similar limited products and the two big banks dominating the market.

1.2.2 Savings bank

The Malawi Savings Bank was licensed under the Banking Act 1989. Malawi Savings Bank is still using the Malawi Post Office network for most of its operations. It is therefore the only institution with a very wide network of branches penetrating all the rural areas of the country.

The Malawi Post Office Savings Bank was licensed under the Banking Act 1989, but currently a new Malawi Savings Bank Act is being drafted. The aim of this is to transform its operations and make it more competitive in the market. Currently, Malawi Savings Bank does not take part in Clearing House operations.

1.2.3 Development finance houses and leasing companies

There are also a number of development and leasing institutions that provide various services in the financial sector. Amongst these are INDE Fund Limited, Leasing and Finance Company, CBM Financial Services Limited, National Finance Company Limited, NICO Finance Company Limited, and Malawi Rural Finance Company Limited. These institutions provide financial support to various development activities such as manufacturing, tourism, construction, transport, education, agriculture and general trading. In particular, the Malawi Rural Finance Company provides loans to small and medium enterprises and mainly in the agriculture and transport sectors.

1.2.4 Foreign exchange bureaux

There are several authorised Foreign Exchange Bureaux operating in Malawi. These are allowed to conduct buying and selling of foreign currency notes and travellers' cheques. The Foreign Exchange Bureaux business was established under the Exchange Control (Forex Bureaux and Foreign Exchange Fixing Sessions) Regulation of 1994.

1.2.5 Other financial institutions

In addition to the institutions mentioned above, there are also a number of small financial institutions that provide credit facilities and advice to small businesses. Some of these institutions are Malawi Union of Savings Credit Cooperatives Limited (MUSCO), Development of Malawian Traders Trust (DEMATT), Small Enterprise Development Organisation of Malawi (SEDOM), Women World Banking (WWB), National Association of Business Women (NBW) and, National Association of Small and Medium Enterprises (NASME).

MUSCO is basically a savings institution which concentrates on encouraging people to form savings groups. The accumulated savings benefit members of the very same groups in terms of loans. DEMATT is mainly a business advisory body aimed primarily at assisting small businessmen in business planning and implementation.

Non-bank institutions are also represented in the payment media market although on a very small scale. Some of these are:

- companies issuing entertainment cards or luncheon vouchers such as hotels and tour operators;
- commercial companies issuing in-house cards or vouchers such as petrol companies like Oilcom which issue pre-funded vouchers for fuel procurement.

1.3 The roles of the central bank

The Reserve Bank of Malawi (RBM) is the country's central bank. It was established in July 1965, a year after the country's independence from its former colonial ruler, Britain. The Bank was established under the Reserve Bank of Malawi 1964 Act of Parliament. This Act was amended in 1989. The Bank's principal responsibilities and duties as stipulated in the Act are as follows:

- to issue legal tender currency in Malawi;
- to act as banker and adviser to the Government;

– to maintain external reserves so as to safeguard the international value of the Malawi currency;

– to implement measures designed to influence the money supply and the availability of credit, interest rates and exchange rates with the view to promoting economic growth, employment, stability in prices and a sustainable balance of payments position;

– to promote a sound financial structure in Malawi, including payment systems, clearing systems and adequate financial services;

– to promote a money and capital market in Malawi;

– to act as lender of last resort to the banking system;

– to supervise banks and other financial institutions;

– to collect economic data from the financial and other sectors for research and policy purposes; and

– to promote development in Malawi.

In the pursuance of the above functions, the Reserve Bank of Malawi is expected to act with due regard to the interest of the national economy and to the economic policies of the Government.

Distribution of notes and coins is done by the Reserve Bank of Malawi through its head office in Lilongwe as well as its branch in Blantyre in the Central and Southern Regions respectively. In the Northern Region where the central bank does not have its own branch, it maintains a sub-chest agreement with National Bank of Malawi whereby the central bank uses National Bank, Mzuzu Branch as its distribution centre.

As lender of last resort, the Reserve Bank of Malawi grants credit to commercial banks and other financial institutions in the case of severe liquidity problems. As banker to government, the RBM maintains Government accounts and accepts deposits. It also issues Government Treasury bills and Local Registered Stocks on behalf of the Government. The Reserve Bank of Malawi is not involved in retail activities.

The RBM provides the settlement mechanism among banks. Settlement and clearing services are provided at both its head office in Lilongwe and its branch in Blantyre. Malawi uses a netting out settlement system which is basically manual since clearing house operations have not yet been automated. The Bank also plays a leading role in setting standards for the financial system and assumes general responsibility for the smooth operation of payment systems. In this regard, the Reserve Bank issues Monetary Directives from time to time to regulate the financial market.

The Reserve Bank of Malawi is interested in the efficiency, reliability and integrity of the payments system which is vital for monetary policy operations. It is also a supervisory authority over commercial banks and other financial institutions including insurance companies.

In addition to maintaining government accounts, it also maintains accounts for commercial banks and some statutory bodies, foreign central banks, private commercial banks and international organisations like the IMF and the International Bank for Reconstruction and Development (IBRD).

1.4 The role of other private sector and public sector bodies

Several entities play various roles in the modernisation of the payment system in Malawi.

1.4.1 National Payments Council

The promotion of the national payments system in Malawi is done by the National Payments Council (NPC), a body which was established in 1993 under the IMF assisted modernisation programme of the financial sector. A consultancy study on the status of Malawi's national payments system was carried out in that year. The results of this study revealed that much progress could be made in the payments system if there was a specific body to initiate developments in the area. The original members of NPC included the Reserve Bank of Malawi, National Bank of Malawi, Commercial Bank of Malawi and the Government, represented by the Accountant General of the Ministry of Finance. Today membership has expanded to include the two new commercial banks, namely First Merchant Bank and Finance Bank of Malawi Limited. It also includes other financial institutions such as Finance Company of Malawi (FINCOM), New Building Society, Malawi Savings Bank, INDE Financial Services Limited and the Malawi Posts and Telecoms Corporations Department.

The NPC comprises the Governor of the Reserve Bank of Malawi and the Chief Executives of the member institutions. Below this council, there is a steering committee which deliberates issues before they are referred to the council and below this steering committee, there are several task teams which are usually set up by the steering committee to work on specific projects. Committees of this nature are usually disbanded once the purpose for which they were established has been accomplished.

1.4.2 Bankers Association of Malawi

Under the auspices and influence of NPC, in 1995, the commercial banks formed their own association known as the Bankers Association of Malawi. The main objective of this Association is to promote and protect matters of common interest among its members. The Bankers Association of Malawi works hand in hand with the NPC on all issues relating to payments and the modernisation programme.

2. SUMMARY INFORMATION ON PAYMENT MEDIA USED BY NON-BANKS

2.1 Cash payments

Cash has remained the most widely used payment medium in the consumer sector in Malawi. Approximately 75% of all business transactions are conducted through cash payments. In 1996 the currency in circulation in Malawi averaged MKW 1,398 billion, an increase of approximately 77% over the 1992 levels.

The unit of currency used in Malawi is the Malawi Kwacha (MKW) and comprises notes (Kwacha) and coins (Tambala). One hundred tambala equal one Malawi Kwacha. The banknotes are issued in six denominations of MKW 200, 100, 50, 20, 10, and 5 while the coins are in seven denominations of 1, 2, 5, 10, 20, 50 Tambala and MKW 1. Cash withdrawals are mainly made through the counters in banks. The proportion of notes in relation to the value of total cash in circulation amounted to approximately 96.5% at the end of 1996.

Although it is difficult to estimate the actual value or number of payments made using cash, the relatively underdeveloped banking system has meant that cash takes precedence in most business transactions. As indicated above, the use of ATM services for obtaining cash are offered on a very small scale by one commercial bank.

2.2 Non-cash payments

2.2.1 Credit transfers

Some payments are made through credit transfers using telegraphic transfers and mail transfers in Malawi. Under credit transfers, the order is given by the customer making the payment to his bank usually in paper form and handed in at his bank branch or sent by post. Credit transfer instructions are also normally used for payments of recurring nature such as rent. However, credit transfers constitute a small proportion of all payments in the country.

Telegraphic transfers are also another form of credit transfers which enables a payment to be made to a holder of a bank account at one branch from an account holder at a different branch of the same bank. Telegraphic transfers are used for both intrabank and interbank transactions validated through use of tested telex messages. Mail transfers are usually used for inter-branch payments.

For cross border transactions, banks are currently being encouraged to use S.W.I.F.T. facilities as opposed to telegraphic transfers in transferring funds because of their efficiency, relatively high security and low cost.

2.2.2 Cheques

Cheques are issued under the Bills of Exchange Act and they are the most frequently used cashless payment instruments. However, the use of cheques has not been popular due to a number of factors. Two of these factors are the long delays in cheque clearing periods and the large number of cheques issued on insufficiently funded accounts. The authorities through the NPC and the Bankers Association of Malawi are examining various ways through which usage of cheques could be promoted. One way through which this can be done is by encouraging banks to issue cheque guarantee cards. It is expected that by supplying creditworthy customers with cheque guarantee cards, financial institutions will promote the acceptability of cheques to creditors. These cards will serve as a guarantee that any cheque drawn will be honoured up to a specific amount whether or not the drawer’s bank account has sufficient cover.

In general terms, the volume of cheques has been increasing slowly each year. Unlike other cashless payment instruments, the cheque can be used for several successive payments, by means of endorsement. This practice is, however, relatively limited.

In addition to cheques issued by individual financial institutions, the Post Office also issues a special category of pre-funded instruments, known as the postal and money orders. These are payment orders sent by post which the recipient can cash at a post office or at a financial institution at which he is a customer. There is generally extensive use of the postal and money orders in Malawi because the Post Office has a very wide network extending to all rural areas. The Post Office also provides the only available network through which people are able to send cash to rural areas.

2.2.3 Direct debits

The direct debit facility exists to a small degree in Malawi. Like the standing order, its purpose is simply the execution of regular payments and the signing of agreements between suppliers and consumers such as payment for electricity, water and telephone bills or subscriptions. The direct debit is made out by the creditor (payee) and presented to his bank for collection from the debtor’s (payor’s) bank.

2.2.4 Payment cards

Credit cards and travel and entertainment cards. Credit card facilities are not yet available in Malawi. However, hotels and tour operators accept credit cards issued by international organisations such as American Express, Diners Club, Eurocard and VISA. These cards are usually used by foreign tourists. The Reserve Bank and the NPC are encouraging commercial banks to consider introducing these facilities. However, the success of this will depend on the introduction of an electronic payment infrastructure.

Pre-paid vouchers. Pre-paid vouchers issued by petrol companies and large retail outlets are also available in Malawi. These vouchers are used manually and are only controlled by their issuers.

ATM and POS networks. ATM services are currently offered by Commercial Bank on a stand-alone basis at a few branches. However, the other commercial banks will also be introducing these services in the near future. Point Of Sale (POS) card payments are yet to be introduced and the commercial banks in Malawi are planning to install these facilities at large retail outlets for its customers.

3. PRESENT INTERBANK EXCHANGE AND SETTLEMENT SERVICES

3.1 General overview

Interbank exchange and settlement services are offered by the Reserve Bank of Malawi through the clearing house. Malawi has a net settlement system. However, plans are under way to introduce Real Time Gross Settlement (RTGS) in the long term. There is no specific law relating to payment, clearing and settlement services, but these functions are currently carried out under the Reserve Bank of Malawi Act. Clearing House operations are conducted by the Reserve Bank at both its Lilongwe and Blantyre offices.

Clearing is done twice a day at 11.30 and 13.30 from Monday to Friday. The 11.30 clearing is mainly for exchange of items by banks and actual settlement is done at 13.30. During peak periods like month end, an extra clearing period is usually arranged at 15.00.

Malawi has not yet automated its clearing house operations and therefore the clearing system involves the physical exchange of paper-based payment instruments such as cheques, clearance vouchers and mail transfers. Interbank financial market transactions are also processed by the Reserve Bank through the accounts of the commercial banks maintained by the Reserve Bank. Interbank transfers are normally effected either by issue of a letter to the Reserve Bank from the bank requesting the transfer of funds from its account authorising the Reserve Bank to debit the account and credit the account of the borrowing bank specified in the instruction. Membership of the Clearing House is only extended to deposit taking institutions licensed under the Banking Act and the Reserve Bank of Malawi Act.

3.2 Structure, operation and administration

3.2.1 Major legislation, regulation and policies

There is only one exchange and settlement system in Malawi. As indicated above, there is no specific legislation regulating the payments and clearing system in Malawi. The rules and regulations governing the Clearing House operations are agreed between the Reserve Bank and the participating institutions. The Reserve Bank plays the role of inspector of the Clearing House in order to safeguard the smooth functioning of the system.

3.2.2 Participants in the system

Currently, there are five members in the Clearing House in Malawi. These are:

– Reserve Bank of Malawi (Member and Inspector of the Clearing House);

– National Bank of Malawi (Member);

– Commercial Bank of Malawi (Member);

– First Merchant Bank Ltd. (Member);

– Finance Bank Malawi Ltd. (Member).

However, other financial institutions participate indirectly through the four clearing banks. Each bank is held responsible for the transactions of the indirect participants which it represents at the Clearing House.

3.2.3 Types of transactions handled

Since Clearing House operations are done manually, all types of paper-based payment instruments can be processed. At present, only cheques, clearing vouchers and mail transfers are handled.

3.2.4 Operations of the transfer system

As indicated above, clearing rules provide for two clearing times each business day at 11.30 and 13.30. The morning session is mainly for exchange of items among members while the afternoon session is for the actual settlement of financial obligations among the participating banks. At month ends, extra clearing time is normally provided at 15.00. This extra period is provided to avoid the banks having to hold a huge amount of uncleared effects.

Punctuality in the Clearing House is emphasised. Members reporting late for clearing may be fined. Once the transfer documents are exchanged during the morning session, each member separately classifies the items into either claims against his bank and in favour of another bank or against another bank and in favour of his bank. During the afternoon session, each member then calls and records the total amount received from and delivered to the other banks. The inspector of clearing then tallies all the figures and the settlement figure is arrived at by netting out the total value of items received and that of the total items delivered. Each member is required to certify his settlement figure by signing a clearing house certificate.

The actual settlement takes place in the form of passing settlement entries into the accounts of the member banks held by the Reserve Bank of Malawi. Once the settlement figures have been certified and the necessary book entries passed, the transactions cannot be revoked. Finality is thus provided at that stage.

For up-country cheques, the maximum clearing period is five days. Currently each bank uses its own courier system to transport its country cheques to the clearing centres of Lilongwe and Blantyre.

3.2.5 Transaction processing environment

At present, the clearing process is purely manual involving the physical exchange of items among clearing house members.

3.2.6 Settlement procedures

The Reserve Bank of Malawi is the only settlement agent. Finality of Clearing House operations is at the end of the day when the net financial obligation of each individual bank is entered in their respective accounts. Since this is not an online process, the banks are unable to obtain their treasury positions until the next business day when end-of-day processing by the Reserve Bank is completed. Notification of each bank's position is done by telephone every morning of each business day.

3.2.7 Pricing policies

Since there are no sophisticated clearing and settlement facilities in the Malawi Clearing House, the small costs arising from the clearing house operations are borne by the Reserve Bank. Processing of end-of-day operations is done by the bank's computer system using the bank's own personnel. Telephone bills arising from confirmation of bankers' positions are also borne by the bank. There are no transaction fees.

3.2.8 Credit and liquidity risks

All banks are required to maintain adequate balances in their main accounts held at the central bank at the end of each business day. The idea of this is to reduce any credit risks. However, when a bank's clearing account is overdrawn after settlement, it is expected to borrow funds from the interbank market. If it fails to secure funds from the interbank market, the bank can resort to the discount window facility at the central bank. Borrowing from the central bank is usually on the basis of collateral whose value must always be equal or higher than the value of the loan.

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

4.1 Exchange and settlement systems for international transactions

International payments are effected through traditional correspondent banking channels maintained with all major trading partners. All existing exchange controls have been liberalised except on capital transfers.

Payment instructions are either received or sent through tested telex or S.W.I.F.T. messages to and from foreign banks. However, the Reserve Bank of Malawi is encouraging commercial banks to use S.W.I.F.T. because of high security and low cost considerations. Documentary letters of credit are also used, particularly for big contracts.

The major commercial banks also maintain international correspondent business. In the context of international payments made face-to-face, the most commonly used payment instruments are traveller's cheques and to a small degree banknotes and bank drafts.

4.2 Exchange and settlement systems for securities transactions

The only securities instruments traded in Malawi are Malawi Government Treasury Bills and Local Registered Stocks. These instruments are issued by the Reserve Bank of Malawi as an agent of the Malawi Government.

5. THE ROLE OF THE CENTRAL BANK IN INTERBANK SYSTEMS

5.1 General responsibilities

5.1.1 Statutory responsibilities

As mentioned above, there is no specific legislation for the clearing and settlement system in Malawi, but by virtue of its responsibilities as described in the Reserve Bank of Malawi Act, the Bank plays an active role in both clearing and settlement functions and the development and modernisation programmes of the payment system in Malawi.

In clearing and settlement functions, the Reserve Bank plays the role of inspector of the clearing house and provides office accommodation for this purpose and also supervises and confirms all settlements among banks.

It also maintains the settlement accounts of commercial banks through which interbank settlement obligations are met. It also accepts deposits from commercial banks and may make current account advances and short-term loans to them in its role as lender of last resort through these settlement accounts.

The Reserve Bank also processes interbank loans by debiting and crediting the main accounts of the concerned parties on instruction from the account holders.

The Reserve Bank is also responsible for the supervision of the commercial banks. In Malawi, the supervisory authority of the Reserve Bank also extends to all other financial institutions including the insurance industry. In these supervisory duties, which are carried out within the general framework of oversight, the Bank's major concerns are to ensure that the banks are financially sound, well managed and not posing a threat to depositors' interests.

5.1.2 Establishment of clearing rules

Through the initiative of the Reserve Bank, Clearing House rules were established. However, any amendment of these rules now requires the involvement of the Bankers Association of Malawi and the National Payments Council. The Reserve Bank also regularly issues Monetary Directives for monetary policy purposes.

5.2 Provision of settlement and credit facilities

The role of the Reserve Bank in the settlement process of interbank payments has already been covered above. It is the aim of the Reserve Bank of Malawi that payments are settled in a coherent way without any risk.

The Reserve Bank provides an overdraft facility to banks taking part in clearing and settlement functions. The conditions for usage of these credit facilities are determined by monetary policy considerations.

As regards all clearing operations, the Reserve Bank requires that each financial institution must ensure that its credit balance is sufficiently large to allow its transfer orders to be processed. If necessary, banks may borrow from and lend to one another to acquire funds to initiate irrevocable transactions during the day.

All commercial banks in Malawi are by law subjected to liquidity reserve requirements and therefore hold balances in the Liquidity Reserve Requirement accounts with the Reserve Bank of Malawi. Currently, the Liquidity Reserve Requirement is calculated at 35% of the total deposit base of a bank for the preceding month. The Reserve Bank imposes heavy penalties for non-compliance with the liquidity reserve requirement.

In a further effort to tighten money market conditions, the reserve requirement base was, in February 1996, redefined to include government deposits with the commercial banks.

As mentioned above, the Reserve Bank also provides all other facilities relating to clearing to all banks and assumes the role of the Inspector of the Clearing House. The bank also ensures that all commercial banks' overdrawn accounts are cleared before the end of each business day. Currently, the Reserve Bank is not charging the commercial banks for the clearing services.

5.3 Monetary policy and the payment system

The principal objective of the Reserve Bank of Malawi's monetary policy is price stability which is mainly guided by targeted growth and exchange rates. Malawi liberalised its economy and the exchange rate of the Malawi Kwacha is therefore determined by economic forces. Previously, the Malawi Kwacha was linked to a basket of seven currencies comprising the US dollar, pound sterling, Deutsche Mark, rand, yen, french franc and dutch guilder, from 17th January 1984 to 1994. On 7th February 1994, the Malawi Kwacha was floated. The first fixing session was on 18th February 1994 on which US$ 1.00 settled on MKW 6.51.

With regard to interest rates, the Reserve Bank of Malawi announces and provides its official discount rate, thereby giving clear indications on the desired movement of short-term interest rates. In order to achieve desired interest rates, the Reserve Bank is guided by the economic growth targets that are set at the beginning of each financial year. Control of inflation is one major concern of monetary policy in Malawi. This aims at ensuring that the level of inflation is consistent with growth objectives.

To change the bank rate the Reserve Bank is guided by the average of six auctions of the 91-day Treasury bills rate. However, the bank rate is only adjusted if there is a continuous change in the trend of the Treasury bills rate either downwards or upwards. This helps to ensure that changes in bank rate are really determined by market forces.

In monitoring money supply in order to bring the overall market position to the desired levels of surplus or deficit, the Reserve Bank uses Open Market Operations in order to mop up excess liquidity or increase money supply in the economy.

Although exchange controls have been liberalised, Malawi still maintains exchange control on capital flows. Accordingly, residents of Malawi have to seek exchange control approval for any external direct or portfolio investments. Similarly, all foreign capital inflows for direct or portfolio investments have to be registered with the Reserve Bank of Malawi.

5.4 Risk reduction measures

The Reserve Bank of Malawi through the NPC has managed to reduce the clearing period for cheques. This move was aimed at reducing the liquidity risk in the payment system usually associated with delays in cheque clearing. In order to avoid the systemic and credit risk that the banks may be exposed to in the Clearing House, all members of the clearing system are requested to maintain adequate credit balances in their clearing accounts with the Reserve Bank.

The banks have also agreed to establish a fraud investigation unit to be responsible for investigating all fraud cases in the banking industry and also prosecute the cases in court. This unit will be established on a cost sharing basis among all members in the financial system.

6. RECENT DEVELOPMENTS IN THE PAYMENT SYSTEM

6.1 General overview

6.1.1 NPC plan of action for modernisation of the payments system in Malawi

Malawi has embarked on a comprehensive programme to re-examine its payment system infrastructure. Under this, the NPC has drawn a comprehensive payments system modernisation plan of action. Some legislation will be reviewed under this plan of action.

There are also plans to develop new legislation for areas which are not currently covered. One legislation to be reviewed is the Bills of Exchange Act. There are also plans to review the Building Societies Act. The new legislation under consideration is the Payment System, Settlement and Clearing Act, Money Laundering Act and Securities Act. Drafting of the Money Laundering Act and the Securities Act has already been completed and awaiting parliamentary debate.

Under this modernisation programme there are also plans to introduce more cashless payment instruments such as smart cards, debit/credit cards, POS and others. In order to promote the use of cheques and restore the public's confidence in cheques as acceptable means of payment, the banks have agreed to introduce cheque guarantee cards.

6.2 Other developments

6.2.1 Automation of clearing house system

Malawi has a long-term strategy to eventually automate its Clearing House operations. Already plans are under way to link the commercial banks and the central bank. Some consultants have already been approached to carry out a feasibility study on this project.

6.2.2 MICR cheque processing standards

Banks in Malawi have agreed to introduce modern cheque processing standards by using MICR technology. This move is in line with the current payments system modernisation plan of action.

6.2.3 Establishment of data bank

In order to share information on issues of mutual interest, banks have also agreed to establish a data bank. Through this data bank, banks will share such information as list of bad customers as well as fraud cases. It is hoped that through this banks will be able to avoid certain risks.

6.2.4 Review of Clearing House rules

As mentioned above, the current Clearing House rules were drawn up by the Reserve Bank. It is realised by the central bank that the commercial banks through the Bankers Association of Malawi should be fully involved in the formulation of these rules and should actually take ownership of the rules. In this way the Association will be able to punish any member who contravenes the rules. It is very difficult at the moment to punish any member who contravenes the current rules because they are simply viewed as Reserve Bank rules imposed on the members. All these measures are aimed at creating an environment where cashless payment instruments will gain acceptability and reduce excessive use of cash, thereby establishing an efficient system on the transfer of value through the payment system.

7. INFRASTRUCTURE

7.1 Telecommunications infrastructure

The Malawi Posts and Telecoms Corporation (MPTC), formerly the Government Department of Posts and Telecommunications within the Ministry of Transport and Communications until 1995, is mainly responsible for the provision of the telecommunications infrastructure in Malawi. Private companies have not yet been licensed to provide telecommunication services.

The MPTC has a wide network of telecommunication facilities throughout the country. It is currently putting up new exchange centres in the urban areas in order to improve telecommunication facilities. The NPC has also formed a special subcommittee to constantly review the requirements of the banking industry together with MPTC.

7.2 Availability of electricity

The Electricity Supply Commission of Malawi (ESCOM) is the sole supplier of electrical power in Malawi. It has a wide distribution network of electricity throughout the country. Most of the urban centres are adequately supplied with electricity. Currently, there is a project on Rural Electrification, funded by the World Bank, the African Development Bank and the Malawi Government, which is aimed at bringing electricity to most of the rural areas.

ESCOM is putting up more new hydroelectric power stations in order to boost its generating capacity.

7.3 Road infrastructure

Malawi has a very good road network connecting the major cities and towns. Malawi also has a good road network in the rural areas which has been constructed under the Rural Integrated Development Programme. Since Malawi is mainly an agricultural economy, the improvement of roads in the rural areas has been given priority in order to facilitate the transportation of agricultural commodities to the markets.

The good road network between cities has helped to speed up the movement of cheques from one corner of the country to another and thereby speeding up the clearing of cheques. Recently, the cheque clearing period in Malawi has been reduced from as long as 21 days to a maximum period of 5 days.

7.4 Economic reforms

Economic reforms started in the early 1980s through the World Bank and IMF sponsored Structural Adjustment Programmes. Both the Government and the central bank have played active roles in these economic reforms. The reforms have mainly aimed at rejuvenating the private sector in order to turn it into an engine of economic growth.

The impact of these reforms on the country's financial sector has been positive. Malawi has witnessed the establishment of new banks and several financial institutions in an industry which was dominated by a few institutions before. The birth of these new institutions has increased competition, which in turn has helped to improve efficiency in the country's payments system.

Table 1

Basic statistical data

	1992	1993	1994	1995	1996
Population (millions)	9.4	9.7	10.0	10.34	10.70
GDP (US$ millions)	1,857.71	2,069.86	1,286.80	1,422.70	2,201.70
GDP per capita (US$)	182.85	226.71	128.31	142.21	205.5
Exchange rate (domestic vis-à-vis USD)					
year end	*4.3956*	*4.4656*	*15.2986*	*15.3048*	*15.3224*
average	*3.6013*	*4.4132*	*8.8476*	*15.2839*	*15.2771*

Table 2

Settlement media used by non-banks

(at year-end, not seasonally adjusted, in billions of Kwacha)

	1992	1993	1994	1995	1996
Notes and coin	65.93	92.75	40.83	64.53	79.85
Transferable deposits	123.53	181.00	65.60	118.45	184.15
Narrow money supply (M1)	153.71	206.05	92.43	135.48	170.44
Broad money supply (M3)	277.24	387.05	158.02	253.93	354.59

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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;

– Stock Exchange of Mauritius.

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 business of taking deposits by non-banks is governed by section 13A of the Banking Act 1988. Insurance companies are regulated by the provisions of the Insurance Act 1987. Non-bank offshore entities are governed by Mauritius Offshore Business Activities Act 1992, International Financial Companies Act 1994 and the Offshore Trusts Act 1992. Stock Exchange activities are governed by the Stock Exchange Act 1989. Some non-bank financial institutions, namely the Mauritius Leasing Co. Ltd, Mauritius Housing Co. Ltd, SBM Lease Ltd and General Leasing Co. Ltd, Finlease Co. Ltd and SICOM Ltd have been authorised under section 13A of the Banking Act to raise deposits from the public to finance their specific activities.

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:

Notes		**Coin**	
Rs	10	Cent	1
Rs	50	Cents	5
Rs	100	Cents	20
Rs	200	Cents	50
Rs	500	Rupee	1
Rs	1,000	Rupees	5
		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:

Money Supply	M1	45.8%,
	M2	6.6%

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

	1992	1993	1994	1995	1996
Population (millions) (mid-year)	1.084	1.097	1.113	1.122	1.134
GDP (in millions of Rupees)	49.633	56.57	63.043	69.082	77.299
GDP per capita (thousands of Rupees)	45.77	51.554	56.662	61.564	68.192
Exchange rate (domestic vis-à-vis USD)					
year end	*16.998*	*18.656*	*17.863*	*17.664*	*17.972*
average	*15.563*	*17.648*	*17.960*	*17.386*	*17.948*

Table 2

Settlement media used by non-banks

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

	1992	1993	1994	1995	1996
Notes and coin	4.81	5.3	5.56	6.03	6.62
Transferable deposits	3.68	3.19	4.44	4.69	4.77
Narrow money supply (M1)	7.51	7.43	8.87	9.58	9.83
Broad money supply (M3)	34.7	40.64	45.65	54.18	58.26

Table 3

Settlement media used by banks

(in millions of Rupees)

	1992	1993	1994	1995	1996
Reserve balances held at central bank	1.95	2.68	2.84	3.56	2.5
Transferable deposits at other institutions	0.007	0.006	0.013	0.046	0.006
Accounts at the Post Office	-	-	-	-	-
Accounts at the Treasury	-	-	-	-	-
Required reserves	3.11	3.63	4.07	4.94	4.14
Institutions' borrowing from central bank	0.05	0.09	0.16	0.55	0

Table 4

Banknotes and coin

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

	1992	1993	1994	1995	1996
Total banknotes and coin in circulation	4809.4	5304.5	5558.4	6033	6617.2
Denomination of banknotes:					
1000 notes	1251.30	1503.70	1623.20	1740.90	2064.40
500 notes	1033.00	1315.30	1470.90	1729.70	1890.00
200 notes	751.40	878.80	878.80	933.90	1025.50
100 notes	1142.50	1029.70	1020.90	1052.90	1057.90
50 notes	283.70	228.40	207.10	199.70	188.80
20 notes	13.50	7.80	5.60	3.60	2.20
10 notes	175.30	172.10	173.00	183.90	188.90
5 notes	9.10	6.80	6.00	5.70	5.40
Coin					
10 coins	0.20	0.20	0.20	0.20	0.20
5 coins	35.00	40.70	44.60	48.50	53.10
1 coins	46.20	50.00	54.40	57.20	61.20
½ coins	11.10	12.00	12.70	13.30	13.90
1/4 coins	6.50	6.50	6.50	6.50	6.50
1/5 coins	7.20	8.80	10.30	12.00	13.50
1/10 coins	2.50	2.50	2.50	2.50	2.50
1/20 coins	2.20	2.50	2.70	3.00	3.30
1/50 coins	0.30	0.30	0.30	0.30	0.30
1/100 coins	0.20	0.20	0.20	0.20	0.20
Banknotes and coin held by credit institutions*	989.3	1073.5	1146.28	1185.83	1566.41
Total banknotes and coin outside credit institutions	3820.1	4230.88	4412.23	4847.18	5050.76
Banknotes held in overseas territories	-	-	-	-	-

*commercial banks only

Table 5

Institutional framework

(as at 30th September 1997)

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

Table 6

Cash dispensers, ATMs and EFTPOS terminals

	1992	1993	1994	1995	1996
Cash dispensers and ATMs:					
Number of networks	*2*	*2*	*3*	*3*	*3*
Number of machines	*38*	*48*	*78*	*105*	*130*
Volume of transactions (millions)	*0.94*	*1.29*	*2.00*	*4.23*	*6.66*
Value of transactions (billions of Rupees)	*0.74*	*1.25*	*2.14*	*3.09*	*4.22*
EFTPOS					
Number of networks	*1851*	*2059*	*2448*	*2753*	*3011*
Number of machines	*291*	*642*	*882*	*1212*	*1538*
Volume of transactions (millions)	*0.39*	*0.48*	*0.83*	*1.37*	*1.75*
Value of transactions (billions of Rupees)	*0.61*	*0.86*	*1.31*	*1.96*	*2.93*

Table 7

Number of payment cards in circulation

(in thousands)

	1992	1993	1994	1995	1996
Cards with a cash function	67.93	85.1	124.97	195.47	267.15
Cards with a debit function	10.00	20.00	37.00	71.69	125.56
Cards with a credit function	26.06	36.29	46.53	56.36	65.65
Cards with a cheque guarantee function	-	-	-	-	-
Retailer cards	-	-	-	-	300

Table 8

Transfer instructions handled by securities settlement systems: volume of transactions

	1992	1993	1994	1995	1996
Shares (Stock Exchange of Mauritius)	-	-	*46,000*	*156,000*	*652,000*

Table 9

Transfer instructions handled by securities settlement systems: value of transactions

(in billions of Rupees)

	1992	1993	1994	1995	1996
Shares (Stock Exchange of Mauritius)	-	-	*0.04*	*0.18*	*0.69*

Table 10

Indicators of use of various cashless payment instruments volume of transactions

(in millions)

Instruments	1992	1993	1994	1995	1996
Cheques issued	4.32	4.94	5.76	12.01	12.9
Payments by debit and credit cards	0.38	0.49	0.76	1.06	1.37
Paper-based credit transfers	0.42	0.45	0.51	0.57	0.64
Paperless credit transfers	0.55	0.59	0.67	0.79	1.61
customer initiated	-	-	-	-	-
interbank/large-value	-	-	-	-	-
direct credits	-	-	-	-	-
Direct debits	-	0	0	0	0.34
Other	-	-	-	-	-
Total	-	-	-	-	-

Table 11

Indicators of use of various cashless payment instruments value of transactions

(in billions of Rupees)

Instruments	1992	1993	1994	1995	1996
Cheques issued	191.53	201.35	229.68	250.78	275.15
Payments by debit and credit cards	0.32	0.47	0.64	0.68	1.19
Paper-based credit transfers	1.5	1.64	2.08	1.98	2.51
Paperless credit transfers	1.95	2.25	2.63	3.42	7.96
customer initiated	-	-	-	-	-
interbank/large-value	-	-	-	-	-
direct credits	-	-	-	-	-
Direct debits	-	0	0.01	0.04	0.25
Other	-	-	-	-	-
Total	-	-	-	-	--

Table 12

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

	1992	1993	1994	1995	1996
Members					
of which: live	*2*	*2*	*2*	*2*	*2*
Members					
of *which*: live	*2*	*2*	*2*	*4*	*6*
Participants					
of which: live	-	-	-	-	-
Total users					
of which: live	-	-	-	-	-

Table 13

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

	1992	1993	1994	1995	1996
Total messages sent	-	175.094	197.053	185.032	196.221
of which:					
category I	-	*9.902*	*60.581*	*77.007*	*105.528*
category II	-	*5.175*	*38.801*	*44.997*	*53.804*
Total messages received	-	154.634	174.091	163.280	182.228
of which:					
category I	-	*7.289*	*64.062*	*77.147*	*94.888*
category II	-	*3.453*	*7.697*	*9.331*	*12.236*

THE PAYMENT SYSTEM IN MOZAMBIQUE

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OVERVIEW OF THE NATIONAL PAYMENT SYSTEM IN MOZAMBIQUE

The Mozambican payment system is undergoing a process of rapid transformation as a result of the overall changes occurring in the economy, namely the transition from a centrally planned economy to a market oriented one. Payment system reform originated in 1987 from IMF recommendations and started in 1994 under the advice of senior Bank of Brazil officers.

The Mozambican Payment System Project involves a process of rapid modernisation. It involves a senior consultant from the Bank of Brazil, the Banco de Mozambique (the Central Bank), commercial banks and other legally authorised financial institutions as well as air and road transportation companies.

The overall Payment System Project is composed of a number of sub-projects, namely:

– the New Regulation of the Settlement Service subsystem, which includes the review of the deadlines for the return of unpaid cheques and other instruments, the utilisation of Return Advice Communications and the set up of the Support Group on Payment Issues;

– the Transport of Settling Documents (payments) subsystem, which includes transportation companies and the appropriate mechanism for costs sharing by the banking system;

– the Overdraft Accounts Database (credit information) subsystem, including the respective regulation;

– the Database for the Management Information System, which includes Operations and Participating Financial Institutions codification.

All the sub-projects outlined above are now concluded. The Settlement Service can now centralise more than 95% of the settlement results in the Central Bank headquarters. The steps towards this achievement included the opening of the Central Bank’s branches in the Central and Northern regions of the country thus enabling regional centralisation of the clearing results and thus the centralisation within the head quarters in a day plus one. The settlement is not only limited to national currency, but recently approval has been given to use the same process and regulation for foreign currency. The settlement process does not exceed four working days.

The clearing periods have been cut from a maximum of 60 days to a maximum of 25 days. However, it is important to note that more than 80% of the settlement is made in between two and four working days. Recent developments indicate that the above period will be decreased much more. The recent privatisation of all the state banks and the expected modernisation of their operations as a consequence will play a fundamental role in the process.

The next phase of the modernisation process includes the automatisation of the Settlement System and entails the Banking System adopting standardisation of bank cheques.

1. INSTITUTIONAL ASPECTS

1.1 General legal aspects

The general legal aspects of payment systems in Mozambique can be summarised under the following legal framework:

– the major law, the “Organic Law of the Banco de Mozambique” (Law 1/92 of 03.01.92), which gives the legal authority to the Bank to act and behave as a central bank;

– the bylaw 43/94 of 28.12.89 which regulates financial intermediation;

- the bylaws 44/94 of 12.12.94, and 139/79 of 18.05.79 both of which introduce the regulation of “Financial Location Societies”;
- the bylaw 45/94 of 12.10.94, which regulates the “Financial Location Contracts”;
- the bylaw 46/94 of 12.10.94, which sets the regulation of Exchange Bureaux;
- the bylaw 20/90 of 18.09.90, that institutionalises the Secondary Exchange Market;
- the Cheque Act - approved by the Geneva Convention in 19.03.1931, and ratified in Mozambique (10.05.1934) and then published on 21.03.1934;
- uniform Law of Bonds, approved by Geneva Convention by the bylaw 23.721 of 29.03.1934, and ratified in Mozambique (10.05.34) and then published (21.06.34).

1.2 Role of financial intermediaries that provide payment services

Prior to the modernisation project that took place in 1992 with the constitution of Banco de Mozambique as a Central Bank, financial intermediaries comprised three major commercial banks whose function was to provide payments for economic agents; two of these banks were state owned. Since then a number of banks are emerging and expanding rapidly all over the country. These include Commercial, Investments, Credit Cooperatives, Leasing and Financial Location Institutions. All of these institutions are regulated by Supervision Department of the Central Bank. The Post Office does not yet play a role in the payment system, though with the termination of the civil war it is expected to resume such activities in the near future.

1.3 The role of the central bank

Under the Banco de Mozambique Organic Law the role of the central bank is to guarantee the supply of currency in the form of banknotes and coins as well as to regulate the volume of currency necessary for the economy according to the needs of economic agents.

The obligation of the bank, as stated in the Organic Law, is to provide the public with notes and coins in good condition for circulation. According to the Law the right of issuing commemorative coins belongs to the government, with the central bank as a consultant regarding the technical aspects.

Demand deposits and call deposits for individuals are kept in the commercial banks and credit institutions. These institutions in turn keep their reserves (both free and compulsory) in the central bank for clearing and settlement and custodial purposes, as well as for monetary and financial policy purposes.

The Central Bank, according to the aforementioned Organic Law, acts as a State banker thereby providing specialised services such as keeping deposits and processing daily payments.

Concerning the execution of monetary and financial policies, the Law establishes that the Bank, in so doing, must regulate the money market as well as supervising credit institutions to guarantee harmony with monetary and financial policies. It is up to the Bank to establish the quantitative and qualitative limits of credit as well as manipulation of the rate of rediscount.

The supervision of banking is also determined by the Law and deals with the application and the authorisation for the establishment of financial and credit institutions, their expansion, as well as the inspections of their activities so as to guarantee and safeguard banking activities. In this regard, financial and credit institutions must regularly submit reports for analysis.

1.4 The role of other institutions in the payment system

The payment system in Mozambique, according to the aforementioned Law, falls solely under the banking system, which is composed of the Central Bank and financial and credit institutions. Due to the fact that the banking system is still in an early stage of development, associations with other institutions do not, as yet, exist.

2. SUMMARY INFORMATION ON PAYMENT MEDIA USED BY NON-BANKS

2.1 Cash payments

Household and other economic agents’ transactions in Mozambique are mainly made in cash. Acceptance of cheques and other payment instruments is still marginal. Some modern credit institutions have struggled to introduce new modern instruments for payments, such as debit cards through electronic networks. Its important to note that these new products are not the objective of Interbank Settlement Service available at the Central Bank.

It is expected that soon the Settlement System in Mozambique will be modernised, through the innovations already taking place. This is the reason for the introduction of a Risk Management Centre and Database of Illegal Cheque Issuers in the Central Bank, as well as the Project for the Electronic Settlement System.

Given the high rates of inflation that characterised the last five years, the portfolio of currency in circulation has changed constantly. Before 1992 the banknotes in circulation were of six denominations: Mozambique Meticais, MZM 10,000; 5,000; 1,000; 500; 100; 50 and prior to 1993 the coins were of seven denominations: MZM 50; 20; 10; 5; 2.50; 1; 0.50.

In 1994 for the reasons stated above, a new portfolio of coins was introduced composed of three denominations: MZM 1,000; 500; 100. In 1995 a further portfolio of new banknotes was issued comprising two denominations MZM 100,000 and 50,000.

When new denominations of banknotes are issued, the old ones of low denominations are withdrawn by the monetary authority. It is therefore important to note that the small denominations, both banknotes and coins, are rarely utilised in transactions. The strategy of the Central Bank to save costs related to the issuing process is to constantly withdraw the low denomination banknotes and replace them with coins whose life expectancy is high.

The banknotes in circulation amount to 95% of the total cash, while total cash accounts for over 65% of the broad money in circulation. Broad money in Mozambique is basically composed of banknotes and coins in circulation and bank deposits, both demand and call deposits. Hence the broad money is equivalent to M2, though recent developments point to the emergence of new financial products with the establishment of open market and stock exchange.

2.2 Non-cash payments

2.2.1 Credit transfers

The order to transfer funds is given by the customer after completing the application form or providing written instructions. Customers also provide standing orders to make regular transfers.

International credit transfers are made via the S.W.I.F.T. network using correspondents while local transfers, within the city of Maputo, are via an interbank exchange of payment orders through the Clearing House.

For the most part, credit transfers are used for payments made by corporate customers and individuals. In all cases handling and telex charges are recovered.

The international transfers system currently used has proved both efficient and effective, in that funds are received by the beneficiary within two days. The same time frame applies to local credit transfers in accordance with the Clearing House Regulations.

2.2.2 Cheques

Cheques are widely used as a payment medium in Mozambique. Bank customers continue to show a preference for cheques and at the present time the volume of cheques issued far exceeds payments effected by credit transfer.

Cheques are supplied to all clients. As a payment instrument, cheques are used by customers for the settlement of bills, withdrawals of cash, transfers between accounts, etc.

Cheques could be used for successive payments by means of endorsement, but due to attempts at fraud, restrictions are in place. Hence banks will certify a cheque and guarantee the payment providing the customer has sufficient funds in the account.

At the present time, banks do not supply cheque guarantee cards. With the rapid developments and transformation taking place in banking activity, it is expected that they will be introduced at some future stage which will further improve the acceptability of cheques.

2.2.3 Direct debits

A direct debit system has not yet been introduced in Mozambique.

2.2.4 Payment cards

Some modernised banks are introducing a payment cards system and also ATM machines for use throughout the country, as the communications and telecommunications infrastructure improves.

2.2.5 Other payment instruments

Travellers cheques are another form of payment instrument, mainly used by visitors to the country. They bring with them travellers' cheques because no ATM facilities exist in Mozambique for international credit cards. These cheques are used for settlement of hotel bills in foreign currency and conversion into local currency for other personal expenses.

3. PRESENT INTERBANK EXCHANGE AND SETTLEMENT CIRCUITS

3.1 General overview

The Clearing House, based within the Central Bank, is used for the settlement of all interbank transfers, e.g. cheques drawn on banks, credit transfers and Treasury bills. The function of the Clearing House is to facilitate the settlement of payments between participating credit institutions, all of whom maintain accounts in the various currencies at the Central Bank. The rules of the Clearing House insist that exchange and clearing are completed two times a day as follows:

– for local currency, twice a day, in the afternoon;

– a technical arrangement for “settlement” of foreign currency in order to shorten the clearing periods.

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

4.1 Exchange and settlement systems for international transactions

The flow of foreign exchange is regulated by specific legislation - the Exchange Law 3/96 of 4th January. The purpose and scope of application as stated in its Chapters I and II, can be summarised as follows: “This Law applies to any act, arrangement, transaction or operations of any nature, carried out by residents or non-residents, which result or may result in payments to or receipts from abroad, ... and, ... this Law governs exchange operations carried out by residents in respect of goods and monetary assets which are located within the national territory, or rights in respect of such goods and assets; goods and monetary assets or rights which are acquired, generated or located abroad and with regard to which there is a legal obligation to repatriate.” The same applies for non-residents as regard to these operations.

The Law referred to establishes an amount limit under which no regulation is required, e.g. economic agents are free to trade up to those amounts. The Law defines the appropriate institutions to handle these exchange activities, which comprise basically the commercial banks, financial and credit institutions in general, exchange houses and others, legally authorised by the Central Bank.

The entry and export of foreign currency is free, though it must be reported for registration purposes if greater than the limits fixed by the Central Bank.

The arrangements and facilities used for international payments are limited to telex and the S.W.I.F.T. system. The Central Bank does not have access to the system in its own the right. Each credit and financial institution is free to affiliate and access the system. The Central Bank only acts in order to help those institutions with inadequate financial capacity to afford the required costs.

The range of currencies traded in the Republic of Mozambique is quite wide and it comprises 34 currencies: USA - dollar, South Africa - rand, Germany - Mark, Austria - schilling, Belgian - franc, Canada - dollar, Denmark - krone, Spanish - peseta, Finland - Mark, France - franc, Holland - guilder, England - pounds sterling, Italy - lira, Japan - yen, Malawi - Kwacha, Norway - krone, Portugal - escudo, Sweden - krona, Switzerland - franc, Zambia - kwacha, Zimbabwe - dollar, China - renminbi, Tanzania - shilling, Russia - rouble, European Union - ECU, Bulgaria - leva, India - rupee, Iraq - dinar, Kuwait - dinar, Australia - dollar, Independent Common States - rouble, African Development Bank - B.U.A, African Development Fund - F.U.A, Monetary International Fund - SDR.

All the above currencies are freely traded among economic agents either through banks or exchange houses and others legally authorised, as stated in the law referred to above. The payment instruments available for international clearing and settlement include:

– cheques;

– credit transfers;

– payment orders;

– travellers cheques.

5. THE ROLE OF THE CENTRAL BANK IN INTERBANK SETTLEMENT SYSTEMS

5.1 General responsibilities

According to the Organic Law the Central Bank is responsible for providing the Interbank Settlement Service for cheques and other instruments under a specific regulation. According to this regulation the Central Bank must execute the payment of cheques and other instruments even if the banks are temporarily overdrawn, utilising its overdraft lending facilities, within the objectives of the credit policy under the umbrella of the broad monetary policy.

The regulation governing the Interbank Settlement Service calls for a Supporting Group for Payments Matters whose objective is to constantly examine and implement new strategies for the upgrading of the overall payment system of the country.

5.2 Provision of settlement and credit facilities

The provision and the ownership of settlement facilities are the responsibility of the Central Bank, though the related costs are shared by the participant members according to the proportion of the documents exchanged. The system is divided into three levels, comprising the central, regional and local levels. At the regional level there is a Central Bank branch and at the local level the Central Bank is represented by one of the credit institutions legally appointed by the monetary authority.

The facilities for communication include the national transport network as well as the telecommunication facilities for interchange of information.

To enable the clearing to take place, credit institutions keep deposits within the Central Bank, and the Central Bank reserves the discretionary power to allow overnight loans in case of the failure of a bank to maintain adequate reserves to meet its obligations. In so doing the Central Bank fixes a rediscount rate as well as a penalty rate according to period that a credit institution may run an overdraft.

5.3 Monetary policy and payment systems

The monetary policy in Mozambique is basically restrictive, and its objectives are to guarantee the stability of the domestic currency and the reduction of the inflation rate to a sustainable level. In order to achieve these objectives, the Central Bank utilises a number of instruments, namely:

- net domestic assets;
- reserves requirements;
- manipulation of rediscount rate.

The above-mentioned instruments will play a role in the payment system, either by affecting the liquidity of the system or by credit extension limits and the related risks resulting from the lack of funds.

5.4 Risk reduction measures

The main payment risks are related to fraud and to technical problems, since the risk due to a lack of funds does not occur. In the case of a bank running an overdraft, the Central Bank acts as a lender of the last resort, thereby charging a rediscount rate and a penalty premium, depending on the extent of overdraft. On the other hand, the already approved Regulation for Settlement Services, introduces a number of innovations intended to ameliorate and reduce the risks arising from technical issues, e.g. the sub regulation governing the shared transportation mechanism.

6. RECENT DEVELOPMENTS IN THE PAYMENT SYSTEM

Apart from the developments given in the general overview of the payment system above, no further new developments are taking place. The payment systems project is subject to review by a consultancy approximately twice a year.

7. INFRASTRUCTURE

Transport, telecommunications and electricity are the responsibility of several entities and ministries and are not directly related to Central Bank activities. Technical information is still being gathered.

7.1 Telecommunications infrastructure

Network overview

Telecommunications of Mozambique (TDM) served a total of 61,175 telephone subscribers at the end of 1996. Total exchange capacity was 103,753. More than 91% of the subscribers are connected to digital exchanges and the remainder to analogue exchanges, which are gradually being replaced.

More than 100 towns and large villages in the country now have access to the telecommunications network.

Over 96% of the customers are connected to the national automatic service.

During the last five years, an additional 19,000 telephone connections have been installed. As a result, the unsatisfied demand for telephone services has been reduced substantially.

There are three telex exchanges in service with a total capacity of 2,246 lines. The international telex service uses 83 trunk lines and the national telex service has been allocated 107 trunk lines. The capacity of the main exchange at Maputo is 1,386 lines whilst the Beira exchange has a capacity of 686 lines. There is one electro-mechanical telex exchange in Nampula with a capacity of 170 lines. Existing capacity is considered to be adequate for current demand.

Urban network

At the end of 1995, 31 digital exchanges, 12 Strowger type analogue and 57 manual exchanges were in operation. The cities of Maputo and Beira have a multi-exchange network.

The total exchange capacity of network has increased by 84% since the process of digitalisation was first started in 1989. The switching equipment will be fully digital by the end of current investment programme in 1998.

Local cable network rehabilitation has been nearly completed in the main centres of Maputo and Beira. New cable networks were constructed in 7 other major towns. These towns account for more than 90% of the total local network. The rehabilitation of the local network has resulted in marked improvement in the fault rate per telephone and quality of service in these towns.

Rural network

A rural network rehabilitation programme with a number of links is presently being installed. A network of high frequency stations is in operation, linking rural localities with the provincial centres.

Developments of telecommunication facilities

Technological change has transformed the industry over the last decade. The exchange of information in digital form is breaking down barriers that have traditionally existed between the telecommunications industry and other related industries.

The development of the public telecommunications network in Mozambique is driven by complex relationships between external environmental forces and developing technologies.

Two major contributions to the success of Telecommunications of Mozambique are its opening of relationships with the international community and its concentration on the use of technology to enhance its core business.

The challenge now is for TDM to attract the correct strategic alliances with which it can successfully accept the technological challenges of the future. Simultaneously this also creates opportunities for international telecommunications role players to align with TDM in accepting the challenges of Southern Africa, the biggest of which is to continuously identify the most appropriate and profitable future technologies for Mozambique to leapfrog into.

The existing telecommunications infrastructure plays an important part in the movement of funds both internally and externally, with all the banks linked by telex and S.W.I.F.T. to their respective correspondent banks.

Table 1

Basic statistical data

	1992	1993	1994	1995	1996
Population (millions)	14.79	15.58	16.61	17.42	18.03
GDP (MZM billions)	1.30	1.50	1.50	1.60	1.50
GDP per capita (MZM)	86.90	94.20	88.00	103.30	122.40
Exchange rate					
(domestic vis-a-vis USD)					
year end	2,742.14	5,238.38	6,552.50	10,776.00	11,295.00
average	2,432.38	3,724.40	5,918.09	8,819.75	11,139.67

Table 2

Settlement media used by non-banks
(at year-end, in MZM millions)

	1992	1993	1994	1995	1996
Notes and coins	257,508	469,444	762,434	1,130,155	1,405,480
Transferable deposits:	766,349	1,326,364	2,132,578	3,362,810	3,856,280
Narrow money supply (M1)	1,023,855	1,795,808	2,895,012	4,492,965	5,261,740
Broad money supply (M2)	1,129,244	2,180,654	3,180,824	4,919,934	5,982,643

Table 3

Settlement media used by banks
(in MZM millions)

	1992	1993	1994	1995	1996
Reserve balances held at central bank	871.738	1,549.210	2,418.390	3,789.779	4,577.183
Transferable deposits at other institutions	766.349	1,326.364	2,132.578	3,362.810	3,856.260
Required reserves	106.389	222.846	285.812	426.969	720.903
Institutions' borrowing from central bank	904.794	1,134.201	1,634.704	2,216.967	2,793.813

Table 4

Banknotes and coins
(value in MZM millions)

	1992	1993	1994	1995	1996
Banknotes and coin held by credit institutions	94.836	114.390	168.007	170.323	269.620
Total banknotes and coin outside credit institutions	257.506	469.444	762.434	1,130.155	1,405.460
Banknotes held in overseas territories	-	-	-	-	-

Table 5

Institutional framework
(at end-1996)

Categories	**Number of institutions**	**Number of branches**
Central bank	1	1
Commercial banks	5	239
Savings banks	-	-
Public credit institutions	-	-
Post Office	-	-
Memorandum item:		
Branches of foreign banks	1	1

Table 6

Cash dispensers, ATMs and EFTPOS terminals

	1992	1993	1994	1995	1996
Cash dispensers and ATMs:					
Number of networks	-	-	1	1	1
Number of machines	-	-	4	4	4

Table 7

Payment instructions handled by selected payment systems: volume of transactions

(thousands)

	1992	1993	1994	1995	1996
Cheques	704.190	765.973	580.625	765.973	951.321
ATMs and POS	37.458	40.118	32.138	40.118	48.098

Table 8

Indicators of use of various cashless payment instruments
value of transactions
(in MZM thousands)

Instruments	1992	1993	1994	1995	1996
Cheques issued	491.179	606.215	580.625	286.698	n.a.

THE PAYMENT SYSTEM IN NAMIBIA

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OVERVIEW OF THE NATIONAL PAYMENT SYSTEM IN NAMIBIA

Background information

Over the last few years increased attention has been given to the issue of the payment and settlement systems. Many developing nations and the countries of Eastern Europe and the former Soviet Union have been redesigning their payment systems to support market economies which those countries have embraced.

The current Namibian payment system has undergone a few changes since Namibia's independence on 21st March 1990. The system provides a wide range of payment facilities (under various payment stream options) for domestic as well as international payments. The participants in the payment system comprise five commercial banks, one building society, the Post Savings Bank and the Bank of Namibia (the central bank).

The Bank of Namibia has the responsibility to ensure the overall soundness and efficiency of the payment system. The Bank is the controller of the clearing house and provides accommodation accounts to all clearing banks to facilitate settlement.

Namibia has a well-established financial system which is controlled by legislation and state agencies working through the Bank of Namibia.

Present state of payment system

Payment systems in Namibia compare favourably with those in developed countries as far as customer services are concerned. Although the rural areas are densely populated (up to 65% of total population) cash is utilised as a means to pay low value transactions whilst a wide range of payment instruments and services are offered by the banking sector.

Cash, cheques, paper based credit transfers, credit-, debit- and prepaid cards, trade bills, electronic funds transfer services, S.W.I.F.T. transfers and Automated Teller Machines (ATMs) are all widely used. Even cross-border payments through the Automated Clearing Bureau (ACB) in South Africa are an accepted means of payment. There is noticeable public interest in electronic banking since the introduction of the Internet as more people are demanding home banking facilities.

Presently local interbank and settlement payments are facilitated through a manual clearing system, with physical delivery and exchange of payment instruments taking place at an agreed venue.

New developments and projects being undertaken

Pursuant to the launching of the SADC initiative on payment systems, Namibia embarked upon a visionary approach by drawing up a strategic plan in order to steer the current payments system to meet the demands of the Vision 2005 of free trade in the SADC region.

During 19th-21st August 1997 Namibia held a sensitisation workshop, where all or most of the stakeholders were invited and participated. It was resolved to establish a country project committee to manage the payment systems project. This committee is to spearhead the National Payment Systems strategy.

1. INSTITUTIONAL ASPECTS

1.1 General legal aspects

The legal framework governing the payment system in Namibia follows the pattern of many countries in the sense that it is fragmented and the laws are outdated. There is currently no law that directly governs the payment system in Namibia. The payment system has been established and is operated and regulated in terms of either common law or by certain selected provisions contained in various statutes. Common law (e.g. Law of Voluntary Association; Law of Contract) governs mainly the structures within the payment system and the various membership and other agreements. Provisions within the following legislation are applicable to the payments system in Namibia:

- Bank of Namibia Act, 1997 (Act. No. 15 of 1997);
- Banking Institutions Act No. 2 of 1998;
- Building Societies Act (Act. No. 2 of 1986 (under revision));
- Post and Telecommunication Act (Act No. 19 of 1992);
- National Housing Enterprise Act (Act. No. 5 of 1993);
- Companies Act (Act. No. 61 of 1973);
- Insolvency Act (Act. No. 24 of 1936 (as amended));
- Usury Act (Act. No. 73 of 1968);
- Bills of Exchange Act (Act No.34 of 1964);
- Credit Agreements Act (credit card).

1.2 Role of financial intermediaries that provide payment services

The banking sector in Namibia is controlled by legislation and by state agencies working through the Bank of Namibia.

General banking facilities are available and most of the commercial banks are capable of providing specialised merchant banking facilities to their customers. Branches of banks can be found in most towns in Namibia with agencies in the smaller centres. International services are also available through interbank arrangements, whilst electronic banking services are available in all major towns.

Categories of financial intermediaries are as follows:

Category	Number
Commercial Banks	5
Building Societies	1
Post Office Banks	1

1.2.1 Commercial banks

There are five commercial banks with 78 branches spread over the country. This figure includes banks with local and foreign ownership. The banks offer a wide range of services to their customers, including payment facilities, loans and mortgages, foreign exchange, and travel services. The banks operate in both the retail and the wholesale market.

1.2.2 Building societies

Currently, building societies are registered under the Building Societies Act. Until 1996, there were two building societies, but one of them merged with a commercial bank. The remaining building society has branches throughout the country and provides retail banking services, in the form of investments, savings and mortgage loans.

1.2.3 Nampost

The Post Office Savings Bank (Nampost), is a savings and money transfer institution and is registered under the Post and Telecommunications Act no. 19 of 1992, and is therefore not registered as a bank under the Banks Act.

Other services provided include the sale of revenue stamps (as Government agent), collection of general sales tax and additional sales duty, payment of social welfare pensions, collection of telephone account payments and selling of new telephone cards on behalf of Telecom Namibia. Postal services available include, business reply services, cash on delivery (COD) and insured, registered and express delivery.

Nampost is limited in its investment operations, and hence lending to third party organisations is not permitted.

1.2.4 Credit card companies

Credit cards are issued under an agreement between the issuer (bank) and the user (the customer). This agreement has to comply with the provisions of the Credit Agreements Act of 1975. Interest rates are charged to the user and are subject to the Usury Act of 1968.

Currently, most cards are issued by the card divisions of South African parent banks, on behalf of Namibian banks' customers.

"Non-Residents" need prior approval from the Bank of Namibia's Exchange Control Division before they will be issued with a credit card.

Virtually all conditions and regulations under which credit cards are issued are the same as those applied in South Africa.

1.2.5 Other non-banking entities

Apart from the entities already mentioned, there are certain non-bank institutions which are involved in payment services:

- Cash Paymaster Services for pension pay-outs;
- mobile agencies of companies in payments;
- some retail stores as agents, where banks are not represented;
- micro lenders;
- insurance companies;
- the Post Office;
- Namibian Development Corporation;
- National Housing Enterprise;
- club cards issued by American Express and Diners Club.

1.3 Role of the central bank

The functions of the Bank of Namibia include:

- the issuing of bank notes and coin;
- acting as banker to the government;
- acting as banker to other banks;
- providing facilities for the clearing and settlement of claims between banks;
- acting as lender of last resort;
- engaging in public debt management and open-market operations;
- supervising banks and building societies;
- collecting, processing and interpreting economic statistics;
- formulating and implementing monetary policies;
- administering exchange control under delegation of authority by the Minister of Finance In terms of the Exchange Control Regulations, the legal basis for exchange control, the Minister bears ultimate responsibility for foreign exchange and therefore, for exchange-control policy, on which he is advised by the Governor of Bank of Namibia;
- overseeing the safety and soundness of the national payment system.

Some of the listed functions need to be considered in more detail:

Banking supervision[5]

The function of banking supervision is delegated by the Minister of Finance to the Bank of Namibia. Presently, all regulations pertaining to the Act are issued by the Minister on recommendation by the Bank although the Bank is responsible for administration of the Act. The Minister may in terms of current legislation (i.e. the Banking Institutions Acts) make any regulations consistent with the Act.

Under the newly promulgated legislation, i.e. the Banking Institutions Act of 1998, the Bank will have greater powers to ensure independent licensing procedures, maintain effective prudent supervision and be better equipped to intervene in crises situations or deal effectively with non-compliance. The proposed legal framework will allow the Bank to respond more effectively to changes facing the industry by being empowered to issue circulars, directives or notices on any issue related to banking business without following the process of being approved by the Minister of Finance and compliance only becoming effective after publication in the Gazette.

Issuing of currency

The Bank of Namibia is the sole issuer of notes and coins to the commercial banks, and limited quantities to Government and the public. The printing and minting of bank notes and coins respectively are awarded to note and coin printing companies through a tender process. The first issue of notes was printed by Tumba Bruk of Sweden (1993) while Thomas de la Rue of UK (1996), printed the second issue. Mint of Finland was awarded the tender to mint the coins.

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5 Registrar of Banks.

Administration of accounts for banks and individuals

Bank of Namibia provides banking services to banks but very limited services to the public. Presently the Bank maintains accounts for the Government and the commercial banks. The administration of these accounts is governed by the Bank of Namibia Act.

The commercial banks are currently eligible to have a current account, reserves account, call account and an overdraft facility. The present settlement balances, as well as cash deposits/withdrawals are reflected on the current accounts, daily.

Payment services for the Government

Although the Government makes direct transfer of salaries to the commercial banks and the building society, the Bank of Namibia offers cashier services for civil servants, who are paid by cheque.

The Bank of Namibia is not involved in retail banking activities, but handles, as an agent for the Government, the receipts and expenses for the Treasury as well as the administration and accounting of Government securities.

Execution of monetary policy

Due to its membership in the CMA (Common Monetary Area), the Bank of Namibia is restricted in determining and implementing monetary policy.

Cash reserve requirements are utilised mainly for the execution of monetary policy. The banks are obliged to maintain a minimum cash reserve of:

- 5% of their short-term liabilities to the public (other than liabilities under acceptances);
- 2% of their medium-term liabilities to the public (other than liabilities under acceptances).

Banks are also obliged to maintain liquid assets in Namibia consisting of:

- 20% of short-term liabilities of which cash contributes 5%;
- 15% of medium-term liabilities of which cash contributes 2%; and
- 5% of long-term liabilities.

1.4 The role of other private and public sector bodies

The following bodies are involved in the payment system:

The Bankers Association. This is the council of the Namibian banks and has structures such as the Technical Committee, the Joint Security Committee and the Clearing House Committee. The Association is the *de facto* collective body for the banking sector in Namibia.

Common Monetary Area Commission. This grouping, consisting of Lesotho, Namibia, South Africa and Swaziland, is responsible for the policies on exchange control and trade related issues within CMA countries or externally.

S.W.I.F.T. Membership as a S.W.I.F.T. user is available to banks that operate within the S.W.I.F.T. network which facilitates the exchange of payment and other financial messages between financial institutions throughout the world. The S.W.I.F.T. users group of Namibia represents the interest of banks and participants who belong to the S.W.I.F.T. network.

ESAF Banking Supervisors. This body is responsible for the harmonisation of banking supervision standards in the region.

Automated Clearing Bureau of South Africa. The ACB is a regionally based organisation which also facilitates cross-border clearances. All Namibian banks, except one, are represented by South African member banks of the ACB. Through this relationship clearing and settlement is facilitated in South Africa and access to the ACB is ensured for the Namibian banks.

2. SUMMARY INFORMATION ON PAYMENT MEDIA USED BY NON-BANKS

2.1 Cash payments

The Bank of Namibia has the sole right and responsibility to issue and circulate banknotes and coins. The currency is known as Namibia Dollar (N$).

However, as a transitional arrangement, Namibia has both South African Rand and Namibia Dollar as legal tender in Namibia, until the Ministry of Finance gives notice in the Government Gazette regarding the termination of legal tender status of the Rand.

The following denominations of the Namibian notes and coins are in circulation:

Notes	**Coin**
N$ 10	5 cent
N$ 20	10 cent
N$ 50	50 cent
N$ 100	100 cent
N$ 200	500 cent

The notes and coins are issued under provisions of the Bank of Namibia Act.

The value of total notes and coins in circulation (issued by Bank of Namibia) amounted to N$529 million at the end of 1997.

The proportion of notes to the value of total cash in circulation amounted to 94 per cent.

The proportion of cash to M1:[6] N$452 million/N$2707 million = 16.70% (December 1996).

The proportion of cash to M2:[7] N$452 million/N$6676 million = 6.78% (December 1996).

The annual number of cash transactions is not known precisely. The population in rural areas mostly trades with cash.

The banks and other institutions provide services where customers can withdraw and deposit money from and to their accounts through their branch networks. Customers can use cards at ATMs or can issue cheques or even withdraw from bank tellers in order to acquire cash.

Annual growth of the current volume of cash in circulation is not expected to vary substantially in the foreseeable future but is estimated at following level of growth (1997 16.54%, 1998 14.78% and 1999 12.88%).

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6 M1 (narrow money) – currency in circulation and demand deposits.

7 M2 (broad money) – M1 and quasi-money (savings and deposits).

The major trend forecasted is the growth in ATMs and cash dispensers installed, which are likely to bolster the use of banknotes. The development of electronic banking or prepaid cards is likely to curtail the use of cash.

2.2 Non-cash payments

Cashless payments are effected by means of credit transfers, cheques, direct debits, payment cards and, recently, electronic banking (also known as home banking) products.

2.2.1 Credit transfers

Credit transfers are nowadays not as popular as they used to be a few years ago, because of the emergence of other methods, particularly direct debits. The facilities available can be categorised as same day credit clearing mail transfers, telegraphic transfers and S.W.I.F.T. transfers.

For paper based transfers, instructions are given by the customer, which are manually captured onto the bank’s computer system and electronically transmitted to the beneficiary account. Such funds can be processed in real time or are processed in batches after close of business on the day of deposit.

The availability of the funds is always dependent on the nature of the contra to the deposit. The customer receives the benefit of the funds being credited to the account on the same day although they may not be available for withdrawal and, in case of batch processing, the deposit will not be evident until the following day. Where the contra to the credit clearing consists of cheques drawn on other banks the customer receives the benefit of immediate credit while bank carries the debit until settlement is made.

2.2.2 Cheques

The commercial banks are entitled to issue cheques to customers, both private individuals and other legal entities. As Namibia forms part of the Common Monetary Area all Namibian cheques comply with the standards laid down by the South African Cheque Standards Committee, which adopted the British Association for Payment Clearing Services (APACS) paper specifications (known as CBS1) as the cheque paper standard for the Common Monetary Area. All cheques are printed according to Magnetic Ink Character Recognition (MICR) specifications as defined by banks within the common monetary area. Cheques issued are only printed by approved printers. Customers may have their own cheques printed, but only once the banks sanction that they meet the strict standards set by the industry, to avoid the risk of forgery and penalty charges imposed as a result of non-compliance to MICR standards. As a member of the ACB all Namibian banks’ (except one) cheques are MICR encoded and can be processed there. The acceptance of the cheque as a form of payment is dependent on the merchants’ or payees’ willingness to accept this form of payment. The fact that the cheques must be physically examined by the drawee bank for technical genuineness has proved a serious disadvantage as far as acquiring same day value for deposit.

2.2.3 Direct debits

Banks in Namibia use bulk direct debits for large volume low-value corporate receipts. This method is generally used for insurance premiums, medical aid premiums, home loan re-payments, etc.

2.2.4 Payment cards

Banks in Namibia do not provide such services at present.

2.2.5 Other payment instruments

The banks also provide various electronic banking products, where a customer is linked via a modem to a bank's computer (all transactions are therefore "same day soonest value").

These products are provided by almost all the major banks in Namibia and include various home-banking facilities and other payment services, *inter alia*, corporate access management for clients to transfer funds between the various types of accounts held in the books of their bank and payment and collection systems for clients to make bulk salary payments.

3. PRESENT INTERBANK EXCHANGE AND SETTLEMENTS CIRCUITS

3.1 General overview

Namibia's interbank payments are processed and settled primarily through the mechanisms of:

– manual clearing and final settlement at Bank of Namibia in Windhoek;

– manual clearing and settlement at country banks represented;

– cheque clearing by the ACB in South Africa;

– ATM transaction clearing service by SASWITCH (South Africa);

– direct debit through correspondent banks in South Africa;

– EFT clearing by ACB and S.W.I.F.T.;

– Stock Exchange clearing through banks.

All clearing banks subscribe to the Clearing House rules drawn up and agreed by the Namibian Banks Technical Committee, in line with South African clearing rules.

Interbank Clearing. Interbank clearing takes place between the banks on a daily basis. The banks in Windhoek meet at the Bank of Namibia at set times, where cheques and other credit items are exchanged. These amounts are then also relayed to the banks' treasury departments. In the outlying branches settlement also takes place where the banks meet daily at set times to exchange items. These clearance figures are then also relayed to the bank's treasury departments via telex or facsimile. All these figures are then accumulated and settlement then takes place between various bank's treasuries. The commercial banks are party to an agreement reached by the local banks, whereby interest is paid at the Namibian Interbank Rate on large items not cleared in time. Transfers (i.e. authorities to debit their account) are physically sent to the Bank of Namibia who then effect the relevant entries in each bank's current account held at the Bank. The system is, however, still largely manual and therefore time consuming and cumbersome. Float times for uncleared effects vary from bank to bank within Namibia and cross-border between 7 days and 21 days.

Automated Clearing Bureau (ACB). The ACB operates in South Africa and only facilitates Namibian banks through their correspondent banks. To facilitate the clearance of cheques or transfers intended for non-Namibian banks in the Common Monetary Area, certain South African banks have facilities for such non-Namibian banks in neighbouring countries. Likewise the Namibian Banks clear the cheques of South African banks not represented in Namibia, through agency arrangements.

3.2 Structure, operation and administration

3.2.1 Major legislation, regulations and policies

The Namibian clearing house is governed by the agency agreement between the Namibian clearing banks. The general provisions are outlined and have been approved by the Namibian Banks Technical Committee. Any provisions which relate to liability for losses within the banking industry do not extend to bank customers or other third parties.

For items cleared through the ACB in Johannesburg the rules governing clearing activities within the Common Monetary Area, drawn up by the South Africa Banks Technical Committee, on behalf of the Payment Association of South Africa (PASA), apply.

There is no specific legislation for payment system issues.

3.2.2 Participants in the system

As far as the local manual clearing and settlement system is concerned, all five commercial banks participate in the system. The membership is only open to the clearing banks, on application. The arrangement is by virtue of mutual agreement between the commercial banks and the Bank of Namibia, ratified by Bankers Association and approved by the Bank of Namibia. The Bank of Namibia provides clearing facilities from Mondays to Fridays whilst on Saturdays one clearing only takes place among the commercial banks, hosted at Bank Windhoek.

With regard to the ACB in South Africa and the clearance of cheques or transfers intended for non-South African banks in the Common Monetary Area, certain South African banks provide facilities for such non-South African banks in neighbouring countries (including Namibia). Therefore all items drawn on/in favour of any of the corresponding banks should be cleared/remitted to branches of the correspondent bank which will care for the onward transmission and settlement thereof.

3.2.3 Types of transactions handled

The following instruments are cleared through the interbank clearing systems:

– cheques;

– credit transfers;

– debit/credit card transactions;

– ATM transactions;

– EFT (POS) transactions.

3.2.4 Operation of the transfer systems

Clearing. The current clearing and settlement is done manually as follows:

– Monday to Friday 11 a.m. all eligible items;

– 3.30 p.m. only debit items at the premises of Bank of Namibia;

– Saturdays 9 a.m. All eligible items at the premises of a selected commercial bank and also at country branches among themselves at agreed times.

Procedures. At agreed times each member clearing bank must be represented even if only to receive the clearances presented. Physical exchange of eligible items take place and each representative must summarise and arrive at a total for all clearances delivered and received. At the end of final clearance the banks calculate the difference, to arrive at the settlement due to or by that bank. The controller of the clearing house will then prepare the final settlement statement. When it balances he/she will declare the house to be “In Balance”. The final settlement is effected by the Bank of Namibia at 9 a.m. on the following day backdated to the previous day.

3.2.5 Settlement procedures

The settlement statement is to be signed by the controller of the clearing house and the applicable bank representative. The host bank’s bank stamp is to be impressed. Settlement for all clearances for the day will take place each day at the last clearing. The member bank completes a signed request that its account in the books of Bank of Namibia is either debited or credited with the final net amount. Once the instructions are received from the member banks the settlement is final and irrevocable. The matter of unwinding or/and failure of a participant will be addressed when the legal framework is discussed.

3.2.6 Pricing policies

Currently each bank bears its own telegraphic costs in case of a telegraphic settlement, especially settlements outside Windhoek.

3.2.7 Credit and liquidity risks

The Banking Supervision department is analysing financial statements as well as monthly statutory returns in order to establish reserve requirements to reduce liquidity risks.

Each bank has been granted a secured overdraft facility on the current account in the case of overdrawing the accounts as a result of settlement or other claims against it.

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

4.1 Exchange and settlement systems for international transactions

Most banks in Namibia effect all their international telegraphic payments using S.W.I.F.T. On an occasional basis funds can be transferred via telex, but only once the message received has been authenticated and the test confirmed accordingly.

Through established relationships with international correspondents and travel agents some banks provide their own traveller’s cheques in USD, GBP and DEM. The Bank of Namibia provides Citibank, New York, Travellers cheques in USD to their staff members.

Most banks maintain nostro accounts in all the currencies that they operate in, with major banking institutions in the respective countries. The treasury functions of the banks are active market-makers through the use of a screen-based electronic dealing systems in various currencies, namely:

US dollar, British pound, Austrian schilling, Australian dollar, Belgian franc, Botswana pula, Canadian dollar, Swiss franc, German Deutsche Mark, Danish krone, Spanish peseta, Finnish markka, French franc, Hong Kong dollar, Irish punt, Italian lira, Japanese yen, Kenyan shilling, Lesotho maloti, Mauritius rupee, Malawi kwacha, Dutch guilder, Norwegian krone, New Zealand dollar, Portuguese escudo, Swedish krona, Singapore dollar, Swaziland lilageni, European Currency Unit, South African rand, Zambian kwacha and the Zimbabwe dollar.

The commercial banks actively market foreign exchange to private customers, corporate clients and government institutions through the use of the following products; cash, drafts, traveller's cheques, credit cards, S.W.I.F.T. transfers, letters of credit, forward exchange contracts, Euro loans (off shore finance) and the purchase of cheques drawn on foreign banks, while most banks are linked to VISA and Mastercard.

The amount of foreign currency provided to the public, corporate clients, etc., is subject to exchange controls as determined by the Bank of Namibia.

Non-banking companies classified as Authorised Dealers with Limited Authority (ADLA) have recently been licensed to conduct bureau de change activities involving buying and selling of foreign bank notes and travellers cheques.

4.2 Exchange and settlement systems for securities transactions

Major banks in Namibia are active in holding and trading securities such as shares and government securities at present.

All security transactions are confirmed by the custodian and the customer. If the customer is another bank, with whom there is a custodial agreement, the confirmation is done via S.W.I.F.T., or if it is a general customer by means of a written confirmation.

All shares that are traded are also cleared via the Namibian Stock Exchange, NSE, Trustees.

Security transactions are settled when the custodian delivers or collects the relevant script and at the same time makes payment or collects payment. Settlement is made by cheque. All share certificates are collected at the NSE and all Government securities at the Bank of Namibia.

Brokers and custodians (local banks) settle through the NSE Trustees, who oversee all transactions. All transactions must be settled through the NSE Trustees bank account, while settlement for Government securities takes place by cheque at the Bank of Namibia.

5. THE ROLE OF THE CENTRAL BANK IN INTERBANK SETTLEMENT SYSTEMS

5.1 General responsibilities

5.1.1 Statutory responsibilities

The Bank of Namibia provides both clearing and settlement facilities.

The Bank shall, by virtue of Bank of Namibia Act, in conjunction with the financial institutions, organise facilities for the clearing of cheques and other instruments for effecting payments and establish such procedures and rules relating thereto as may be appropriate.

Furthermore the Bank of Namibia has the responsibility of:

- overseeing the creation of national standards and that the payment system standards are in keeping with international standards;
- guiding the payment system review project;
- ensuring the smooth functioning and conclusion of the settlement process;

- defining the nature of adequate collateral and the extent of collateral to be held by banks in support of the settlement arrangements;
- ensuring that roles within the payment system are defined unambiguously and that responsibilities are properly delegated to appropriate organisations;
- facilitating the handling of systemic crises and promoting the resolution of disputes, without prejudicing the ability of the payment system to continue functioning; and
- enforcing the agreed payment system principles, policies and practices.

Presently the Bank of Namibia does not have specific legislation that sets out provisions as to how to regulate and supervise the payment system. Since the soundness and effectiveness of the payment system is however of great importance to the Bank of Namibia as lender of last resort it does generally oversee the payment system.

5.1.2 Establishment of common rules

As a result of mutual agreement between the banks, the Bank of Namibia manages the clearing and settlement system.

Being a member of the Common Monetary Area Namibian banks have to abide to the prescribed standards of MICR cheque clearing and transfer of funds via ACB clearing.

5.2 Monetary policy and payment systems[8]

Namibia's monetary policy objective has been to support the fixed exchange rate between the Namibia Dollar and the South African Rand. This policy has been effective in attaining the ultimate monetary policy objective of price stability, as reflected in single digit inflation recorded in Namibia over the year. Low inflation achieved in Namibia is a reflection of the restrictive monetary policy pursued by the South African Reserve Bank (SARB) to achieve price stability, which is transmitted to Namibia via the fixed exchange rate.

Namibia's membership of the Common Monetary Area (CMA), which has on the whole proved beneficial to the country, necessitates a monetary policy that supports the fixed exchange rate between the Namibia Dollar and the South African Rand. This relationship between the two countries has helped Namibia to achieve inflation rates that are low by regional standards, contributing to the Government's long-term objective of growth in a stable macroeconomic environment.

While the basic objective of monetary policy in Namibia has been to support the fixed exchange rate arrangement, there is nevertheless some room for the use of certain monetary policy instruments to achieve greater macroeconomic stability. While inflation is low by regional standards, it is still high at close to 10 per cent. Monetary aggregates have risen too rapidly in the past, although there was some moderation in 1996. There is a need to keep monetary expansion under control. The adoption of monetary policy measures for this purpose, within the basic constraints imposed by the exchange rate arrangement, is being examined by the monetary authorities.

In the past, the Bank of Namibia followed the SARB's monetary policy, especially with respect to interest rates. In 1996 the Bank of Namibia diverged from this practice for the first time when, on two occasions, it did not adopt changes implemented by the SARB. This was basically due to the need to rectify some misalignment of interest rates between the two countries.

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8 BON Annual Report 1996.

5.3 Risk reduction measures

A bank must be an account holder with the Bank of Namibia before being granted a credit facility and should also hold those assets that qualify as collateral for a credit facility at the Bank.

(a) With regard to credit risk management, banks have their own credit risk management policies which address the following areas:

- screening of applications; collateral; disbursement of loans; exposure to single or related customers; etc.
- classification of loans according to their performance; provisioning; etc.

A standardised guideline on loan classification, etc. will be issued in 1998.

(b) Liquidity risk: Banks are required to comply with the minimum liquid assets and reserve balance requirements in terms of the Banking Institutions Act. Banks are also expected to have internal policies and procedures relating to liquidity risk management.

6. RECENT DEVELOPMENTS IN THE PAYMENT SYSTEM

6.1 The establishment of the National Payment System Committee

A country strategic team has been established with their inaugural meeting on 10th November 1997. This team will be responsible for the national payments system strategy and comprises representatives from all the commercial banks and from the Bank of Namibia.

6.2 Legal framework for the new National Payment System

The need for the legal process to effect the promulgation of the NPS Act has been identified and the legal practitioners will be entrusted with the drafting of the Bill.

7. INFRASTRUCTURE

7.1 Telecommunications infrastructure[9]

Currently Telecom Namibia Ltd. is a fully state-owned commercial company and operates one of the most highly developed telecommunications systems in Africa.

Approximately 75,000 Namibians have telephones, which represents roughly 4% of the population. Telecom expects to double this figure before the year 2000 by having eight telephone lines per 100 inhabitants.

One of Telecom’s major investment projects was to set up Namibia’s first international telecommunications links by mid-1995 including two Intelsatelite earth stations and an international switch. This project has now been completed.

Data transfer services are also available and the vision 2000 strategy seems to be on course.

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[9] Business Guide to Namibia 96/97.

7.2 Availability of electricity[10]

Nampower is responsible for Namibia’s electricity network while its water supply activities have been discontinued. The company is primarily a bulk supplier to municipalities and mines. Namibia is connected to both the South African and the Zambian grid and is a net importer of electricity at times of local shortages mainly caused by insufficient water flow through the Ruacana hydro-electric scheme. Presently there are feasibility studies under way to develop power schemes to make Namibia self sufficient and a net electricity exporter.

7.3 Road and rail transport

The provision, development and maintenance of the transport infrastructure is clearly stated in the Government’s policy guidelines.

As part of expansion Namibia has now been linked by tarred highways to Botswana (Trans Kalahari) and Zambia (Trans Caprivi highway).

The current road network is well maintained and of the highest standards in the region.

[10] Business guide to Namibia 96/97.

Table 1

Basic statistical data

	1992	1993	1994	1995	1996
Population (millions)[1]	1.42	1.46	1.50	1.54	1.59 (est)
GDP (N$ billions) (at market prices)[2]	8.20	8.80	10.90	12.20	13.80
GDP per capita (1990 constant N$)	5,774	6,027	7,266	7,922	8,679
Exchange rate (domestic vis-à-vis USD)[3]					
year-end	*3.05300*	*3.39750*	*3.54350*	*3.64750*	*4.68250*
average	*2.85201*	*3.26774*	*3.55080*	*3.62709*	*4.29935*

[1] International financial statistics (IMF) October 1997. [2] National Accounts Central Statistics Bureau. [3] IMF financial statistics October 1997.

Table 2

Settlement media used by non-banks

(in N$ billions at year-end, not seasonally adjusted)

	1992	1993	1994	1995	1996
Notes and coin	-	-	279.81	320.68	385.08
Transferable deposits	1.06	1.40	1.55	1.64	2.62
Corporate sector	*0.44*	*0.69*	*0.62*	*0.71*	*1.18*
Household	*0.47*	*0.49*	*0.65*	*0.65*	*0.91*
Other	*0.15*	*0.22*	*0.28*	*0.28*	*0.53*
Narrow money supply (M1)[1]	0.86	1.32	1.57	1.65	2.70
Broad money supply (M2)[2]	2.76	3.36	4.35	5.37	6.68

[1] Narrow money supply currency in circulation and demand deposits. [2] M1 plus quasi-money (savings and time deposits with banking institutions).

Table 3

Settlement media used by banks

(in N$ billions)

	1992	1993	1994	1995	1996
Reserve balances held at central bank (average annual)*	0.12	0.25	0.35	0.21	0.44

* These balances are not available for settlement purposes.

Table 4

Banknotes and coin

(at end-1996)

	1992	1993	1994	1995	1996
Total banknotes and coin outstanding (millions)	-	-	332.71	380.18	451.78
Denominations of banknotes:					
200 notes	-	-	-	-	23.8
100 notes	-	-	158.4	168.8	187.6
50 notes	-	-	106.7	129.3	137.1
20 notes	-	-	-	-	8.8
10 notes	-	-	52.9	59.5	66.7
Denominations of coin:					
500 cents	-	-	7.5	9.1	9.4
100 cents	-	-	4.5	8.5	11.5
50 cents	-	-	1.5	2.4	3.2
10 cents	-	-	0.87	1.9	2.7
5 cents	-	-	0.34	0.68	0.98
Banknotes and coin held by credit institutions	-	-	-	-	-
Total banknotes and coin outside credit institutions	-	-	-	-	-
Banknotes held in overseas territories	-	-	-	-	-

Table 5

Institutional framework

(at end-1996)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (N$ millions)
Central bank ……………….	1	1	0.5	2,013
Commercial banks* ………..	5	78	650	6,408
Savings banks ……………...	-	-	-	-
Building societies* ………...	1	11	-	-
Public credit institutions* ….	-	-	-	-
Post Office*………………...	1	80	102	140

* Estimates.

Table 6

Cash dispensers, ATMs and EFTPOS terminals

(estimates)

	1992	1993	1994	1995	1996
Cash dispensers and ATMs:					
Number of networks	-	-	-	5	5
Number of machines	45	60	99	119	124
Volume of transactions (in millions)	0.70	1.29	1.83	4.86	6.06
Value of transactions (in N$ billions)	0.66	1.60	2.29	3.09	3.55
EFTPOS:					
Number of networks	-	-	-	-	-
Number of machines	-	-	-	-	-
Volume of transactions (in millions)	-	-	-	-	-
Value of transactions (in N$ billions)	-	-	-	-	-

Table 7

Number of payment cards in circulation

(estimates, in thousands)

	1992	1993	1994	1995	1996
Cards with a cash function	85.5	98.6	112.8	124.1	136.3
Cards with a debit function	60.6	71.7	87.1	99.3	124.2
Cards with a credit function	12.5	14.7	16.0	19.9	22.6
Cards with a cheque guarantee function	4.0	5.9	7.0	8.3	9.8

Table 8

Payment instructions handled by selected payment systems: value of transactions

(estimates, in N$ billions)

	1992	1993	1994	1995	1996
Clearing House:					
Cheques	21.70	24.56	21.88	23.94	30.48
Securities clearing balances	-	-	-	-	-
Postal drafts	-	-	-	-	-
FX transactions	-	-	-	-	-
Debits	-	-	-	-	-
Ordinary credits	9.07	10.82	12.30	13.62	14.77
Bilaterally exchanged credits	-	-	-	-	-
ATM and POS	-	-	-	-	-
Others	-	-	-	-	-
Large-value system					
Direct debits (CVs) in\out	0.12	0.11	0.12	0.19	0.44
Truncated cheques	-	-	-	-	-
ATM and POS	-	-	-	-	-
Credit transfers (CVs) out	-	-	-	-	-
Large-value transfers	-	-	-	-	-

Table 9

Transfer instructions handled by securities settlement systems: volume of transactions

(thousands)

	1992	1993	1994	1995	1996
Treasury certificates	263	1,778	2,174	2,960	7,520
Government securities	33	55	35	32	33
Shares	-	-	-	-	-
Bonds	-	-	-	-	-
Futures	-	-	-	-	-
Options	-	-	-	-	-
Other	-	-	-	-	-

Table 10

Transfer instructions handled by securities settlement systems: value of transactions

(in N$ billions)

	1992	1993	1994	1995	1996
Treasury certificates	0.23	0.73	0.84	1.20	2.77
Government securities	0.10	0.32	0.23	0.43	0.40
Shares	-	-	-	-	-
Bonds	-	-	-	-	-
Futures	-	-	-	-	-
Options	-	-	-	-	-
Other	-	-	-	-	-

Table 11

Indicators of various cashless payment instruments: volume of transactions

(estimates, in millions)

Instruments	1992	1993	1994	1995	1996
Cheques issued	10.09	10.23	10.59	11.56	12.43
Payments by debit and credit cards	-	-	-	-	-
Paper-based credit transfers	1.10	1.12	1.45	1.87	2.40
Paperless credit transfers: customer initiated interbank/large-value direct credits	0.08	0.08	0.08	0.08	0.11
Direct debits	1.1	1.2	1.3	1.4	1.5
Other	-	-	-	-	-
Total	**12.37**	**12.63**	**13.42**	**14.92**	**16.44**

Table 12

Indicators of use of various cashless payment instruments: value of transactions

(estimates, in N$ billions)

Instruments	1992	1993	1994	1995	1996
Cheques issued	25.60	32.60	32.80	32.20	35.80
Payments by debit and credit cards	-	-	-	-	-
Paper-based credit transfers	8.70	10.86	13.75	14.90	16.20
Paperless credit transfers: customer initiated interbank/large-value direct credits	36.20	47.00	44.40	59.20	66.90
Direct debits	n.a.	n.a.	n.a.	n.a.	n.a.
Other	-	-	-	-	-
Total	**70.50**	**90.46**	**90.95**	**106.30**	**118.90**

Table 13

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

	1992	1993	1994	1995	1996
Members					
of which: live	4	4	4	4	5
Sub-members					
of which: live	1	1	1	1	-
Participants					
of which: live	-	-	-	-	-
Total users					
of which: live	5	5	5	5	5

Table 14

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

	1992	1993	1994	1995	1996
Total messages sent	37,881	42,025	51,819	65,819	73,335
of which:					
category I	-	-	-	-	-
category II	-	-	-	-	-
sent to domestic users					
Total messages received	48,904	54,872	66,813	76,554	88,957
of which:					
category I	-	-	-	-	-
category II	-	-	-	-	-
received from domestic users					

Category I = customer (funds) transfer; Category II = bank (funds) transfer.

THE PAYMENT SYSTEM IN SOUTH AFRICA

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OVERVIEW OF THE NATIONAL PAYMENT SYSTEM IN SOUTH AFRICA

The South African national payment system is presently undergoing various fundamental reforms. In November 1995 a comprehensive new national payment system (NPS) strategy, which was a collaborative effort between the South African Reserve Bank and the banking industry, was published in the NPS Strategy and Framework document. The strategy encompasses the vision, fundamental principles and critical success factors for the reform of the domestic national payment system in the Republic of South Africa. The objectives of the strategy cover a broad spectrum, from placing the South African payment system on a par with international standards, to developing a sound and robust payment system, serving the requirements of domestic and international business and providing access to secure payment mechanisms for all South Africans.

At the core of the new NPS lies the South African Multiple Option Settlement (SAMOS) system, implemented on 9th March 1998. This new electronic interbank funds transfer system provides for immediate finality and irrevocability of settlement through the real-time gross settlement option, the so-called real-time line (RTL) (also see 6.2). The new settlement system will also provide for a delayed net settlement option, which will, by means of collateralisation, ensure guaranteed settlement.

Major new developments are taking place as a result of the new national payment system reforms (see section 6). This chapter will, however, focus mainly on the status of the national payment system as at the end of 1996.

1. INSTITUTIONAL ASPECTS

1.1 General legal aspects

The South African Reserve Bank Act, Act No. 90 of 1989 provides in general terms that the central bank may organise and participate in a clearing system. The Reserve Bank does not presently have any specific statutory powers to supervise the national payment system.

The payment system, however, is in general terms regulated by commercial law while the banking industry is subject to various laws, regulations and related legislation such as:

- the Banks Act, Act No. 94 of 1990;
- the Mutual Banks Act, Act No. 124 of 1993;
- the Bills of Exchange Act, Act No. 34 of 1964;
- the Companies Act, Act No. 61 of 1973;
- the Insolvency Act, Act No. 24 of 1936.

From a payment system viewpoint the Bills of Exchange Act deals mainly with the usage of paper-based cheques and bills of exchange. No legislative framework or relevant case law for the handling of electronic payments exist.

1.2 The role of financial intermediaries that provide payment services

There are mainly two categories of registered banking institutions, namely banks and mutual banks. An institution is registered as a bank or as a branch of a foreign institution under the Banks Act or as a mutual bank under the Mutual Banks Act and is therefore subject to the supervision of the South African banking supervisory authority. A bank is also required to be registered as a public company in terms of the Companies Act whereby equity is provided by the bank's shareholders. A mutual bank is not registered in terms of the Companies Act, but certain provisions of the Companies Act relating to solvency and liquidation are, however, applicable to mutual banks.

The Postbank was exempted from the provisions of the Banks Act by Government Notice No. 334, as published in *Government Gazette* No. 13744 dated 24th January 1992 and is also not registered under the Companies Act. The Minister of Finance, however, retains the discretion to withdraw the exemption from the provisions of the Banks Act.

It is mainly registered banking institutions that provide payment services to the public. This wide range of services include money transmission facilities via cheques, cash, credit and debit cards and home banking services. Banks also issue credit cards which are affiliated to either the VISA or MasterCard schemes.

Certain non-bank institutions also provide payment services to their customers. American Express and Diners Club issue travel cards in South Africa while a number of private sector retailers provide private-label credit cards. The Post Office provides mail orders and telegram services in respect of the transfer of money.

1.3 The role of the central bank

The main responsibility of the Reserve Bank is to formulate and implement monetary policy to attain its mission. The Bank's mission is to protect the value of the currency. The Reserve Bank has the statutory role of issuing notes and coin and holds the loan, settlement and cash reserve accounts of registered banks. The Reserve Bank also provides banking and payment services to the government as well as to the neighbouring countries' central banks (see section 5 for a more detailed discussion on the role of the central bank).

1.4 The role of other private-sector and public-sector bodies

1.4.1 Council of South African Bankers

The Council of South African Bankers (COSAB) is the *de facto* collective body, representing the interests of the banking industry in South Africa as a whole.

1.4.2 BANKSERV

BANKSERV is the largest operator (providing infrastructural components) in the South African payment and clearing system. Services provided by BANKSERV include the Automated Clearing Bureau (ACB) for the processing of magnetic ink character recognition (MICR) cheques, cheques processed through code-line clearing (CLC), an electronic funds-transfer (EFT) service, the switching of electronic payments between banks (SASWITCH) and the clearing of South African Payment System (ZAPS) and South African Netting System (ZANS) payments through S.W.I.F.T. (Society for Worldwide Interbank Financial Telecommunication). The MICR service is an automated cheque-clearing system, whereby the ACB electronically proves, sorts and re-lists cheques cleared by clearing banks on sophisticated computerised equipment. The CLC service is an automated debit-clearing system for cheques. Participating banks send information of deposited cheques electronically to the ACB, which processes the information in order to provide inward and outward clearance figures and data for banks.

1.4.3 Payment Association of South Africa

The Payment Association of South Africa (PASA) was established in November 1996 to act as the governing umbrella body of all Payment Stream Associations (PSAs) (also see 6.1). A PSA is an association of banks that provide payment instruments in a specific payment stream to their customers. The objectives of PASA are to manage, control and govern all matters effecting interbank payments, payment clearing and netting of interbank obligations within the payment system. Membership is limited to South African registered banks, branches of foreign banks and mutual banks. The council of PASA consists of eight members, five representing the banks with the highest product of throughput and annual total value in the payment clearing system, two members representing all other members and the Reserve Bank. The Reserve Bank is a non-voting member. Any member of PASA may appeal to the Reserve Bank against any decision of the Council if the member is of the opinion that such a decision is contrary to the integrity of the payment system or the interests of PASA members as a whole.

1.4.4 S.W.I.F.T. Users of South Africa

The mandate of the S.W.I.F.T. Users of South Africa (SUSA) is to represent the interests of banks and participants who belong to the S.W.I.F.T. network.

1.4.5 Treasury Operators Forum

The mandate of the Treasury Operators Forum (TOF) is to discuss treasury and international banking issues which are of mutual concern and to set market practices where appropriate. The executive committee consists of the four major banks, the Reserve Bank (as a treasury operator) and two representatives from the other banks. The members of this body are responsible for the largest portion of large-value payments.

1.4.6 Association of Bank Card Issuers

The mandate of the Association of Bank Card Issuers (ABCI) is to discuss technical and issues of mutual concern in the bank card industry, specifically of bank cards affiliated to VISA and MasterCard. They also set industry rules, do research and involve themselves in legal matters pertaining to the bank card industry.

2. SUMMARY INFORMATION ON PAYMENT MEDIA USED BY NON-BANKS

2.1 Cash payments

Since 1963 notes have been printed locally by the South African Bank Note Company (Pty) Ltd., a wholly owned subsidiary of the Reserve Bank. The sole right to mint, issue and destroy coins was transferred to the Reserve Bank by the Act No. 49 of 1989. The South African Mint Company (Pty) Ltd. became a wholly owned subsidiary of the Reserve Bank.

Five note denominations are being printed and nine coin denominations are being minted, namely:

Notes	Coin
R10	1 cent
R20	2 cent
R50	5 cent
R100	10 cent
R200	20 cent
	50 cent
	R1
	R2
	R5

At the end of 1996 the value of notes and coin in circulation in the hands of the public amounted to approximately R16 billion. From the end of 1990 onwards this amount constitutes approximately 5% of the broadly-defined money supply (M3). M3 consists of notes and coin in circulation plus cheque and transmission deposits plus other demand deposits plus other short and medium-term deposits plus long-term deposits.

2.2 Non-cash payments

2.2.1 Cheque payments

The banked community in South African is primarily cheque oriented in payment behaviour (see next paragraph). The government also uses cheques for various payments usually associated with creditors, pensions, salaries and wages. Most South African cheques are MICR encoded which are read by high-speed MICR reader machines (see 1.4.2).

Payments by cheque accounted for approximately 80% by value and approximately 45% by volume of cashless payments by the end of 1996. These ACB figures exclude on-us transactions for some banks, which consist of cheques drawn on the same bank for cash and inter-branch cheques. A formal study by the Reserve Bank in 1994, however, showed that the number of cheque transactions remained virtually unchanged during the early 1990s probably due to the growth in card-based and magnetic-tape transactions. Some banks also provide a cheque guarantee card, but it is only issued to clients who are in the higher-income categories.

2.2.2 Cards

There has been a major growth in electronic funds transfer point-of-sale (EFTPOS) terminals, which provide a sophisticated network for electronic-card presentation to clearing banks. In excess of 90% of credit-card payments have been converted to EFTPOS payments. These networks are mainly owned by banks. Card-based payments can be effected by means of credit as well as debit cards. Withdrawals and deposits can also be made at automated teller machines (ATMs) of the major retail banks. When withdrawals are made and the drawer transacts at a different bank than his/her own bank, these ATM transactions are switched through SASWITCH (see 1.4.2).

Preliminary estimates show that there are approximately 20 million cards in circulation in South Africa of which 3 million are credit cards, 7 million are private label cards and 10 million account-linked (debit) cards.

Credit cards. Some of the banks issue credit cards which are affiliated to either VISA or MasterCard. Credit cards are issued with a pre-set credit limit. The card account is normally separate from the bank account. Real-time credit card authorisations are also conducted via SASWITCH (see 1.4.2). Card-holders may choose to settle the total amount of the purchase with the bank before the expiration of 30 days or pay off a portion (normally a minimum of 10%). Interest is paid on the amount if it is not settled after 30 days. A budget facility is also available on certain credit-card schemes with periods to pay off instalments normally ranging from 6-48 months. The interest charges on these credit-card facilities are normally higher retail rates

The volume of credit-card transactions processed through SASWITCH amounted to 14.5 million in December 1996 which is 16% higher than December 1995 while the value of credit card transactions processed, which amounted to R2.6 billion in December 1996, is 26% higher than the corresponding period in the previous year.

Debit cards. Cash dispensers and ATMs are distributed throughout South Africa and are used extensively to withdraw cash and to effect numerous banking transactions via debit cards - for example, to transfer funds between a customer's accounts and to deposit funds. Approximately 5600 ATMs existed at the end of 1996. Real-time debit card payments are also facilitated. Debit card payments for fuel sales are being introduced via point-of-sale devices at petrol stations.

2.2.3 Electronic instruments

Direct debits and credits. Electronic funds transfer (EFT) direct debits are usually used for payments of a regular nature, for example, insurance deductions, tax refunds, telephone, electricity, water and hire-purchase payments. Direct credit transfers are used for a wide range of applications, from the transfer of low-value amounts for individuals, low-value retail payments and salary and pension payments. Banks, the government and large corporations normally utilise this form of payment.The volume of EFT transactions processed through BANKSERV amounted to 20.9 million in December 1996 which is 15% higher than December 1995, while the value of EFT transactions processed, which amounted to R94.3 billion in December 1996, is 44% higher than the corresponding period in the previous year.

The South African payment system and South African netting system. The South African Payment System (ZAPS) is used to effect large-value rand-denominated interbank transactions in the settlement accounts of banks at the Reserve Bank. Although the ZAPS system was originally destined to effect rand-denominated interbank settlement as a result of foreign exchange transactions, the system is presently also utilised for non-forex large-value interbank transactions. The rand-denominated settlement figures are cleared through the ACB and included in the net settlement report that is forwarded to the Reserve Bank (also see 3.2.4). R496 billion of payments were cleared through the ZAPS system for the month of December 1996, representing an annual growth of 69%. The message carrier being utilised is S.W.I.F.T. The South African Netting System (ZANS) is being utilised for the net settlement of the corresponding US dollar payment leg.

Other cashless payment instruments. The Post Office provides mail orders for low-value payments, which are especially convenient for the unbanked segment of the community. Payment of Post Office bills can also be transacted through the utilisation of point-of-sale (POS) devices. Some banks introduced 24-hour telephone home-banking services. This facility is normally used for the paying of low-value bills and the transmission of funds between a client's in-house accounts at a bank. Many retailers also offer private label card schemes. These cards can only be utilised in-house with a certain revolving credit limit, while interest could be charged after a certain period if the original amount is not settled. This period for monthly instalments could be ranging from 3-12 months.

3. PRESENT INTERBANK EXCHANGE AND SETTLEMENT CIRCUITS

3.1 General overview

The bulk of interbank clearing and settlements are effected through a multilateral netting system at the ACB (see 1.4.2). The Reserve Bank ensures a sound and secure payment system by providing for the final interbank settlement of clearing obligations over the current accounts of banks.

3.2 Structure, operation and administration of large-value systems

Various interbank operating companies were set up as joint ventures in order to facilitate the smooth functioning of the present interbank clearing and settlement operations. The most important of these operators is the ACB. Settlement obligations are based on the multilateral net of all settlement exposures and the ACB forwards the settlement instructions for each individual payment stream to the Reserve Bank for final end-of-day settlement on the following day.

Final end-of-day settlement takes place at 9 a.m. the following day under the previous day's date by entering the settlement obligations, received from the ACB, into the settlement accounts of the banks. The Reserve Bank thus provides same-day value to banks. In outlying areas, banks mainly use clearance vouchers to make payments to each other. These clearance vouchers are then forwarded to regional ACB processing centres and are then cleared by the same process as customer cheques.

The ACB has four main branches, namely in Johannesburg (which is the main clearing centre), Durban, Cape Town and Port Elizabeth. In the larger centres not serviced by the ACB, there are what is called "mini-ACB centres", which electronically send their settlement figures to the main ACB centres, for inclusion in the settlement. Most clearing takes place in the Johannesburg, Cape Town, Durban and Port Elizabeth areas, which account for approximately 80% of the clearing process. The settlement figures of all branches of the ACB are transferred to the Johannesburg branch, where they are incorporated into the total settlement report that is sent to the Reserve Bank at the end of the clearing process.

In addition, there are various other manual clearing houses in the country areas which operate on a daily basis. Settlement in most of these clearing houses, which consist of two or more banks, is performed on a bi-monthly basis, or when the bilateral settlement position of one of the parties reaches a predetermined level.

All clearing houses subscribe to Clearing House rules, drawn up, on behalf of PASA (see 1.4.3) by the South African Banks Technical Committee.

3.2.1 Major legislation, regulation and policies

There is no specific legislative framework governing the operations of the payment system except for cheques or other bills of exchange subject to the provisions of the Bills of Exchange Act (see 1.1). The operations of clearing are subject to rules and regulations set by the members through the South African Banks Technical Committee. Technical and procedural clearing rules as well as set standards are contained in various manuals.

In South Africa, the cheque format has to comply with the standards laid down by the Cheque Standards Committee, which adopted the British Association for Payment Clearing Services (APACS) paper specification (known as CBS1) as the cheque-paper standard for South Africa. Other standards relate to the position in which the bank code, payee, payer, amount and other information, normally appearing on the face of the cheques, should be printed. These specifications are laid down in the Cheque and MICR Specification Document issued by the Cheque Standards Committee, under the auspices of the South African Banks Technical Committee.

3.2.2 Participants in the system

Presently, only banks designated as “direct or indirect clearing banks” are allowed to participate in the clearing systems under various conditions specified in the entry criteria. Non-clearing banks participate indirectly by means of sponsorship agreements with other clearing banks. Participation in the clearing system is regulated by PASA. A direct clearer must comply with various specified entry criteria. Foreign branches are not permitted to be direct clearers. A sponsored clearer participates with the specific guarantee of a direct clearer.

Sponsorship arrangements were eliminated with effect from 9th March 1998. Should a bank wish to participate as a sponsored bank, it must negotiate a corporate-customer relationship with a direct clearing bank. All banks will be eligible to hold a settlement account with the Reserve Bank and will then settle in its own name.

3.2.3 Types of transactions handled

The types of transaction are described under 2.2.

3.2.4 Operation of the transfer system

Clearing takes place throughout the day at the clearing centres, but settlement is only effected by the Reserve Bank at 9 a.m. on the following day, backdated to the previous day. The net settlement results are manually entered via the Centralised Banking System (CBS), which posts the settlement obligations to the relevant banks’ current accounts in the books of the Reserve Bank.

The present processing of the payment instruments on a daily basis involves settling net claims between the banks themselves, as well as the banks on the one hand and the Reserve Bank on the other hand. The settlement of resultant debit and credit positions of the banks themselves and the Reserve Bank will result in that several of the banks with accounts at the Reserve Bank will become overdrawn. Normally no excess cash is held on these settlement accounts of the banks due to the lack of interest payments on them. Banks who are in debit will seek normal automatic and unconditional overnight accommodation under the marginal lending facility from the Reserve Bank (also see 5.2).

3.2.5 Settlement procedures

The Reserve Bank receives the settlement report as a balanced batch from the ACB. The ACB, which acts as agent for the banks and the Reserve Bank, is indemnified against any errors. After this process has taken place the next morning the settlement is backdated and the Reserve Bank provides guaranteed irrevocable same-day settlement (also see 3.2.4). No specific formalised procedures are in place in case of participants’ default and cases are treated on a discretionary basis. The practice of net settlement is not supported by any current payment system legislation and, in the event of a default of a participant, unwinding could prove to be a complicated, if not impossible, procedure.

3.2.6 Backup solutions

The ACB has certain contingency arrangements in place should it not be able to process transaction data. Various backup sites were established to continue with the payment processing.

3.2.7 Pricing policies

Processing charges are in place for services provided by BANKSERV (see 1.4.2). The Reserve Bank charges no fees for its processing of settlement entries over the current accounts of the banks.

3.2.8 Credit and liquidity risk

Banks who are in a debit position when settlement positions become known the next day will seek normal overnight accommodation under the marginal lending facility from the Reserve Bank under the proviso that acceptable securities can be provided by that bank (also see 5.2). The acceptable securities are pledged to the Reserve Bank and providing the central bank with first right of ownership in case of liquidation. Should a clearing bank be unable to fund its overall debit position or be able to provide security, the credit and liquidity risk is at present borne by the Reserve Bank. No loss-sharing agreements or any specific payment risk reduction measures are presently in place.

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

4.1 Overview

This section focuses on high-value and retail foreign exchange payments as well as present payment practices in the securities markets.

4.2 Exchange and settlement systems for international transactions

The foreign exchange market, confined to banks, is settled on a multilateral net basis (for rand and dollars) at end-of-day at the Reserve Bank. The Reserve Bank settles the rand leg of the payment transaction by passing accounting entries on the settlement accounts of banks. In order to settle the dollar leg, the Reserve Bank sends S.W.I.F.T. messages to the relevant foreign counterparties for dollar transactions on behalf of banks (see 2.2.3, paragraph 3).

International foreign exchange transfers are mainly effected through cross-border correspondent banking relationships. The message transmission by which payment instructions are conveyed is predominately through S.W.I.F.T. Banks usually use their own correspondent bankers to pay foreign counterparties. In most cases, banks make use of correspondent banking agreements to effect such payments. These agreements allow a bank to hold a foreign currency denominated account with an overseas bank. In order to effect payment, a bank will instruct its correspondent bank to effect payment to its foreign counterparty, in the foreign currency, by debiting its account and transferring the funds to the account of the foreign counterparty.

South Africa is also a member of the Common Monetary Area (CMA), which consists of South Africa, Namibia, Lesotho and Swaziland. The practical arrangements include the acceptance of South African currency as legal tender in these member countries.

4.2.1 Retail international transactions

There are a number of ways by which retail cross-border transactions can be effected. Travellers' cheques are available in a number of major currencies. VISA and MasterCard are part of international networks for the usage of credit card transactions. American Express and Diners Club provide international debit card transaction facilities.

4.3 Exchange and settlement systems for securities transactions

The following section focuses on the settlement practices as presently existing in the formalised financial market exchanges. Major new developments are taking place in respect of securities settlement practices (see section 6.6).

4.3.1 The Johannesburg Stock Exchange

The Johannesburg Stock Exchange (JSE) is the formalised exchange for equities and is governed under the Stock Exchange Control Act, 1985 by the Financial Services Board (FSB) as well as rules formulated by the members of the JSE. Transactions on the JSE are settled on an account basis every settlement day (Tuesday), by cheques on a netted basis. The cheques form part of the normal MICR settlement of the ACB the next morning at the Reserve Bank (see 3.2.4).

4.3.2 The South African Futures Exchange

The South African Futures Exchange (SAFEX) is the formalised exchange for futures and options contracts and is governed under the Financial Markets Control Act, 1989 by the FSB as well as rules formulated by the members of SAFEX. Transactions on SAFEX are settled by cheques or via electronic transfers through S.W.I.F.T. and form part of the normal net settlement report from the ACB (see 3.2.4).

4.3.3 The Bond Exchange of South Africa

The Bond Exchange of South Africa (BESA) is the exchange for debt instruments (gilts and semi-gilts). BESA is governed under the Financial Markets Control Act, 1989 by the FSB, as well as rules formulated by the members of BESA. Transactions on BESA are settled through an electronic settlement system, whereby the major clearing banks transfer funds amongst one another on a net basis on settlement day, at the Reserve Bank.

5. THE ROLE OF THE CENTRAL BANK IN INTERBANK SETTLEMENT SYSTEMS

Presently, the Reserve Bank does not have any specific statutory powers to regulate the national payment system. The South African Reserve Bank Act of 1989 provides in general terms that the central bank may organise and participate in a clearing system. The Reserve Bank, however, plays a prominent role in the following:

- the execution of monetary policy, which includes *inter alia* the conducting of repurchase transactions and open-market transactions with banking institutions (also acting on behalf of clients) to manage the liquidity in the money market (also see 6.8);
- the guiding of the evolution of the payment system, focusing primarily on the overall soundness and effectiveness of the national payment system. The Reserve Bank participates as a member as well as overseer of the payment system;
- the development of financial markets to provide stability for the execution of monetary policy. This presupposes reliable and efficient clearing and settlement systems. The Reserve Bank, in its role as banker to banks, also has a direct interest in the stability of the payment system and the banking system insofar as it acts as lender-of-last resort. A deputy governor of the Reserve Bank is the chairman of the Policy Board for Financial

Services and Regulation. The objective of the Board is to advise the Minister of Finance on policy matters relating to financial services and regulation;

- the issuing of notes and coin in South Africa;
- the holding of the loan, settlement and cash reserve accounts of registered banks; and
- the provision of banking and payment services to the government as well as to the neighbouring countries' central banks.

5.1 Provision of settlement facilities

The present settlement facilities are owned and provided by the Reserve Bank. The Reserve Bank is the settlement bank in the interbank market and prior to 9th March 1998, settled interbank obligations by making transfers across the current accounts of banks (see 3.2.4 and 3.2.5). The Reserve Bank provided overnight loans to banks against acceptable collateral. The banks were not charged for the usage of these settlement facilities. Banks will be charged for the settlement instructions that they send to the Reserve Bank under the new SAMOS system.

5.2 Monetary policy and the payment system

The Bank rate was set by the Reserve Bank in line with the monetary policy objectives. The Bank rate influences the money supply (M3) and credit extension to the private sector, and eventually the rate of general price inflation to attain the mission of the Reserve Bank. The mission of the Reserve Bank is to protect the value of the currency. The Bank rate is normally applied to first-tier loans and an additional rate premium to second-tier loans. The Reserve Bank provides overnight loans (accommodation) against acceptable securities. It should be noted, however, that the overnight loan position is only known the next day after the clearing process of payment instruments has taken place at the ACB. First-tier collateral (with an unexpired maturity of not longer than 91 days) and second-tier collateral (with an unexpired maturity of longer than 91 days, but less than three years) were automatically and unconditionally utilised should a shortage of funds in the settlement account of a bank occur after the overnight clearing process had taken place (see 3.2.4 and 3.2.5). Additional overnight loan arrangements against third-tier collateral could be made with the Reserve Bank, although these loans were normally granted against higher penalty charges.

6. RECENT DEVELOPMENTS IN THE NATIONAL PAYMENT SYSTEM

6.1 The establishment of National Payment System management structures

PASA is the governing body for all payment streams (PSAs) in South Africa and makes strategic and policy decisions in conjunction with the Reserve Bank (see 1.4.3). Banks who wish to offer particular payment services to their clients are represented on PSAs. Initially PASA created four PSAs to manage:

- a paper-based stream;
- an electronic low-value debit stream;
- an electronic low-value credit stream; and
- an electronic high-value stream.

6.2 The South African Multiple Option Settlement system

The SAMOS system, implemented on 9th March 1998 and provided by the Reserve Bank, facilitates immediate real-time settlement for South African banks. All South African banks are eligible to link up to the SAMOS system in order to:

- transfer funds across their settlement accounts at the Reserve Bank in real-time;
- automatically raise central bank intraday loans under certain provisions;
- gain access to the central bank's marginal lending facility (accommodation window) at the end of the day; and
- participate in the new monetary policy operational procedures via repurchase agreements, which are also settled in real time.

In line with the envisaged reforms of the payment system, the new settlement system requires new settlement arrangements and new intraday accommodation arrangements to facilitate immediate real-time settlement (see 6.8).

Different technological options are available to banks to access the system. Provision is made for two message carriers. Due to the investment made by the South African banking industry in S.W.I.F.T., it was decided that banks could use this mechanism to transfer payment messages between themselves and the SAMOS system. SARB-Link will be established by the Reserve Bank to enable other banks to gain affordable access to funds transfers across their accounts and Reserve Bank accommodation. SARB-Link also provides other facilities which includes, *inter alia*, a bridge between S.W.I.F.T. and non- S.W.I.F.T. users.

6.3 Electronic cash developments

A banking industry electronic cash (E-cash) project was launched to investigate the emergence of electronic cash payment instruments and the need for regulation thereof. In conjunction with this project, initiatives are also being undertaken by concerned organisations in the banking and technology industry to create a secure environment for the facilitation of electronic commerce. These actions include, *inter alia*, the establishment of certification authorities (CAs). A CA is an institution, trusted by all participants, to issue and maintain public key certificates for digital identification purposes. A CA was established by the Reserve Bank to uniquely identify participants and provide a safe and secure link to the SAMOS system.

Some of the banks are also introducing payment services via the Internet. Clients will be allowed to conduct fund transfers across their own accounts and also execute payments to creditors. It is expected that international funds transfers could also be conducted should they be permitted by the foreign exchange regulations.

6.4 Southern African Development Community payment system initiatives

In accordance with the responsibilities under a Southern African Development Community (SADC) Finance and Investment Sector project, South Africa obtained the approval of the member countries to launch a SADC payment system project. The objectives are, *inter alia*, to define a coordinated regional approach to cross-border payments and to assist member countries to develop a domestic payment system strategy. A survey was also conducted to establish the existing situation regarding clearing, payment and settlement systems. Various focus groups were identified to concentrate on payment system related business areas which include, amongst others, risk, legal, payment instruments and financial markets.

6.5 Legal framework for the new National Payment System

The Reserve Bank is initiating the legislative process to effect the promulgation of the NPS Act. This act will enable the banking industry and specifically the Reserve Bank to give effect to the NPS strategy by providing the necessary, statutory powers. Aspects that are being addressed include, *inter alia*, finality and irrevocability of settlement, netting and clearing. Changes to the South African Reserve Bank Act will also augment the Reserve Bank's supervisory powers in respect of the payment system.

6.6 Securities settlement in the financial markets

Various initiatives are being undertaken to address settlement practices in the financial markets. The Johannesburg Stock Exchange and the Bond Market Exchange of South Africa are moving towards the introduction of G-30 recommendations, which include, *inter alia*, the move to continuous "trade plus three" (T+3) rolling settlement. This will reduce the lag between trading and settlement in the financial markets.

A strategic planning session, which included all the major stakeholders, was held in October 1997 to align securities settlement practices in the financial markets and payment settlement at the Reserve Bank. A more expanded strategy will, however, be developed and published. This strategy will include, *inter alia*, the development of the financial markets' infrastructures in line with international standards, and thereby enhancing South Africa's standing in the international financial markets.

6.7 Notes and coin management project

A national notes and coin management project was initiated in January 1997. The main objective of this project is to investigate the feasibility of the present national notes and coin management system.

6.8 New accommodation arrangements for monetary policy purposes

New intraday and interday accommodation arrangements were introduced with the implementation of the SAMOS system on 9th March 1998. The SAMOS system contains a dynamic collateral management component, which enables banks to obtain an intraday and overnight loan (under the marginal lending facility) from the Reserve Bank automatically if it has the necessary acceptable financial instruments available in the system to be used as collateral (see 5.2). The new settlement system can also, to provide for efficient liquidity management, automatically release the financial instruments as soon as the loan is no longer required, that is, on receipt of incoming payments. The SAMOS system will, through its immediate electronic settlement facilities, provide for the rapid transmission of the Reserve Bank's monetary policy actions through the interbank and short-term money market via repurchase agreements.

7. INFRASTRUCTURE

South Africa has a widespread telecommunications infrastructure which covers all main cities and towns. New developments are, however, underway to cover most of the deep rural areas with a telephone network. The introduction of cellular network phones has also improved the telecommunications infrastructure. Telephones are not the only means of distance communication. The use of facsimile machines is also widespread. The Internet has also brought the most modern means of electronic communication, which is cheap, effective and, in most cases, reliable. The broad telecommunication infrastructure in the urban areas is adequate and reliable, making it possible for a reliable Internet infrastructure to be developed and maintained. Road transportation is still being used extensively for the delivery of cheques to and from clearing houses. The Post Office service also relies on the efficiency of the road infrastructure to provide its mail service. South Africa has one of the most advanced air transport infrastructures on the continent.

Table 1

Basic statistical data

	1992	1993	1994	1995	1996
Population (millions)	38.9	39.7	40.6	41.4	42.3
GDP (billions of Rand)	341.8	382.2	431.1	484.6	542.7
GDP per capita (Rand)	8,796.0	9,624	10,623	11,695	12,828
Exchange rate (domestic vis-à-vis USD)					
year end	*0.3274*	*0.2942*	*0.2816*	*0.2740*	*0.2135*

Table 2

Settlement media used by non-banks

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

	1992	1993	1994	1995	1996
Notes and coin	12,445	12,804	16,848	20,354	22,075
Cheque and transmission deposits	30,191	35,850	45,573	53,172	66,333
Other demand deposits	31,845	30,066	36,728	45,242	65,310
Narrow money supply (M1)	71,571	76,398	94,538	112,745	147,581
Total money supply (M2)	172,149	178,947	215,823	245,722	284,423

Table 3

Settlement media used by banks

(in millions of Rand)

	1992	1993	1994	1995	1996
Reserve balances held at central bank	2,342	1,529	1,961	4,275	5,590
Transferable deposits at other institutions	-	-	-	-	-
Accounts at the Post Office	-	-	-	-	-
Accounts at the Treasury	-	-	-	-	-
Required reserves	-	-	-	-	-
Institutions' borrowing from central bank	3,724	5,844	5,090	5,164	10,449

Table 4

Banknotes and coins

(in Rand millions)

	1992	1993	1994	1995	1996
Total banknotes and coins circulation	12,445	12,804	16,848	20,354	22,075
Banknotes and coin held by credit institutions	9,535	10,482	12,237	14,331	15,938
Total banknotes and coin outside institutions	2,910	1,382	4,611	6,023	6,137

Table 5

Institutional framework

(at end-1996)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (millions of Rand)
Central bank	1	-	-	-
Commercial banks	39	-	-	428,400
Mutual banks	6	-	-	767
Public credit institutions	0	-	-	-
Post Office	1	2,365	2,400	-
Memorandum item:				
Branches of foreign banks	6	-	-	-

Table 6

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

	1992	1993	1994	1995	1996
Members:	11	12	12	11	11
of which: live	*11*	*12*	*12*	*11*	*11*
Sub-members	6	5	5	9	10
of which: live	*6*	*5*	*5*	*9*	*10*
Participants:	0	0	1	1	3
of which: live	*0*	*0*	*1*	*1*	*3*
Total users:	17	17	18	21	24
of which: live	*17*	*17*	*18*	*21*	*24*
Memorandum items:					
Total S.W.I.F.T.					
members	2,074	2,244	2,551	2,845	3,014
sub-members	1,738	1,787	2,097	2,311	2,500
participants	91	125	218	315	404
users	3,903	4,156	4,866	5,471	5,918

Table 7

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

	1992	1993	1994	1995	1996
Total messages sent	3,383,691	3,685,529	4,313,515	5,047,316	6,095,991
category I	*737,400*	*843,765*	*936,153*	*1,095,983*	*1,213,011*
category II	*1,320,286*	*1,366,057*	*1,558,959*	*1,605,924*	*1,845,662*
sent to domestic users	*1,050,097*	*1,087,933*	*1,261,418*	*1,240,525*	*1,467,272*
Total messages received	2,498,662	2,703,623	3,167,435	3,651,592	4,441,155
category I	*554,248*	*626,817*	*724,247*	*882,304*	*1,031,055*
category II	*748,379*	*761,801*	*938,885*	*969,061*	*1,275,966*
received from domestic users					
Memorandum item:					
Global S.W.I.F.T. traffic	405,540,902	457,218,200	518,097.873	603,575,374	687,785,294

Category I = customer (funds) transfer); Category II = bank (funds) transfer.

Source: S.W.I.F.T. users of South Africa

Appendix 1

Registered banks, mutual banks and foreign banks with South African bank branches as at 31st December 1996

Registered banks	ABSA Bank Limited Albaraka Bank Limited Bank of Taiwan (South Africa) Limited Barclays Bank of South Africa Limited BOE NATWEST Limited BOE Private Bank & Trust Company Limited Boland Bank PKS Limited Cape of Good Hope Bank Limited Citizen Bank Limited District Securities Bank Limited Fidelity Bank Limited First National Bank of Southern Africa Limited FirstCorp Merchant Bank Limited Habib Overseas Bank Limited HBZ Bank Limited Imperial Bank Limited International Bank of Southern Africa - SFOM Limited Investec Bank Limited Investec Merchant Bank Limited Islamic Bank Limited Marriott Merchant Bank Limited Mercantile Bank Limited MLS Bank Limited NBS Bank Limited NDH Bank Limited Nedcor Bank Limited Ons Eerste Volksbank (Association not for gain incorporated in terms of section 21 of the Companies Act, 1973) Rand Merchant Bank Limited Regal Treasury Private Bank Limited Saambou Bank Limited Secfin Bank Limited Securities Investment Bank Limited Syfrets Bank Limited The African Bank Limited The New Republic Bank Limited The South African Bank of Athens Limited The Standard Bank of South Africa Limited UAL Merchant Bank Limited Unibank Limited
Registered mutual banks	Credit and Savings Help Bank GBS Mutual Bank TNBS Mutual Bank
Banks and mutual banks in terms of the Supervision of Financial Institutions Rationalisation Act, 1996	In terms of the provisions of the Supervision of Financial Institutions Rationalisation Act, 1996 (Act No. 32 of 1996), the following are regarded as a bank and as a mutual bank, respectively, with effect from 1st July 1996: Bank of Transkei Limited (Bank) Venda Building Society (Mutual bank)

Appendix 1 (cont)

Registered banks, mutual banks and foreign banks with South African bank branches as at 31st December 1996

Mutual bank under curatorship	Community Bank
Foreign banks with South African bank branches as at 31st December 1996	ABN AMRO Bank N.V. Banque Indosuez Citibank N.A. Commerzbank Aktiengesellschaft ING Bank N.V. Société Générale

Appendix 2

APACS paper specification known as CSB1*

Propensity		Requirement	Test Method
Grammageg/m^2		95 ± 5%	ISO 536
Thicknessµm		105 min	ISO 534
Smoothnessml/60s	WS	150 max	ISO 8791-2
	FS	150 max	
Stiffness m/Nm	MD	0.33 min	ISO 2493
(Taber)	CD	0.13 min	(10 mm test length)
Internal tearing resistance	MD	705 min	ISO 1974
m N/Sheet	CD	705 min	
Porosityml/min		450 max	ISO 5636-3

* Cheque and MICR specification Document by the Cheque Standards Committee working under the auspices of The South African Banks Technical Committee.

Note: FS = Felt side. CD = Cross direction.

THE PAYMENT SYSTEM IN SWAZILAND

Table of Contents

OVERVIEW OF THE NATIONAL PAYMENT SYSTEM IN SWAZILAND

The payment system in Swaziland has been changing over the years in response to the financial market changes in demand and supply of payment instruments and payment services. Over the years changes have been noticed in the gradual shift from usage of hard cash (banknotes and coin) to paper money (cheques, drafts, postal and money orders) to cashless transactions like electronic money transactions. Plans are now underway to modernise the payments system.

Most commercial banks in Swaziland are subsidiaries of South African banks, and have benefitted from the technological innovations that have taken place in South Africa.

To achieve efficiency and stability, financial structures depend on the functional efficiency of the clearing and settlement system. The National Payment System in Swaziland serves the needs of businesses and individuals in all the sectors of the economy including international transactions.

Nature and Scope. This should indicate that the National Payment System is composed of banks, including the Central Bank of Swaziland, commercial banks, development bank, building societies and other financial institutions, together with end-users (the general public, the business community and Government).

Factors limiting or hindering the process of modernisation. The volume of business transactions is still too small to justify the high level of mechanisation costs. The telecommunications infrastructure has not kept pace with technological developments in other sectors of the economy for purposes of modernising the payment systems in the country.

Factors contributing favourably to the process of modernisation. The Government's commitment to modernisation through the Economic and Social Reform Agenda (ESRA) and the National Development Strategy (NDS) enhances NPS modernisation. Changes which are taking place in the SADC region will hasten the pace of change and the modernisation process in Swaziland.

1. INSTITUTIONAL ASPECTS

1.1 General legal aspects

The regulation of the payment system in Swaziland is governed by the Banking Code and Rules of Procedure issued by the Central Bank of Swaziland (CBS) as guided by the Exchange Control Act of 1974 and Financial Institutions Order of 1975. There are no specific regulations aimed at controlling the activities of non-banks' activities.

The activities of the postal administration in the payment system involve funds transfer operations governed by specific rules and regulations of the postal administration over which the Central Bank has no control.

The Stock Market business and securities investment business are also regulated through specific regulations of the Financial Institutions Order of 1975.

1.2 The role of financial intermediaries that provide payment services

The main providers of payment services are banks. There are presently four commercial banks operating in the country through their network of 37 branches. Alongside the commercial banks, one building society operates four branches. The banks in Swaziland hold regular monthly meetings chaired by CBS where matters of mutual interest are discussed. There is also a Banker's

Technical Committee which addresses issues of a technical nature, and the Bankers Fraud Liaison Committee which addresses issues of fraud in the banking industry.

Payment services are also provided by non-bank institutions through numerous credit and financing schemes like Tibiyo TakaNgwane, Swaziland Industrial Development Company, Cooperative Savings and Credit Schemes, the Postal Services, etc.

1.3 The role of the central bank

1.3.1 Authority

The Central Bank draws its powers from the Monetary Authority Order No. 6 of 1974, as amended, which enables it to control, guide and influence banking activities.

1.3.2 Participation in the payment system

Issuing of currency (bank notes and coin). In terms of the Monetary Authority Order of 1974, CBS is the sole issuer of Emalangeni currency (notes and coin). The Emalangeni (E) currency is legal tender in Swaziland. Although the South African Rand circulates freely in the country, in terms of the renegotiated Common Monetary Area Agreement, it is not legal tender.

Administration of accounts for banks and other financial institutions. The commercial banks together with CBS constitute the clearing house which is situated at the central bank. CBS acts as facilitator and coordinator of the clearing arrangements.

The members of the clearing house are:

- The Central Bank of Swaziland;
- Standard Bank of Swaziland Limited;
- Swaziland Development & Savings Bank;
- First National Bank;
- Nedbank Swaziland;
- Barclays Bank of Swaziland (which merged with Standard Bank of Swaziland with effect from 1st January 1998).

Any bank licensed under the Financial Institution (Consolidated) Order 1975 or established under a special law, may become a member of the clearing house.

CBS acts as the “banker” and agent for Government for both local and external debt payments and also directly issues debt instruments such as Treasury Bills and Stocks.

Monetary policy in Swaziland is characterised by its historical relationship with South Africa under the terms of the Common Monetary Area (CMA), and its predecessor the Rand Monetary Area Agreement. There is unrestricted flow of funds for both current and capital transactions within the area (encompassing Lesotho and Namibia as well as Swaziland and South Africa). Although Swaziland issued its own currency (the Lilangeni) from 1974, which has since its introduction circulated at par with the Rand, changes introduced into the agreement in 1986 allowed for the Swazi authorities to de-link from the Rand.

The operations of the CMA and the linking with the Rand (at par) has resulted in a loss of monetary policy independence for Swaziland. With (effectively) a common currency, the money supply is controlled in South Africa. This means that Swaziland has limited ability to manage its own money supply, nor to have an independent exchange rate policy (as long as the lilangeni remains at par with the Rand).

Within this limited scope of monetary policy, interest rates and deposit and lending rates have been kept several percentage points below those obtaining in neighbouring South Africa since the 1980s. The margins varied from time to time, averaging 2% and reaching a maximum of 6% in the last decade. The rationale for this policy has been to stimulate investment by affording cheaper capital and to facilitate the strength of the domestic base in order to create more employment. Since the early 1990s, this has changed with interest rate differentials being increasingly reduced.

1.3.3 Supervisory authority

The Central Bank of Swaziland is responsible for regulating and supervising all banks licensed and operating in the country and draws its powers from the Monetary Authority Order of 1974 Section 4, as amended and the Financial Institutions (Consolidation) Order, 1975. In addition, CBS is empowered to ensure prudential management of other institutions such as the Swaziland Building Society, Stock Brokers Limited and Growth Trust Corporation Limited.

The purpose of supervision is to protect the stability and soundness of the financial system and this is done through the conduct of both on-site inspections of the institutions and the timely upgrading of the legal framework. It ensures that reasonable standards are met with regard to capital adequacy, asset quality management, earnings and liquidity. Specific regulations are in place to ensure the effectiveness and reliability of clearing and payment systems.

The legal framework is currently under review to include such issues as consolidated supervision, audit committees, duties of external auditors, cooperation between external auditors, bank management and supervisors and all matters affecting effective supervision.

The current legal framework does not clearly deal with pyramid schemes and these have been a problem, with local investors losing money to these schemes which normally promise returns in excess of 100%. The definition of deposit-taking and banking business need to be expanded to assist in curtailing such schemes.

Money laundering issues have not been adequately addressed due to the fact that there is no money laundering legislation in place. Currently money laundering is treated as an offence under the Drug Trafficking Act. The country is in the process of drafting its own Money Laundering Act using the Commonwealth draft as a model and as suggested by the Financial Action Task Force (FATF).

2. SUMMARY INFORMATION OF PAYMENT MEDIA USED BY NON-BANKS

2.1 Cash payments

Currency in circulation consists of notes in the following denominations: E100, E50, E20, E10 and E5 and coin in the following denominations: E5, E2, E1, E0.50, E0.20, E0.10 and E0.05.

The E5 note and the 2 cent and 1 cent coin sets are being phased out as it is not economically viable to produce them. Issues of currency by CBS are processed through three points for the whole country, including two sub-chests. These points of issue ensure that the country is adequately supplied with currency to meet the needs of the commercial banks and the public.

The value of Emalangeni notes and coin issued at 31st March 1997 amounted to 118 million. The ratio of currency in circulation to gross domestic product for the year ended 31/3/97 was 8.76% and, for the same period, the proportion of notes in relation to the value of total cash in circulation was 94%. The share of cash (notes and coin) in circulation, in the hands of the public in M1 (narrow money supply) was 29%, and M2 (total money supply) was 9%. Refer to Table 2.

Certain structural and institutional factors still favour the continuing widespread use of cash in Swaziland, like payment of salaries and wages for lower income groups. The developments in the payment systems affect the use of cash in many ways. The country has witnessed growth in the use of current bank accounts which has been accentuated by employees' and employers' preference to make net salary payments and credit transfers directly to the credit of employees' accounts with commercial banks. However, the spread of automatic teller machines (ATMs) has been associated with an increase in the number and value of cash withdrawals from current accounts.

Though the Rand (R) is not legal tender in Swaziland, it circulates freely under the special arrangements with the South African Reserve Bank and is repatriated as soon as it reaches certain limits. This circulation has not been used for computing the above comparative figures.

2.2 Non-cash payments

Cheques, bankers' drafts, postal orders and money orders generally are the most commonly used non-cash payment instruments in Swaziland.

Bankers' current accounts are conducted at a cost to the customer and do not earn interest. On the other hand, savings and deposit accounts do earn interest for account holders.

2.2.1 Credit transfers

Bank credit transfers are not as widely used as the cheque system. They involve mainly larger values resulting mainly from instructions from banks' customers to transfer funds. Some movements in the accounts of customers, particularly banks, are initiated through telex/S.W.I.F.T. advices. In addition, advice on the fate of collections and account movements are sent or received through the medium of the telex or telefax/S.W.I.F.T.

The responsive attitudes of the users of these facilities have prompted banks to join the ranks of other banks who are fully automated by employing technological facilities like Automated Teller Machines (ATMs), S.W.I.F.T. and others. The banks' foreign sections use this facility as does the Post Office.

2.2.2 Bank cheques and bankers drafts

Cheques are widely used in Swaziland and are also used for some cross-border payments on a collection basis. Their acceptability depends on the drawers' clean record with the banks. But because of the high rate of cheque fraud, traders are no longer comfortable with their usage. Some banks guarantee cheques for their customers.

The main controlling standard is the Bills of Exchange Act. Only licensed banks are allowed to issue cheques to their customers for settlement of their debt commitments and/or withdrawing cash from their current accounts. During the financial year ended 31st March 1997 the Central Bank processed 63,259 cheques drawn on itself. The value of cheques drawn on commercial banks was E935 million. Both these totals reflected an increase from the previous year's figures.

On average, a total volume of ± 5000 items are processed per month. Items cleared are 6cts(?) low value (<E50 000) and large (high) value (> E50 000). Large value payments in Swaziland are facilitated by means of the issuance of clearance vouchers. In some cases, such payments are made specially via the CBS by telex to the debit/credit of the respective bank's reserve accounts.

High value payments are influenced by monetary policy which directly influences the banks' liquidity. A sophisticated system needs to be introduced which will be able to deal with high value payments as well as providing a mechanism through which the monetary authorities can monitor Banks' exposures, risk and market liquidity.

Types of payments made by cheque are bankers' clearing settlements, some domestic large value payments, cross-border payments, payment of salaries, pensions, personal payments, company payments, etc.

Other payment instruments available in the country are US$, GBP and other foreign currency.

2.3 Direct debits, bills of exchange and bank receipts

Direct debits are executed through authorised debits of current accounts and are used mainly by firms to collect payments due.

The banking system is also involved in the management of bills of exchange and paper-based receipts widely used by companies to collect trade credits.

2.4 Payment cards

Payment cards used in the country are First Card, Visa Master Card, Diners Card, Auto Car, Bob 2000, Phone Pay Cards, Casino Pay Card and Fleet Management Card. All these payment card products are not locally made, but operate smoothly in Swaziland. The steady change in consumer habits and the security related aspects of cash have necessitated the use of payment cards locally.

2.5 Postal instruments

Swaziland currently has 37 full time main Post Office branches and 28 postal agencies. These take deposits from customers banking with Swazi Bank. The Post Office provides three payment services: it collects deposits for Swazi Bank customers; it processes cash transfers like money orders and postal orders; and it collects cash on delivery for parcels. Money orders are generally issued against payment of cash and sent to the post office nearest to the beneficiary's home. The Post Office provides the telecommunications network which creates an enabling environment for banks to link up Internet and S.W.I.F.T. and related facilities for transacting their business. Telegram messages, facsimile service, expedited mail services, letters and parcels are other services provided by the Post Office in communicating and transporting payment instruments.

3. PRESENT INTERBANK EXCHANGE AND SETTLEMENT CIRCUITS

3.1 General overview

The Bankers Clearing House Rules are in existence and may be amended or added to from time to time by the Committee of Management. Arrangements for the clearing and settlement systems are confidential between the member banks and are designed for the benefit of the banking industry alone. Commercial banks are key participants in the many types of payments made and cleared through the clearing system. It is compulsory for clearing banks to be represented in the clearing process which is conducted twice each working day at 9.00 a.m. and 2.00 p.m., except on a Saturday where it is in the morning.

3.2 Settlement process

Currently, all interbank transactions are settled over a manual clearing system via the CBS and confirmed in writing, by telex and in some instances by S.W.I.F.T. Entries generated therein are processed electronically through a computer terminal network. This includes reimbursements or interbank transfers between banks. Access to the clearing system is strictly confined to deposit-taking institutions.

All the licensed commercial banks gather at the central bank clearing house and, together with the CBS designated clearing officials, physically exchange cheques and other items eligible for presentation through the clearing. Settlement figures are passed at the end of the clearing session which depending on the nature of the difference are either “charge” or “pay”. These entries are then posted into different bankers’ reserve accounts within the central bank. An average volume of 350 items are cleared per day.

3.3 Irrevocability of settlement

The receiving bank shall not impress its bank stamp on wrongly cleared items. These are to be returned or remitted onward, as the case may be, under the cover of an unpaid advice. Unpaid payment instruments are returned with an unpaid advice and shall have an objection memo attached to stating full reasons for non-payment and reference to the presenting bank, clearing session and the date of its original presentation at the Clearing House.

3.4 Pricing policy

Presently, there are no fees charged by the Central Bank for clearing the payment instruments of member banks.

3.5 Credit and liquidity risks

The CBS is lender of last resort for commercial banks. Credit and liquidity ratios are currently in place for determining credit worthiness of these financial institutions.

The collateralisation of credit extended by the central bank normally takes the form of bankers’ acceptances, bills purchased for rediscounts, Treasury Bills and other commercial paper acceptable to the central bank with maturity up to 180 days. Banks in Swaziland have always relied on the interbank market to meet shortfalls and are less reliant on borrowing from the central bank.

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

4.1 Exchange and settlement system for international transactions

The Lilangeni (E) is presently at par with the Rand (R). Currencies are freely convertible for both current and capital account transactions. Swaziland is a member of the Common Monetary Area Agreement (CMA) comprising South Africa, Lesotho, Namibia and Swaziland.

Banks in Swaziland have correspondent arrangements with other banks in all the major financial centres of the world. International transactions are normally done with correspondent foreign banks by use of transfers and bankers drafts. For international funds transfers, the banks rely on their correspondent bank networks. The paying bank instructs a foreign correspondent bank to debit its foreign account and to transfer the amount to a correspondent bank for crediting to the latter's account. To carry out the instructions they receive, foreign banks' use their local clearing and settlement systems.

Foreign currencies traded under this system are USD, DEM, GBP, FRF, JPY, CHF, NLG, ECU, ZAR, BWP, AUD, etc. Travellers cheques are denominated in GBP, USD and other currencies.

4.2 Exchange and settlement systems for securities transactions

The components of security transactions are debentures, equities, and Government Securities. The CBS provides a register for Government guaranteed securities and is also buyer of last resort.

Transactions are processed over the counter. Primary issues of Government securities are settled at the central bank. Other primary issues and secondary market transactions are settled privately.

4.3 The Stock Market

Swaziland Stockbrokers Limited is the only stockbroker in Swaziland. It has as its shareholders the Commonwealth Development Corporation, CBS, the Government, Standard Bank, Nedbank, Swaziland Development and Savings Bank and First National Bank of Swaziland Limited. Shares traded in the stock market are those of Nedbank, Fridge Masters, Royal Swazi Sugar Corporation and Swazi Spar Holdings. Debit instruments traded include Government Stock, Swaziland Breweries Limited 14.5 percent debentures, Swaziland Electricity Board and Swaziland Posts and Telecommunications Debentures. The primary market in both debt and equity issues is largely confined to institutional investors, the secondary market is thin. Swaziland Stock Brokers has also been appointed agent for the Swaziland Managed Trust Fund.

5. THE ROLE OF THE CENTRAL BANK IN INTERBANK SETTLEMENT SYSTEMS

5.1 General responsibilities

The Central Bank of Swaziland is responsible for administering and supervising the interbank settlement systems. The CBS also supervises and helps in the balancing of the final settlement sheet.

The Bank's interest in the proper functioning of the payment systems and, in particular, of interbank transactions, stems also from its role in the implementation of monetary policy and as supervisor of the banking system.

Working within this environment, the CBS supports initiatives for the establishment of common rules governing the exchange and settlement of interbank payments within the Common Monetary Area (CMA) and SADC Region.

5.2 Provision of settlement and credit facilities

The Central Bank of Swaziland provides deposit accounts for the banking system. These deposit accounts are used to facilitate interbank settlements and to manage compulsory reserves.

The CBS can only supply the credit facilities expressly provided for by law. The central bank makes ordinary or fixed term advances to banks and Government against collateral of commercial paper. Fixed term advances are provided at the CBS's discretion in response to an individual bank's request. They are intended to meet even large funding requirements, but for limited periods and are thus are of considerable importance for the regular functioning of the payment system.

The central bank is also an agent of Government in development finance activities involving small scale enterprises and public enterprises where long guarantee schemes operated by CBS for Government provide the necessary security for SMEs and public enterprises in order to access loans from commercial banks. The schemes are as follows: Small Scale Loan Guarantee Scheme, Public Enterprise Loan Guarantee Scheme and Export Loan Guarantee Scheme. The CBS charges banks a premium for credit guarantees issued to them for servicing their customers' loan facilities.

5.3 Monetary policy and payment systems

The relationship between monetary policy and the payment system is such that a smoothly functioning and efficient payment mechanism promotes an effective use of monetary policy instruments as well as the implementation of monetary policy objectives.

The main objective of monetary policy is stability of the general price level leading to sustainable economic growth and employment. This broad objective is achieved through control of the rate of growth of the supply of money and protection of the internal and external value of the Lilangeni. However, Swaziland's membership to CMA and the parity status of the Lilangeni to the South African Rand limits the effective control or management of the monetary and exchange rate policies, as these are indirectly managed through the South African money market.

As the execution of monetary policy affects inflation and therefore output in the economy, the payment system in turn is affected. As output increases, the volume of transactions also increases and the CBS ensures that these are cleared on time and that currency for the transactions is adequately available and durable. Since Swaziland's trade and monetary arrangements are linked to South Africa, there is a need for the local payment system to be electronically linked to South Africa for ease of business activity.

The instruments of monetary policy in use are the cash reserve requirement, the bank rate and open market operations. The cash reserve requirement is currently 6% of domestic deposits. It is rarely used as a monetary policy tool and is mainly for prudential purposes and therefore does not influence the payment system. The bank rate/interest rate policy effected to control money supply changes is the most popular instrument. If lending rates are low, borrowing and business activity rises and so does the volume of transactions, leading to a high volume and/or value of uncleared transactions and delays. The active and regular use of open market operations, namely treasury and central bank bills issue, started in late 1993 and major participants are the banks. These instruments are used to meet government cash requirements and also for liquidity management purposes. Payments involved are between the central bank, Government and banks. As the number of auctions increase, to cater for government financing needs and management of excess liquidity of banks, so does the need for a more efficient payment system.

6. MAIN PROJECTS AND POLICIES BEING REVIEWED AND/OR IMPLEMENTED

6.1 Modernisation of the country's National Payment System

The Central Bank of Swaziland is taking positive steps to review and modernise the country's National Payments System in order to achieve the stability, smooth functioning and efficiency of the system. In this regard, the CBS is aiming for improved customer services through modern technology products to attain systemic stability and efficiency.

6.2 Automating the banker's clearing house

The exchange of formal authentication arrangements among all parties participating in the National Payments System is essential. Without this, the risk in transferring funds and clearing high value items increases substantially. Worldwide, serious attention is given to, and emphasis placed on, the integrity of payment systems, especially as a result of the increase in volumes and amounts. In addition, there is a need to combat the alarming and phenomenal increase in fraud. These issues will have to be given serious consideration in the formulation of a National Payment System strategy in Swaziland, especially in view of the fact that the South African Automated Clearing Bureau is run by external parties. The NPS strategy needs to ensure a smooth transition, the integrity of the entire system and to give comfort, assurance and recourse to all participants. Arrangements are on hand for connecting non-members to S.W.I.F.T. and to automate the Bankers' Clearing House in the near future.

6.3 Review of risk management policy in payment systems in Swaziland

The risk management system entails the timely and guaranteed clearance of all large value items, the delivery of the appropriate payment to the beneficiary, the certain legal status of the National Payments System, the parties involved and the items cleared. These need to be reviewed to be in line with modernisation processes.

6.4 Cheque forgeries and counterfeit notes

Major risk has developed in the payment instruments, resulting from the increase in cheque forgeries, counterfeit Rand notes (which circulate freely in Swaziland) and forgeries of large value payment telex instruments. The CBS is looking into the whole system to correct these problems.

6.5 Review of clearing rules and procedures

A review of the current clearing rules and procedures and an electronic payment system is being undertaken which is aimed at facilitating all institutional payments including settlement and payments to and from Central Bank of Swaziland. This should handle changes due to the South African SAMOS settlement arrangements which became effective in March 1998.

6.6 Draft legislation on money laundering and pyramid schemes

Illegal financial institution structures, such as pyramid schemes, pose the risk of non-settlement by customers due to the high, unregulated interest rates and unsafe repayment methods like taking possession of the borrower's card plus pin number as a security precaution. The banking industry in the country is looking at ways of discouraging these practices.

To prevent money laundering, draft legislation has been prepared based on the Commonwealth model which was suggested by the Financial Action Task Force and is now awaiting approval by the relevant authorities of Swaziland's legal and parliamentary systems. The Central Bank Act is also being reviewed.

7. INFRASTRUCTURE

7.1 Telecommunications

Swaziland has a telecommunications infrastructure which serves both the rural and urban areas. Most of the telecommunication networks are being upgraded to cover, on a large scale, all sectors of the Swaziland community, especially the rural sector. Internet and E-mail are new developments in the communications infrastructure and are available to, and used by few on the communications infrastructure. The Post and Telecommunications Corporation has embarked on a work programme to speed up the extension of the local network to customers using optical fibre and wireless loop systems.

7.2 Roads

Road transportation is used for the delivery of cheques from branch networks in both rural and urban areas to the clearing house. The Post Office operates mainly through the road infrastructure to provide its mail service. In addition, major developments in upgrading the main roads in the country are being undertaken.

7.3 Airlines

Swaziland also has airline services which are used for transporting money and cheques to and from Swaziland's regional banking partners, mainly in South Africa and the SADC Region.

7.4 Electricity

Electricity is available and widely used in both rural and urban areas thereby making it possible for the country's inhabitants to utilise to the modern infrastructure available. As a result, Point of Sale payments are also available in some of the rural areas. Plans are underway for improving the electricity infrastructure between South Africa, Swaziland and Mozambique which will indirectly enhance chances of improving the payment systems network in this region.

7.5 Economic reforms

The drawing up of a National Development Strategy has been initiated, which aims at boosting economic growth and improving social services and the quality of governance. The economic thrust of the Economic and Social Reform Agenda of February 1997 is based on Government helping the private sector to grow and expand commerce and industry, which will also have an effect on investments, and hence the payment system will need to cope with these development strategies of Government.

Table 1

Basic statistical data

	1992	1993	1994	1995	1996
Population (millions)	0.83	0.85	0.88	0.91	0.94
GDP (millions of Emalangeni)	2,765.1	3,229.5	3,779.9	4,161.0	4,753.2
GDP per capita (Emalangeni)	3,331.4	3,799.4	4,295.5	4,572.5	5,056.6
Exchange rate (domestic vis-à-vis USD)					
year end	3.0558	3.3993	3.5483	3.6488	4.6785
average	2.8522	3.2672	3.5496	3.6257	4.2956

Table 2

Settlement media used by non-banks

(at year-end, not seasonally adjusted, in thousands of Emalangeni)

	1992	1993	1994	1995	1996
Notes and coin	75,073	96,444	94,230	106,958	124,009
Transferable deposits:					
Corporate sector.............	118,307	130,446	144,370	165,048	288,121
Household......................	62,821	64,588	66,202	71,413	82,383
Other..............................	13,569	19,576	30,858	43,844	19,513
Narrow money supply (M1)	254,300	290,496	311,585	363,158	422,955
Total money Supply (M2)...	936,409	1,065,856	1,181,764	1,227,425	1,427,913

Table 3

Settlement media used by banks

(in thousands of Emalangeni)

	1992	1993	1994	1995	1996
Reserve balances held at central bank	51,202	54,311	61,336	60,243	43,494
Transferable deposits at other institutions................	-	-	-	-	-
Accounts at the Post Office	-	-	-	-	-
Accounts at the Treasury....	-	-	-	-	-
Required reserves	48,481	61,213	69,954	72,530	83,078
Institutions' borrowing from central bank	9,597	6,820	5,649	30,000	36,759

Table 4

Bank notes and coin
(in thousands of Emalangeni)

	1992	1993	1994	1995	1996
Total bank notes and coin outstanding	75,073	98,444	94,230	106,958	124,007
Denominations					
Banknotes:					
E100	-	-	-	-	18,042
E50	26,792	42,173	50,095	60,804	58,764
E20	24,387	27,486	19,165	19,918	18,494
E10	9,256	10,303	7,773	9,322	9,417
E5	3,302	3,994	4,429	4,689	4,096
E2	3,369	3,116	2,657	1,393	1,253
E1	303	311	310	312	317
Coin:					
E5	-	-	-	-	818
E2	96	97	96	99	1,200
E1	2,517	3,419	3,659	4,161	4,752
50C	1,430	1,574	1,801	1,949	1,950
20C	1,308	1,397	1,423	1,427	1,552
10C	860	965	1,064	1,074	1,341
5C	756	855	911	913	1,094
1C	468	524	618	666	686
Bank notes and coin held by credit institutions	18,980	21,250	24,638	26,632	33,162
Total bank notes and coins outside credit institutions	56,093	75,194	69,592	80,326	90,847
Bank notes held in overseas territories	-	-	-	-	-

Table 5

Institutional framework
(at 31st March 1997)

	1992/93	1993/94	1994/95	1995/96	1996/97
Number of banks	4	4	4	4	5
Branch network (banks)	35	36	36	36	37
Agencies (banks)	12	12	10	9	13
Connections to ATM network	5	7	10	14	40
Building societies	1	1	1	1	1
Branch network (building society)	5	5	5	5	5
Non-banking financial institutions	4	4	5	5	5

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THE PAYMENT SYSTEM IN TANZANIA

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OVERVIEW OF THE NATIONAL PAYMENT SYSTEM IN TANZANIA

Tanzania had a socialist-centrally-planned economy for about 30 years after independence with one state owned bank dominating the banking industry for about 25 years until 1993 when the financial industry was liberalised.

Cash has been the dominant payment instrument with little usage of cheques and telegraphic transfers as main debit and credit instruments respectively. There were no clearing houses until 1993 when one was introduced in Dar Es Salaam. Before then, clearing of paper-based instruments was purely on bilateral arrangements.

There had been no “free” financial markets[1] until 1993 when Treasury Bills started to be traded in a primary “free” market using the physical script. This is explained in detail in Section 4.2 (a).

There has been no comprehensive unified law governing payment, clearance and settlement systems.

As the existing payment systems are mainly cash based, most transactions and payments are effected outside the banking system. This has resulted in a trebling of currency in circulation over the last five years thus increasing transaction costs due to immobility and costs of printing and distribution. Currency distribution is done through central bank branches and custody centres within commercial bank branches.

Financial deepening[2] has stood at about 30% over the last five years with cash believed to account for roughly about 40% of the total bank payments followed by cheques estimated to account for about 80% of all commercial bank paper based payments in the country.[3]

Banking coverage of population per branch is poor with a total of 14 banks in existence. Most banks are relatively new with limited coverage. The largest bank controls about 60% of the country’s deposit money and handles approximately 80% of the total volume of cheques. Daily intra-bank cheque volume is estimated to be 50,000 items. It is the only bank with a nationwide coverage having over 130 branches up to district level. The second largest bank has 20 branches, all at a regional level, while other banks only have one to three branches, mostly concentrated in Dar Es Salaam.

Interbank clearing is manual with netting at end of day for settlement via clearing accounts held at the Bank of Tanzania (BOT). Comprehensive clearing rules exist. Interbank clearing in the cities within clearing houses latitudes is done in 3 days and a maximum of 28 days for remote clearing. The actual effect on customer accounts varies from 5 to 30 days or more depending on bank procedures.

Some banks use S.W.I.F.T. mainly for international funds transfer. While S.W.I.F.T. transfers can take up to 3 days before the beneficiary’s account is credited other means such as telegraphic transfers can take weeks before the Tanzanian shilling cover is provided, even after payment has been cleared.

Tanzania launched a payment systems modernisation project in August 1996. Its primary objective is to modernise the country’s payment, clearing and settlement systems in order to attain internationally acceptable best practices by decreasing risks and increasing convenience, affordability and timeliness of the systems. The other objectives are: to improve macro economic management

1 In the sense that before then, dealings in the money market were based on Government determined rates.

2 Defined as M2/GDP.

3 Nonetheless, it is possible that payment statistics are substantially under-recorded since many transactions are conducted in the informal sector.

capabilities; speed up exchange and settlement of funds and securities; and to migrate, in the long term, from cash to cash-less modes of payment.

Also along with this project are improvements which are currently in the implementation stage. These are: document processing using MICR technology; interbank communication network using the Bank of Tanzania backbone; media exchange processing using diskettes for bulk recurring payments; and transmission of domestic secured payment instructions using S.W.I.F.T. architecture.

There are factors that have contributed favourably to the process of modernisation which include: the country has been undergoing major political and economic reforms over the past decade; the financial sector and markets are being liberalised for both private and foreign investments; the fact that the current legal framework is rather fragmented and outdated, fraught with inadequacies and incapable of regulating the National Payment Systems; the public need for efficient payment systems to serve a new market economy; and the Bank of Tanzania management commitment to the project and a dedicated project team working on full time basis and in coordination with other Southern Africa Development Community (SADC) countries.

1. INSTITUTIONAL ASPECTS

1.1 General legal aspects

There is no general legislation governing the payment systems in Tanzania, though the Bank of Tanzania maintains a close involvement in supervision and regulation. English/common law is the origin of the law in Tanzania, while the following is the key legislation, which directly touches on payment systems.

(a) The Bills of Exchange Ordinance, Cap. 215

The Bills of Exchange Ordinance, Cap. 215 is a statute in pari materia with the Bills of Exchange Act, 1882 of the United Kingdom.

(b) The Evidence Act, 1967

The Tanzanian evidence law has its origin in India and the United Kingdom. Part IV of the Evidence Act, 1967 provides for Bankers Books Evidence.

(c) The Banking and Financial Institutions Act, 1991

The Banking and Financial Institutions Act, 1991 (BAFI) was enacted to consolidate the law relating to the business of banking, to harmonise the operations of all financial institutions in Tanzania.

(d) The Bank of Tanzania Act, 1995

The purpose of this Act was to repeal and re-enact the Bank of Tanzania Act, 1965 so as to provide more definitively the regulatory and supervisory powers of the Bank of Tanzania over other banks and financial institutions. (For a fuller description of this, see Section 1.3.)

(e) The Cheques Act, 1969

The Bills of Exchange Ordinance, Cap. 215, largely governs the use of cheques. The Cheques Act provides for the protection of bankers in relation to transactions concluded through payment by use of cheques and other related instruments.

(f) The Bankruptcy Ordinance, Cap. 25

The Ordinance regulates individuals' and partnerships' insolvency proceedings. However, the ordinance is inapplicable to body corporates like banks.

(g) The Capital Market and Securities Act, 1994

The Capital Market and Securities Act, 1994 was enacted to promote and facilitate the development of an orderly, fair, efficient capital and securities market in Tanzania.

(h) The Fair Trade Practices Act, 1994

The Act encourages competition in the economy. It prohibits restrictive trade practices, regulates monopolies and their concentration of economic power and prices. The Act is also intended to protect the consumer against alltrade malpractice and also provides for other related matters.

(i) The Government Loans, Guarantees and Grants

The Act was enacted to revise and consolidate the written laws relating to loans raised and guarantees given by the government and to provide for the acceptance of grants made to the government and for matters connected therewith and incidental thereto.

(j) The Arbitration Ordinance Cap. 15

The ordinance governs arbitral proceedings referred to the Arbitrators but otherwise triable by the High Court.

(k) The Contract Ordinance, Cap.433

The Ordinance provides for most of the principles of contract law.

(l) The Companies Ordinance, Cap. 212

The Ordinance regulates activities and affairs of all companies incorporated and or registered to do business in Tanzania. It further provides for the winding up procedures of companies incorporated under it.

(m) The Civil Procedure Code, 1966

The Civil Procedure Code is a procedural law which proscribes procedures for disposal of civil suits instituted in the High Courts and courts subordinate thereto (Resident Magistrates and District Courts). It provides for procedures through which the court can restore a right to an aggrieved citizen.

(n) The Penal Code, Cap.16

The Penal Code codifies criminal offences and provides for punishments thereof. The code makes it an offence for a person to obtain money or credit by cheque without having sufficient funds.

(o) Transfer of Business (Protection of Creditors) Ordinance, Cap. 398

This ordinance is intended to protect creditors and even in the event that a debtor, who is a body corporate, intends to transfer either wholly or substantial part of its business to another person/or body corporate.

1.2 Role of financial intermediaries that provide payment services

Two broad categories of financial intermediaries in the banking system exist, namely: commercial banks and non-bank financial institutions. Their number, as of August 1997, subdivided into local and foreign institutions, are given in the following table:

Institutions	Total number	Local owned	Foreign owned
Commercial banks..	14	6	8
Non-bank financial institutions..............................	13	11	2

1.2.1 Commercial banks

These are deposit money banks that incur liabilities in the form of deposits payable on demand and transferable by cheque or otherwise in making payments. They lend and provide other banking services, including payment services, to the public. The 14 licensed commercial banks have approximately 170 branches.

For the year ended June 1996, commercial banks' credit to all sectors of the economy declined by Tanzania Shilling (TZS) 136.1 billion, or 50.2%, when compared with the previous year. On the other hand, within the same period deposits, excluding house accounts liabilities and Government deposits, increased by TZS 72.1 billion or 13.7%. Foreign currency deposits continue to dominate the increase in commercial banks deposits, accounting for 39.3% of the recorded growth in deposits. Time deposits accounted for a mere 10.8%, while Savings and Demand Deposits, contributed 31.2% and 18.7% respectively.

Membership of the Clearing House is restricted to commercial banks while other non-bank financial institutions which are also deposit taking institutions participate in the clearings via agency agreements with member banks.

1.2.2 Non-bank financial institutions

These are grouped into deposit and non-deposit taking financial institutions.

(a) Deposit taking institutions

They are deposit taking but incur liabilities in forms other than demand deposits, say time and savings deposits Also they mobilise deposits, offering various types of deposit schemes (in Tanzanian Shilling and foreign exchange); providing banking services (other than cheque accounts) and participate in money market operations. For example, Tanzania Postal Bank, which is popular for small value savers, uses Tanzania Posts Corporation offices on agency agreement to service remote parts (including rural areas) of the country.

(b) Non-deposit taking institutions

These can be grouped as follows:

- institutions offering leasing and hire purchase services - this service had been monopolised by one state-owned company until the Banking and Financial Institutions Act of 1991 was enacted, then other companies started to compete;
- institutions offering development finance - these provide long-term finance to the public and private sector in the form of loans for medium to large-scale investment. Due to stiff

competition from commercial banks these institutions are planning to become merchant banks;

– institutions offering pension funds and insurance services - the most active of all groups in terms of outreach, volume and frequency of payments. They include:

(i) Pension funds

National Provident Fund (NPF) - with branches in all regions acting as collecting centres for statutory pension collections from all salaried non-parastatal employees. Parastatal Pension Fund (PPF) has neither branches nor any operations outside its Dar Es Salaam head office. It caters for parastatal employees only.

(ii) Insurance companies

One insurance company, the National Insurance Corporation (NIC), has the sole monopoly with collection and payment centres throughout the country. A bill has, however, been passed to allow introduction of private insurance and a review of the pension structure is in the pipeline.

1.2.3 Other institutions that provide payment services

They are grouped into four major categories.

(a) Bureau de change institutions

They provide a retail foreign exchange market. As non-bank currency shops, they are not allowed to participate in the Interbank Foreign Exchange Market.

(b) Sundry institutions

They offer auxiliary intermediation or support services to the national payment systems. For example, Tanzania Posts Corporation which, in addition to its traditional postal services, provides payment services through: postal mail transfers and local postal telegraphic transfers. Tanzania Posts Corporation has about 200 outlet offices throughout the country.

(c) Savings and Credit Co-operative Societies (SACCOS)

These are primarily small member-owned societies of cooperative movements that are active in some parts of the country. About 450 SACCOS are in operation in Tanzania. They are potential intermediaries between the banking sector, the rural areas and micro-businesses.

(d) Non-government organisations

Primarily societies of cooperative movements that mobilise and allocate untapped financial resources. Due to their limitation in scope and finance they target certain groups of people fitting into their scope of operation.

1.3 The role of the central bank

The Bank of Tanzania (BOT) Act, 1965 and its 1995 update spell out that the BOT is empowered as a central bank with the primary objective to formulate and implement monetary policy, directed to the economic objective of maintaining price stability over time. The Bank has also subsidiary functions that include currency issuance, bankers’ bank, Governments’ bank, the advisor to the Governments,[4] the guardian of the country's international reserves, supervision of banks and financial institutions and promotion of financial development.

1.3.1 Currency issuance

The Bank has the sole right to issue notes and coins in Tanzania. The stocks of note and coins are distributed through Bank of Tanzania headquarters, its 4 branches and 6 safe custody centres at various commercial bank branches which were established under agreements.

1.3.2 Payment services

The Bank provides central clearance and settlement facilities for interbank transactions.

The Bank of Tanzania accepts deposits to act as prudential reserves for commercial banks (i.e. the minimum reserve); discounts commercial and government paper; and has the commitment to act as lender of last resort to these banks.

The Bank is also the banker and the fiscal agent for the Governments. The Bank may make temporary advances to the Governments through its overdraft facility, subject to repayment within 180 days and through purchases (direct or rediscounting) of Treasury Bills issued by the Governments, which mature not less than 12 months from the date of issue.

The Bank is the depository of the official external assets of Tanzania, including gold and foreign currency reserves. Guarding international reserves may imply the determination of buying and selling rates of gold and foreign exchange in foreign exchange markets and/or the buying and selling of reserve assets for the purpose of sustaining the national currency's external value.

1.3.3 Advice to the Governments

The Bank may advise the Governments on matters relating to its functions, powers, duties, the credit condition in Tanzania or proposing measures and transactions relating thereto.

1.3.4 Supervision of banks and financial institutions

The Bank insures that commercial banks and other financial institutions conduct their business on sound prudential basis and according to the various laws and regulations in force. It includes the supervision of banking conduct and the licensing of financial institutions in accordance with the Basle Committee recommendations.

1.3.5 Promotion of financial development

The Bank has a responsibility to establish an effective financial system. In this respect it has to facilitate advanced clearing and transfer systems and the availability of necessary banking services, for example, deposit facilities and loan facilities, availability of certain specialised institutions[5] and facilitation of a money market, a capital market and a foreign exchange market.

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4 The United Republic of Tanzania contains the Union and Zanzibar Governments.

5 Which could be represented, for example, by an industrial development bank and/or an agricultural development bank and micro-finance institutions.

1.4 The role of other private and public sector bodies in payment systems

Other entities that play a role in the Tanzania payments system include those that provide specialised clearing services, setting National Payment Systems policies and accounting standard-setting or rule-writing functions.

1.4.1 Bankers clearing houses

Three Bankers Clearing Houses situated in three major cities were introduced in 1993, 1996 and 1997 respectively. Membership is limited to licensed commercial banks. Their main role is to facilitate the clearance of interbank instruments, principally cheques.

1.4.2 Tanzania Institute of Bankers (TIOB)

Its main role is to act as a regulatory and disciplinary body for banking professionals and conduct all bankers professional research and examinations. Membership is restricted to corporate members (commercial banks and financial institutions as indicated in 1.2) and individual members from the corporate members.

1.4.3 Tanzania Bankers Association (TBA)

TBA is an association of banks for safeguarding matters of common interest to members (all licensed deposit taking banks). It is the owner, manager and operator of the clearing houses.

1.4.4 The Advisory Council of the National Payment Systems (NPS)

It is an apex body for decision-making on issues pertaining to payment systems. Its members are heads of all NPS stakeholders.[6] The council has 4 working level committees dealing with Standards, Operations, Legal-Regulatory and Automation issues pertaining to payment systems.

1.4.5 The National Board of Accountants and Auditors (NBAA)

An authority and regulatory body for accounting and auditing standardisation.

2. SUMMARY INFORMATION ON PAYMENT MEDIA USED BY NON-BANKS

2.1 Cash payments

The Bank of Tanzania currently issues notes in 7 denominations; TZS200, TZS500, TZS1,000, TZS5,000, TZS10,000, TZS20 and TZS10. As of June 1996, total notes in circulation was 2.6%, 9.7%, 27.9%, 20.9%, 37.6%, 0.2% and 0.0% respectively in terms of percentages. Proportion of notes in relation to value of total currency in circulation was 98.2%.

The Bank also issue coins in 10 denominations: -/05, -/10, -/20, -/50, 1/-, 5/-, 10/-, 25/-, 50/- and 100/-. As of June 1996, the percentage of total coins in circulation was 0.2%, 0.1%, 0.9%, 1.1%, 4.0%, 9.7%, 16.8%, 20.3%, 0.3% and 46.7% respectively. Proportion of coins in relation to value of total cash in circulation was 1.8%.

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6 These are all heads of banks and non-bank financial institutions.

During the year ended June, 1996, the extended broad money (M3)[7] recorded a growth rate of 16.3%, while broad money (M2)[8] was 14.4% and narrow money (M1)[9] was 13.4%.

The usage of cash relative to other payments over the past five years has diminished insignificantly. There were no significant developments of other cash payment substitutes, e.g. plastic payments, during the period.

2.2 Non-cash payments

2.2.1 Credit transfers

Banks effect transactions for credit transfer systems using telegraphic transfers (TT) and mail transfers (MT). Fund transfers through telegraphic transfers are relatively reliable and faster for intrabank or interbank transactions. Coded telex messages perform the transfers. Transfers through mail transfer are popular for local inter-branch payments and non-local payments where telecommunications is not available or is unreliable.

Two options are available:

– the originating bank branch communicates through its head office, which communicates with the head office of the receiving bank before the transfer is effected to the respective branches; or

– the paying bank submits a banker’s payment cheque, draft or clearance transfer vouchers which may contain funds for a number of payees with attached breakdown instructions to an agent bank head office.

On receipt of the instrument, an agent bank transfers funds directly by a TT or MT to its branch at the destination. The agent bank presents the item at the local clearing house for settlement purposes.

The main users of the credit transfer mechanism are corporate customers and banks with customers in places where the paying bank has no branch.

2.2.2 Cheques

The usage of cheques is increasing slowly. In 1994, the Dar Es Salaam Clearing House (DBCH)[10] cleared about 415,000 items for a total value of about TZS 828bn. On a daily basis this works out to about 1800 - 2000 items for a value of TZS3.5 - 4.0bn. Currently, there are three clearing houses estimated to clear between 2,000 - 2,500 items per day.

Only commercial banks that maintain current accounts with the central bank and the central bank are allowed to issue cheques.

The low level of confidence in cheques, particularly in private transactions, is due to several reasons. Key amongst these are the problem of issuing cheques without sufficient funds[11] in

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7 Extended Broad Money - defined as a sum of Broad Money (M2) and foreign currency deposits.

8 Broad Money - defined as sum of Narrow Money (M1), time deposits and savings deposits.

9 Narrow Money - defined as sum of currency in circulation outside banks plus demand deposits.

10 The first clearing house to be introduced in the country in 1993.

11 Although the Penal Code, Cap. 16 of the laws of Tanazia declared this a criminal offence, its enforcement has proven to be cumbersome.

the account and delays in the clearing system - it takes up to 28 days or more in remote parts of the country (it used to be months) - which increases the chance of fraud and forgery.

However, the paper cheque remains the most frequently used non-cash payment instrument in Tanzania. The majority of cheques are written by businesses for corporate, salary and pension payments. Generally, few individuals write cheques mainly because personal cheques are normally not accepted due to, among other reasons, the absence of unique identification.

2.2.3 Direct debits

Some banks provide direct debit services to their customers by use of "Standing/Bankers orders". This service is not common and is limited for intra-bank transactions. However, some customers use it for recurring loan repayments, insurance premiums, water and electricity bills payments, house rents and hire purchase instalments. The total number of direct debit transactions per any given time cannot be determined with any reasonable degree of confidence.

2.2.4 Payment cards

Plastic cards are not issued for local payment use by the banking industry nor by non-bank financial institutions. However, there are utility organisations issuing prepaid cards for bill-paying services including: payment of electricity bills (using a "pay as per your electricity consumption" pre-paid card) introduced in 1996 by an electricity company and payment of phone bills by magnetic stripe cards introduced by telecommunications companies.

2.2.5 Other payment instruments

There are a number of other payment instruments issued by some banks. These include:

(a) Banker's payment cheque

Usually drawn by banks on themselves to settle their obligations. Customers (even the Government) of the bank may apply for banker's cheques in order to make payments under special arrangements. Customers pay commission for using the services of banker's cheques.

(b) Promissory notes

The applicant signs a promissory note undertaking to make the payment on due date. However, to effect payment, the signatory can issue a cheque, give a mandate for his account to be debited or even deliver cash to the bank to meet his obligation.

(c) Travellers cheques

One bank issues its own local travellers' cheques in different denominations. It clears them like any other intra-bank cheque. The traveller's cheques are drawn on the bank's head office with its branches acting as selling agents that remit the proceeds to the head office. The travellers' cheques are sent to head office by courier when encashed by a branch. Other banks handle international traveller's cheques only.

3. PRESENT INTERBANK EXCHANGE AND SETTLEMENT

3.1 General overview

Generally, all interbank payments are first cleared between banks locally, usually through either bilateral agreements[12] or a local clearing house, before being cleared and settled between non-local branches of the same bank via intra-bank clearing mechanism.

Practically, the interbank clearing can be grouped into two separate major sub-systems: local clearings - within clearing house localities and non-local clearance - between up-country[13] branches (where there is no clearing house).

Dar Es Salaam Bankers Clearing House (DBCH) was established in July 1993. It was the first clearing house in the country, with the objective of, amongst others, making arrangements for the speedy and economic collection of cheques, bills and other documents payable or deliverable at or through the offices of the members of the clearing house. It has a comprehensive set of rules which adequately describe the procedures for clearing cheques throughout the country in equitable terms. Later two more clearing houses were established, in 1996 and 1997 respectively. All are bound by the same rules as for the DBCH. All clearing processes in clearing houses are manual.

Within the city or town where a clearing house is situated, the rules provide for an exchange of cheques each morning at the clearing house. These facilities are located in the Bank of Tanzania premises. The rules allow 3 days clearing in the cities and a maximum of 28 days for remote clearing. Settlement is on multilateral net basis over banks' current accounts at the Bank of Tanzania at the end of day.

There has been a general decline in use of DBCH in terms of average daily number of cheques being cleared. On the other hand, the total value of all cheques being cleared each day, on average, has been increasing modestly, as has the average value per cheque. The net settlement, on average, reduces by about 56% the total value being netted. In these cases the concentration of deposits of one bank is not as large as those controlled by the biggest bank in the country.

3.2 Structure, operation and administration

3.2.1 Major legislation, regulation and policies

There is no specific legislative framework governing the operations of the Tanzania payment systems in general nor is there legislation for clearing and/or interbank settlement.

The instruments mostly handled through the clearing houses are cheques, drafts, mail transfers and other bills of exchange. They are subject to the provisions of the Bills of Exchange Ordinance, 1882 and the Tanzania Cheques Act, 1969.

The operations of all interbank clearings are subject to regulations and rules set by members, through the Tanzania Bankers Association and the Bank of Tanzania. Membership of the clearing houses is open to any bank which, in the opinion of the Bank of Tanzania, is eligible for membership and agrees to the regulations and rules governing the operations of the clearing house.

The administrative body of the clearing houses is the Committee of Management consisting of the Governor or Deputy Governor of the Bank of Tanzania (ex-officio chairman) and all the managing directors of commercial banks who are members of the clearing houses.

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[12] In regional towns where there is no clearing house, banks have designated branches where they meet to exchange instruments bilaterally.

[13] Up-country for this purpose means remote parts of the country, i.e. away from clearing house localities.

Any new bank licensed thereafter becomes a member of the clearing house by applying to the Bank of Tanzania using a special form. The application for membership is discussed and decided at the next meeting of the Committee of Management whose decision is final.

3.2.2 Participants in the clearing and settlement system

Fourteen banks, including the Bank of Tanzania, are currently settlement members of the clearing houses. They forward the clearing instruments to the clearing house through their central accounting/clearing departments.[14] The practice is that bank branches do not directly participate in interbank clearing; they pass their instruments through their clearing departments, which are situated in the head offices of each bank in Dar Es Salaam.

All other non-bank financial institutions participate in the clearing arrangements through commercial banks.

3.2.3 Types of transactions handled

Only interbank transactions as described in the rules and regulations for the clearing houses are handled in the clearing houses, these include: cheques, drafts, mail transfers, clearance transfer vouchers, direct debits and sight bills of exchange.

Banks maintain at the Bank of Tanzania the following accounts: Local Currency Current account (clearing account), a United States Dollar (USD) account and Statutory Minimum Reserve (SMR) account. There are also separate accounts for government securities held by banks and on behalf of their customers.

3.2.4 Operation of the transfer systems

(a) Local clearings

Within a clearing house area, rules provide for an exchange of cheques each morning between 10.00 a.m. and 10.30 a.m. at the clearing house. Upon completion of the exchange, a multilateral net settlement position is manually calculated and the banks are notified of their net positions, usually by 11.00 a.m. Posting the net positions to the current/clearing account at the Bank of Tanzania is at end of day. Rules also provide for special collection of items after clearing through a bilateral arrangement. The maximum number of days for local clearing is three days.

(b) Non-local clearance

Instruments originating from up-country are sent through courier services to the central accounting departments of each bank in Dar Es Salaam where preparation of new schedules are done and sent to the Dar Es Salaam Clearing House. The number of days taken for these instruments is guided by regulations governing the clearing houses. The maximum number of days ranges from 14 days between regional centres and 28 days for remote areas of the country.

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[14] Banks with several branches have a centralised accounting department used for control purposes, including liquidity management. So all branch items must pass through these departments.

There are two options for clearance of instruments from branches located in two different up-country towns: one is for the instrument to be passed through the central clearing departments (as explained above); or alternatively, for it to pass directly to the regional branches provided a bilateral clearance agreement exists.[15]

3.2.5 Transaction-processing environment

Clearing processing is purely manual. Members drive or walk to the clearing house with physical instruments, exchange the instruments and leave settlement certificates. There is no automation in the clearing house.

3.2.6 Settlement process

Settlement of interbank instruments is done each day after the clearing session on a multilateral netting system using accounts in the central bank. Settlement for cheques, bank transfers, and interbank foreign exchange market transactions is as follows:

(a) Cheques and bank transfers

After exchange of physical cheques at the clearing house:

– the clearing house supervisor announces the balancing of the clearing work and representatives of members prepare debit/credit settlement certificates. The settlement certificates authorise the Bank of Tanzania either to debit or credit the representative bank's account at the Bank of Tanzania.

– on the same day at 3.00 p.m. posting of settlement balances is done after all the necessary approvals are obtained, the banks previous day positions are determined, and up-country banks' balances are received through "Items in Process of Collection (IPC)"[16] bags from other Bank of Tanzania branches.

– members of the clearing house are required to maintain a credit balance with the Bank of Tanzania at the close of each working day. In the case where a member fails to maintain a credit balance, then the member is required to pay penal interest at the rate applicable to overdrafts plus 2% a day. In addition, the account should be fully covered not later than the next clearing otherwise the member is automatically excluded from clearing house until its balance position is in credit.

– all commercial banks with more than one branch have centralised their clearing account so as to reduce demand on bank reserves for management control and treasury utilisation efficiency.

(b) Interbank Foreign Exchange Market (IFEM)

Dealing is done by phone or other means agreed by the parties. On concluding a deal, the mode of payment is contracted as indicated in the deal confirmation slip.

Each party originates a confirmation slip to the counter-party with a copy sent to the Bank of Tanzania where they are immediately recorded and matched. The parties must also issue instructions to their correspondent bankers for payments to be made. The normal terms and conditions

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[15] In case the two banks involved in clearing have branches in that town.

[16] A special bag from different branches of Bank of Tanzania carried every day to and from head office by Expedited Mail System courier services.

are based on the IFEM dealers' code of conduct and guidelines. The value date is normally T+2 and must be specified by both parties on both currencies.

3.2.7 Pricing policies

A fee, which a member bank charges its indirect clearing house participant or customers, is negotiated between the parties concerned. Banks do not have to pay any entry fees nor per item fees for the use of the clearing houses. All costs are subsidised by the central bank.

3.2.8 Credit and liquidity risks

In Tanzania, four parties are involved in clearing and settlement systems: customers, commercial banks, clearing houses and the Bank of Tanzania. Each party carries certain responsibilities and bears certain risks.

(a) Customer liquidity/credit risk (commercial banks vis-à-vis customers)

Cheques remain the main instrument in the clearing houses. Cheques issued without a sufficient balance in an account expose a collecting bank to liquidity risk and in some cases even credit risk, as the payer's bank will normally not honour that cheque. Items not received back by the collecting bank within such a time as has been mutually agreed by members to the clearing procedures are considered paid and the customer gets credit.[17] Unfortunately, this does not guarantee the fate of that cheque.

(b) Interbank credit risk (member banks vis-à-vis each other)

Because of the concentration of business in one major bank (having more than 60% of volume of items in each clearing house and over 90% of all payments volume in the country), other banks rely heavily on this bank's participation when clearing interbank payments. Since there is no guarantee of payment finality until the settlement process is finalised, its use to settle large volume and high value payments increases concern about credit risk which in turn may have systemic risk implications.

The clearing house rule as explained in 3.2.6 (a) which requires members to maintain a credit balance at the end of each working day aims at reducing such risks but it is impractical to expel such a large bank under present circumstances.

(c) Liquidity risk (member banks vis-à-vis the Bank of Tanzania)

The current multilateral net settlement using central bank accounts is satisfactory in that it substantially reduces the level of intraday liquidity required by clearing house participants. However, given that the role of the central bank is primarily as supervisor and settlement agent for the clearing house, such an arrangement exposes the central bank to settlement risks as it implicitly guarantees finality of outgoing payment. The resulting intraday credit expansion thus exposes it to considerable risk from the unsecured overdrafts which emanate from operational procedures governing settlement.

If it happens that a bank is excluded from the clearing house, there are no rules existing to protect the Bank of Tanzania's money after automatic exclusion of the bank from the clearing house. The situation is further aggravated given that there are no bilateral and/or multilateral limits for

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[17] The time differs from one area to another ranging from 3 to 28 days.

which a participant may be liable (i.e. on gross amounts); nor, are there any loss sharing agreements or a pool of collateral to guarantee settlement. At a minimum, this implies that the Bank of Tanzania guarantees settlement for at least one day and then prohibits the bank from participating when the bank's current account is overdrawn. Therefore, at least some moral hazard and liquidity risks that may pose systemic risk exist.

In some events the central bank advises the commercial banks, by different means including phone, on their current and reserve account positions before the clearing session commences. The banks, however, collect printed papers on their position before the next clearing session.

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

4.1 Exchange and settlement systems for international transactions

4.1.1 General overview

A large number of banks in Tanzania are international, in that out of 14 commercial banks currently licensed to operate in Tanzania, 8 Tanzania-incorporated banks are subsidiaries of foreign banks.

International funds transfers of large value are mainly effected through correspondent banking relationships. However, there are no uniform correspondent banking arrangements in the banking industry. There is no exchange control in Tanzania.

The main means of sending payment instruction to correspondent banks abroad is by tested telex messages or S.W.I.F.T. where available (at end-1997 only five banks had S.W.I.F.T. capability although most were planning to join in 1998). Where payment instructions are quoted in a currency other than that maintained with a correspondent bank, the currency has to be bought at an agreed rate. In such a case the local bank may instruct a bank abroad to make the payment on its behalf and the correspondent bank to reimburse the equivalent. Some payments are also made by bank drafts to customers.

There is monetary cooperation in East Africa, where Kenya, Uganda and Tanzania shillings are traded in a similar manner as other major foreign currencies. The respective central banks provide weekly information on transactions in the regional currencies.

Commercial banks with no correspondent relationship in the region can periodically repatriate excess regional currency holdings to their respective central banks for conversion into local currency. Central banks thereafter repatriate their holdings to the respective central bank in exchange for US dollars.

4.1.2 Retail transactions

Foreign currency cash and traveller's cheques are the main instruments by which retail cross-border retail transactions are effected. These cheques are of two major currencies: pounds sterling and United States dollars.

4.1.3 Foreign currencies trading

Major currencies traded include United States dollars, pound sterling, Ugandan shilling, Kenyan shilling, South Africa rand and Unit of Account for Preferential Trade Area (UAPTA) dollars.

4.2 Exchange and settlement systems for securities transactions

This section looks at the operations of the Tanzania securities markets, with particular reference to the links between securities transfer and payment systems. Currently, the only active domestic financial market is that of Government securities. The Bank of Tanzania, as agent to the Governments, is charged with the task of issuing stocks, bonds and treasury bills.

(a) Money markets

Dealings in the money market by the Bank of Tanzania are yet to be fully developed. A free market is only beginning to emerge. Money market operations are effected by the Bank of Tanzania using one instrument, namely Treasury bills. Treasury bill auctions which began in August 1993 are held weekly (Wednesdays) on a multiple price system basis. The auctions, which are presently open to individuals, groups or institutions, are announced four days in advance of the auction dates. Ownership is evidenced through physical certificates, which can be re-discounted at the Bank of Tanzania provided they mature within 180 days from the day of re-discounting by the Bank of Tanzania. Efforts are underway to introduce a book entry system, which will dematerialise the scrip and allow for instantaneous delivery versus payment. The book entry system will facilitate secondary market trading which is still at a nascent stage. Currently delivery and settlement of treasury bills is two days (T+2) as follows: T+0 (Wednesday): Treasury Bills auction is done and announced; T+1 (Thursday): payments by bankers cheque or bank transfer instructions are received and entries are passed accordingly; and on T+2 (Friday): cheques are sent for clearing and certificates are prepared but not released until after credit has been effected or the clearing period has elapsed without the cheque being returned.

(b) Capital markets

The capital market in Tanzania can be described as an “emerging market”. Bank financing and government subsidies have for along time been a source of finance for state corporations and companies. There is a noticeable absence of publicly owned companies (i.e. companies allowed to invite subscriptions from the public). Many companies are private, i.e. companies whose right to transfer shares is severely limited. The number of securities is limited, with government debt instruments being the only securities in the market (stocks treasury bills and bonds). Pension and provident funds are the only major collective investment schemes and there are no unit trusts.

In the transition of the country’s economy from a “planned” economy, dominated by parastatal enterprises, towards a “market” economy, where the private sector is expected to play an increasingly important role, the Capital Markets and Securities Act was enacted (refer section 1.1). As a result the first stock exchange has just started operations in Tanzania.

(c) The foreign exchange markets

Tanzania introduced the Interbank Foreign Exchange Market (IFEM) in 1994, initially conducted on an open outcry basis, with authorised dealers assembled at the Bank of Tanzania. The Bank of Tanzania supervised the daily sessions by inviting offers and bids and awarding deals at the highest bid. Telephone dealing was later introduced in May 1996. Authorised dealers are now considering introducing electronic dealing.

The mode of payment is agreed as stated in the contract and indicated in the deal confirmation slip. Either a Bank of Tanzania transfer, cheque or bankers payment (which are cleared and settled like any other cheque in the clearing houses) effects payment.

In the case where transfer is through current accounts maintained at the central bank, entries are passed on due date by debiting or crediting the respective bank's local currency accounts. Where payment also involves US dollars, the dollar accounts are debited or credited accordingly.

Bureaux de change and banks cater for the retail market in which individuals and businesses satisfy their foreign exchange requirements.

5. THE ROLE OF THE CENTRAL BANK IN INTERBANK SETTLEMENT SYSTEMS

5.1 General responsibilities

5.1.1 Statutory responsibilities

There is no specific legislative framework governing the operations of the Tanzania payment clearing systems, nor does the Bank of Tanzania have any statutory responsibilities in connection with them. The Bank's interest in the quality of these systems stems from its various core responsibilities as a central bank.

Firstly, the primary objective of the Bank is to establish monetary conditions conducive for price stability over time. As the ultimate provider of liquidity in the financial sector it presupposes efficient and reliable payment, clearing and settlement systems that serve the financial markets effectively.

Secondly, the Banking and Financial Institutions Act of 1991 gives the Bank other responsibilities. These include: ensuring implementation of prudential controls concerning capital adequacy, liquidity, concentration of credit, risk diversification and modification/monitoring of the minimum reserve requirements and foreign exchange exposure. Hence the Bank has particular interest in credit and liquidity risks that may result in systemic crises - incurred by the banking industry, financial institutions and their customers participating in the clearing and settlement systems.

Thirdly, being the bankers' bank, it accepts deposits of prudential reserves for the commercial banks, discounts commercial and government paper, has the commitment to act as a lender of last resort to the banks and, most significant in this context, is the settlement agent to these banks. It is therefore very much exposed to the banks via the clearing system.

Fourthly, the Bank has a responsibility of establishing an effective financial system so that financial transactions necessary for the smooth functioning of the economy can be carried out with minimum costs, risks and the amount of time involved. In this connection, the Bank facilitates the development of advanced clearing, transfer and settlement systems.

Fifthly, the Bank provides and supervises central clearance facilities for interbank transactions through its three branches.

5.1.2 Establishment of common rules

The Bank in collaboration with Tanzania Bankers Association established and regularly reviews the rules and regulations governing clearing houses and money markets. Except for the accounting standards set by the National Board of Accountants and Auditors, no other rules, standards or procedures have been set on payment systems by other organisations.

5.2 Provision of settlement and credit facilities

5.2.1 The provision and ownership of settlement facilities

The central bank provides current accounts used for settlement by institutions participating directly in the clearing house. Any licensed commercial bank can open a current account by right. Non-bank financial institutions do not have this right. These accounts are non-interest bearing and all banks are required to maintain an overnight credit balance.

All banks are required to keep a Statutory Minimum Reserve (SMR) for prudential and monetary policy purposes. The SMR ratio is pre-determined and monitored by the central bank. It is currently 10% of total bank deposits (excluding foreign currency deposits). The SMR account is not used for settlement.

Banks also maintain current accounts at the central bank. These are used for interbank settlement of Tanzanian shilling and United States dollar, purchases and sale of securities and withdrawals and deposit of cash. The central bank receives and honours different types of payment instructions on these accounts. Pre-checking of balances prior to settlement is normally done with reference to the beginning of the day balances.

5.2.2 Role in interbank settlement

As explained in Section 3.2.6, interbank settlement for local currency is done daily on a multilateral netting system using current accounts held at the central bank. It involves cheques, bank transfers arising from interbank money market transactions and any other payments involving Tanzanian shillings (e.g. sale or purchase of securities, dollars, repurchase agreements, etc.). After the clearing session, settlement certificates authorise the Bank of Tanzania to debit or credit the participant's account with the Bank of Tanzania. Settlement balances are posted in the central bank after determining the participant's previous day balance position and this determines finality of payments.

The Interbank Foreign Exchange Market transactions settlement at the Bank of Tanzania currently involve Tanzanian shilling and United States dollars only despite the fact that other currencies are also traded in the market; Section 4.1.3 refers. Since the Tanzanian shilling is pegged to the dollar, the market determines the rate of exchange with other currencies using cross rates based on the dollar to Tanzania shilling rate in the commercial banks and bureaux.

5.2.3 Roles in the settlement of securities transactions

The Bank of Tanzania issues securities on behalf of the Government and on its own behalf. Entries made during sales are directly passed into the accounts of the Government's Treasury Department maintained at Bank of Tanzania. The Treasury has access to the funds credited to their accounts. The investor is paid the interest earned on due date and the principal is redeemed on maturity. Government securities can also be rediscounted prematurely at the Bank of Tanzania as a lender of last resort. All these systems were until recently manually recorded except for the treasury bills system, which has been automated since 1993.

5.3 Monetary policy and payment systems

5.3.1 Objectives of monetary policy implementation

According to the Bank of Tanzania Act, 1995, the primary responsibility of the Bank is to formulate and implement monetary policy, directed to the economic objective of maintaining price stability, conducive to a balanced and sustainable growth of the national economy in Tanzania. The goal of the Tanzania National Payment System is to enable efficient circulation of money.

To achieve price stability, the Bank of Tanzania has to regulate the money supply. A recent survey reveals that, cash accounts for about 40% of the total bank payments followed by cheques (estimated at about 80% of all commercial bank non-cash paper based payments in the country). This indicates an inefficient payments system, which is cash based with very few cash substitute instruments, especially for low value payments.

The measure of money supply over GDP (financial deepening) has stood between 30 and 40% while the share of currency in the money supply has stood at about 30% over the last five years. Payment system inefficiencies are believed to contribute in driving the population away from the formal sector.

5.3.2 Instruments of monetary policy in Tanzania

For the purpose of the National Payment System, four instruments are considered vital for implementation of monetary policy in Tanzania.

(a) Discount rate policy

To ensure that the activities of banks continue smoothly, the central bank uses its refinancing and open market policy to accommodate banks to assist them to meet their interbank obligations. Within the framework of the refinancing policy, the BOT establishes conditions for refinancing commercial banks. The refinancing policy can be the discount policy or the Lombard policy.

Within the framework of the discount policy, the BOT buys from and sells to banks trade bills, treasury bills, and other specified securities at a rate (discount rate) set by itself. Under the discount rate policy the Bank uses one or both of a qualitative discount policy and a quantitative discount policy.

(b) Minimum reserve policy

The base for the determination of the minimum reserves of commercial banks to be held with the Bank of Tanzania, free of interest, includes all shilling deposits, borrowing from the general public (foreign currency deposits are excluded) and vault cash. The minimum reserve ratio is uniformly applied to all banks, although according to the Bank of Tanzania Act, the ratio may differ by type of deposit.

(c) Open market policy

While the other monetary policy instruments have been exclusively dealing with commercial banks, open market policy includes non-banks. Although the institutional framework for carrying out open market policy in Tanzania is still somewhat limited, the Bank has been resorting to treasury bill auctions, tap sales of Treasury bills and direct sales of certificates of deposits.

The proceeds from the sale of the liquidity papers are set aside in a special account created solely for monetary policy purposes and is not used to finance spending by either the government or the Bank of Tanzania.

The effect of open market operations in Tanzania has recently been enhanced substantially due to the increased amount of sterilised Treasury bills and the suspension of Government overdrafts with the Bank of Tanzania. It is hoped that the introduction of repurchase agreements (repos) will add flexibility in the provision of central bank balances to the commercial banks on short-term.

(d) Foreign exchange interventions

The Bank of Tanzania gradually eased foreign exchange controls after the enactment of the Foreign Exchange Act of 1991, with the establishment of foreign exchange bureaux in April 1992, introduction of foreign exchange auctions in July 1993, and the creation of the Interbank Foreign Exchange Market (IFEM) in 1994.

The country's trade and exchange system is now completely free of restrictions on making payments and transfers for current account transactions. The Government has already accepted the obligations of Article VIII of the International Monetary Fund's Articles of Agreement, in order to boost the country's attractiveness for foreign investors. The situation is being made more positive with further gradual relaxation of capital account transactions.

5.4 Risk-reduction measures

5.4.1 Credit and liquidity risks

As explained earlier in Section 3.2.6, members of the clearing house are required to maintain at the close of each working day a credit balance with the Bank of Tanzania. Otherwise a penalty or automatic exclusion from clearing exchanges may result.

As explained in Section 3.2.4 (b), commercial banks with more than one branch have centralised their clearing accounts so as to reduce demand for bank reserves obviating the need to maintain positive balances in several settlement accounts and for liquidity management purposes.

To avoid debit positions, banks get funds from alternative sources (such as interbank borrowing, discounting Treasury bills, etc.) to replenish their accounts before next settlement. The central bank advises the commercial banks each morning by phone on their current account and reserve account positions before the clearing session commences to enable them determine their positions at the end of the clearing session.

Nevertheless, the clearing-house regulations stipulate that a member should be barred from the clearing house if it fails to replenish the account before the next clearing session.

The Directorate of Bank Supervision of the BOT requires banks and deposit taking financial institutions to put forward measurement of risks assets, clarification of loans and other risks assets, provisioning for loans and accrual of interest. The BOT also released a concentration of credit and exposure limits regulation. The central bank also requires banks to adhere to the statutory minimum reserve of 10% of total deposits.

Internally, most banks have Assets and Liabilities Management Committees (ALCO) as a measure of control and monitoring liquidity.

The Penal code, Cap.16 of the Laws of Tanzania makes an act of issuing a cheque without sufficient funds in one's account a criminal offence.

5.4.2 Cross-currency settlement risks

The S.W.I.F.T. communication network currently used by five banks, including the Bank of Tanzania has almost eliminated the delays in settlement and the confirmation period. As such it is considered to have reduced the settlement risks associated with cross-border transactions.

5.4.3 Operational risks

As a control of the risks associated with fraud and negligence, the central bank requires various operational documentation before it allows a bank to operate. The manuals to be submitted are the credit manual, the foreign exchange manual and the internal control manual. Furthermore, in the licensing process the Bank vets management staff and members of the board of directors for their integrity and background.

In the case of computerised systems failures, an immediate fall back position is the use of a manual system. Some banks have arranged for back-up systems and premises to contain such a situation. Standby generators play a significant role during power interruptions. Where communications are concerned, some banks use cellular phones, radio calls, police messages, etc.

6. RECENT DEVELOPMENTS IN THE PAYMENT SYSTEMS

6.1 The National Payment Systems Modernisation Project

In the light of ongoing reforms, it was felt that an efficient payment system is a necessary precondition to address both the domestic and international business needs of the economy. The project titled "National Payment System Modernisation Project" was launched in August, 1996 with the following objectives:

- to reduce payment, clearing and settlement risks by providing conditions where any payment can be made appropriately with finality and with minimum risks;
- to supply timely and accurate information on the stock and flow of funds in order to improve macro-economic management capabilities, particularly in the exercise of monetary policy implementation by the central bank;
- to speed up the exchange and settlement of funds and securities up to levels comparable with those prevailing in major industrial economies in order to reduce float and improve efficiency in the circulation and transmission of funds to leverage this for financial deepening of the economy;
- to migrate, in the long-term, from cash/cheque based modes of payment to modern modes of payment and be responsive to user needs (i.e. a secure, reliable, expandable, integrated, convenient and cost effective payment service with universal access, keeping in mind the low coverage of bank branches in the country);
- to put in place an efficient and robust legal framework capable of regulating new payment systems by considering important payment issues such as the internationally acclaimed Lamfalussy Standards and finality and irrevocability of payment and settlement. Importantly, to approach this by addressing the need to have legislation with enabling powers for the central bank to issue rules and regulations and for the encouragement of agreements between participants in the payment system. It is hoped this approach will cope with the speed with which changes are taking place in technology and business as a whole.

As short-term improvements there are several sub-projects undertaken as explained in 6.2.

So far the current laws and regulations as explained in 1.1 continue to govern the system until new laws and regulations are in place which are currently being worked out.

Participation in the new system, the types of transaction to be handled, the operation of the new system, the transaction-processing environment, settlement procedures, credit and liquidity risks management and pricing will be determined after completion of the National Payment Systems vision, strategy and conceptual design.

6.2 Other developments

Some commercial banks are running home banking services dedicated to their own customers in which the customers are able to send instructions, query their accounts, print statements, etc.

Banks, through the National Payments System Modernisation project team, are undertaking short-term measures to be implemented by June 1998, which include:

(a) MICR document processing

Banks are addressing the problem of processing delays in interbank cheque clearing by introducing document processing using MICR technology. This will be coupled with the Bank of Tanzania offer to handle interbank cheque instruments cleared between its branches and to rationalise the clearing procedures and rules.

(b) Interbank communication network backbone

Banks are addressing the present problems of the inadequate use of interbank credit payment transfers and to minimise risks with online payment on central bank accounts by use of the central bank's VSAT backbone network between its branches. This will facilitate interbank payments through electronic settlement of credit transfers within the areas where central bank branches are locted.

(c) Media exchange processing

Interbank media exchange will be also be introduced for bulk payments and in place of MICR where not available. The banks will reduce the present duplication of effort and subsequent delay or errors in the processing of bulk payments, especially where these are originally derived from computer systems. It will also speed up the flow of cheques and credit transfers and dramatically cut down the labour involved in processing small value transactions and increase demand on the use of banking services in the country.

(d) Transmission of secured payment instructions

Secured electronic payment instructions between branches using S.W.I.F.T. will enable high value interbank credit transfers. This may not be justifiable for smaller branches due to inadequate volumes, infrastructure and capacity (i.e. staff, facilities, controls, etc). Nonetheless, it is possible to have same day clearing and settlement between key bank branches having S.W.I.F.T. facilities if this is done in collaboration with the Bank of Tanzania branch network backbone, which has S.W.I.F.T. connectivity.

7. INFRASTRUCTURE

7.1 Telecommunications infrastructure

(a) Telecommunications

All communications activities in Tanzania are managed and monitored under the auspices of the Tanzania Communications Commission (TCC). The major function of the TCC is to regulate telecommunications, postal services and courier services. The commission has the mandate among other things to: issue licenses to all telecommunications service providers; approve all telecommunications equipment; issue specifications and guidelines for telecommunications service provision; manage frequencies, issue of radio licenses for radio telecommunications operators; and to act as liaison between service providers and users/customers.

There are two basic telecommunications service providers namely Tanzania Telecommunications Company Limited (TTCL) in mainland Tanzania and Zantel in Isles Tanzania.[18] The TTCL is 100% owned by the government of Tanzania.

Telecommunications services have improved in urban areas following the introduction of new technology.[19] However, district and rural areas continue to be served by the old type of exchanges.[20] Available statistics indicates that the number of telephone lines remains less than one (0.7) telephone line per 100 inhabitants.

There is a transmission system[21] crossing the country from east to west and from north to south with connections to neighbouring countries of Rwanda, Burundi, Uganda, Malawi, Zambia and Kenya. The majority of international services are provided through two earth satellite stations in Dar Es Salaam. The two stations have adequate capacity to meet demands for this service for the next 10 years.

The TTCL is currently undertaking the Telecommunications Restructuring Project (TRP).[22] This project focuses on Dar Es Salaam, backbone transmission systems as well as switching and cable networks in the other regional centres. This project is almost complete. There are also spin off projects either as a result of the TRP or other development plans by the TTCL in which most district headquarters will be covered.

A number of regional headquarters can be interconnected in real time to provide on-line banking services. Other places including most districts and some rural areas can use electronic batch processing systems in place of the present paper batch processing system. Most major commercial centres are either at the tertiary or secondary exchange level which can be interconnected using trunk lines.

Places which generate over 80% of the banking business are within easy reach of the modern backbone network or have benefitted from the TRP by having new digital exchange and external plant network (wiring and cabling).

Most banks use leased dedicated lines for S.W.I.F.T. operations and dial-up lines for other business communications.

(b) Data communications

There are three licensed data communications operators in Tanzania. The services provided by these operators includes a state-of-the-art public data communications network based on satellite communications. There are also licensed mobile telephones as value added services. These include services for both speech and data communications in their network.

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[18] Its network is not yet in operation.

[19] Based on digital technology.

[20] Based on analogue technology.

[21] Based on microwave technology.

[22] The TTCL, with the support of seven donors put together a large rehabilitation and expansion of the telecommunications network worth about USD 250 Million. The project started in 1993.

7.2 Availability of electricity

Tanzania Electric Supply Company (TANESCO), a government owned company, dominates the electricity generation and distribution in the country.

Eighty per cent of the national installed capacity is hydroelectric power, representing a share of electricity to total energy balance of about 1%. Average per capita electricity consumption is about 60kwh/annum. The average growth rate of electricity demand is between 11% and 13% per annum. However, less than 10% of the population[23] have access to electricity, most of those who do are in urban areas and in some rural areas where the National Grid passes. On average, the current power tariff is 0.09USD/kWh.

At the moment TANESCO cannot fully satisfy the load demand. As a result some customers, including the banking industry, have resorted to the installation of standby generators. TANESCO is, on a modular basis, adding gas-powered power plants at Dar Es Salaam; nearing completion of an extra hydroelectric power station; building coal-fired power plants; and exploiting the international grid interconnections with her neighbouring countries of Zambia to the south-west and Uganda to the north-west.

7.3 Road infrastructure

Roads are the most accessible[24] mode of transportation in the country. The road network is comparatively far more expansive than air, railways and water bodies. Currently, only 4% of road network is paved and 18% is gravel. The rest of the road network consists of earth roads and tracks most of which are impassable especially during rain seasons.

Most of the regional town centres are connected to each other and to the business capital Dar Es Salaam with all weather roads. This however, is not the case for a greater part of the road network as it is still undeveloped, in particular the district and rural roads.

Because physical payment instruments remain important in Tanzanian payment systems and the most accessible mode of transportation in the country is road, roads are considered vital for transporting local financial instruments by courier service providers to rural areas where there is no other mode of transportation.

Considerable work to rehabilitate and upgrade roads (both track, regional and district roads) has been done under the Integrated Roads Project (IRP), phase I. Phase II was launched in1995 and aims by mid-2000 to have about 80% of trunk roads (paved 95% and unpaved 75%) and 50% of rural roads brought up to good passable condition.

7.4 Economic reforms

Tanzania has been undergoing major political and economic reforms over the past decade. The Government is now being restructured while the financial sector and markets are being liberalised for both private and foreign investments. This includes foreign exchange current account convertibility, divestiture of parastatals (e.g. banks, telecommunications, electricity company), etc. These changes have positively affected the previously socialist centrally planned economic environment. For example: government owned banks have improved their financial position and supervision and hence their potential for privatisation.

Financial markets were introduced at the Bank of Tanzania with interbank money markets (Treasury bills and US dollars). A stock exchange has been set up and is now ready to start

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[23] Tanzania has about 30 million population.

[24] In terms of bulk of the total tonne-kilometres and passengers-kilometres performed by the entire transportation system.

operations. Further, the central bank is also finalising efforts to facilitate money markets with the introduction of an immobilised and dematerialised book entry Treasury bill and repurchase agreements system which may also be extended to handle other highly liquid securities.

Telecommunications are about to be commercialised, major projects for installing modern digital exchanges with micro wave links between relay stations are being implemented and four data communications service providers have been licensed. These developments have enabled some banks to set up inter-branch data communication networks so Automatic Teller Machines, Electronic Funds Transfer at Point Of Sale, etc. may soon become a reality as telecomm tariffs come down and the infrastructure improves.

Unfortunately, the changes have also had negative effects such as depriving access to banking services by closure of branches.

The transport sector is still lagging behind despite rehabilitation of some major roads and the introduction of a private air service. These difficulties hamper postal and courier service development, forcing banks to establish their own courier service networks.

The national outlook for the future is encouraging particularly with a lower rate of inflation (currently 17% from over 26% over the past 5 years). This reflects positively on the monetary and fiscal policies currently followed.

Table 1

Basic statistical data

	1992	1993	1994	1995	1996
Population (millions)	25.3	26.0	26.7	27.4	28.3
GDP (millions of Shillings)	1,369.9	1,725.5	2,298.9	3,020.5	3,767.6
GDP per capita (thousands of Shillings)	54.1	66.4	86.1	110.2	133.3
Exchange rate (domestic vis-à-vis USD)	-	-	-	-	-
year end	335.0	479.9	523.5	550.4	595.6
average	297.7	405.3	509.6	575.0	580.0

Table 2

Settlement media used by non-banks

(at year-end, not seasonally adjusted, in billions of Tanzanian Shilling)

	1992	1993	1994	1995	1996
Notes and coins	81.9	105.9	136.6	197.8	233.2
Transferable deposits:	306.5	307.8	166.6	753.4	214.7
Corporate sector	-	-	-	-	-
Household	-	-	-	-	-
Other	-	-	-	-	-
Narrow money supply (M1)	186.2	24.1	329.6	428.3	449.2
Broad money supply (M3)	302.4	420.6	569.7	752.9	818.6

Table 3

Settlement media used by banks

(in billions of Tanzanian Shilling)

	1992	1993	1994	1995	1996
Reserve balances held at central bank	10.3	21.3	38.6	50.7	55.2
Transferable deposits at other institutions	0.5	4.7	3.4	5.1	9.2
Accounts at the Post Office (for Postal Bank)[1]	5.9	8.7	12.6	22.3	23.9
Accounts at the Treasury [2]	(16.2)	25.4	29.6	39.7	82.7
Required reserves	-	17.7	33.4	35.5	31.7
Institutions' borrowing from central bank [3]	0.4	44.7	0.6	70.3	5.5

[1] Post Offices do not maintain accounts for their customers but on behalf of Tanzania Postal Bank. [2] Government deposits held with the central bank. [3] Banks and others.

Table 4

Banknotes and coins

(in millions of Tanzanian Shilling)

	1992	1993	1994	1995	1996
Total banknotes and coins outstanding	108,897.5	132,312.7	187,824.3	264,116.1	279,774.9
Denomination					
Banknotes:					
10 000 notes	-	-	-	77,297.4	121,294.2
5000 notes	-	-	-	49,612.7	57,213.0
1000 notes	35,022.6	68,828.3	99,950.0	89,107.4	64,428.3
500 notes	43,256.8	37,632.2	54,907.7	34,551.0	22,525.6
200 notes	21,167.6	20,404.8	23,452.1	6,854.1	6,380.4
100 notes	6,989.2	3,149.7	6,142.2	2,260.3	1,693.2
50 notes	675.7	506.2	1,116.8	554.2	440.7
20 notes	269.4	113.6	372.3	502.1	499.8
10 notes	98.1	97.4	186.1	100.3	100.0
Coins:					
100 coins	-	-	-	1,228.0	2,741.8
25 coins	7.7	11.1	11.8	12.6	11.6
20 coins	312.0	270.8	407.7	722.8	987.8
10 coins	549.6	725.7	712.6	655.2	775.4
5 coins	297.7	321.1	313.4	388.5	415.7
1 coins	173.0	174.1	171.8	172.0	169.6
½ coin	45.1	45.2	42.1	45.8	45.8
1/5 coin	18.9	18.8	21.9	38.5	38.8
1/10 coin	3.9	3.9	3.4	4.6	4.6
1/20 coin	10.2	9.8	11.8	8.8	8.8
Banknotes and coin held by credit institutions	7,004.5	8,900.4	11,504.3	19,894.5	22,913.1
Total banknotes and coin outside credit institutions *	101,893.0	123,412.3	176,320.0	244,221.6	256,861.8
Banknotes held in overseas territories	-	-	-	-	-

* Currency in circulation outside banks.

Table 5

Institutional framework

(at end-1996)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (millions of Tanzanian Shilling)
Central bank	1	4	4386[1]	2,306,902
Commercial banks	14	170	2664	525,004
Savings banks	4	4	2	7,011
Public credit institutions	-	-	-	-
Post Office[2]	1	203	883	23,098
Memorandum item:				
Branches of foreign banks	7	8	724	142,644

[1] The central bank maintains Govt. Accounts on a three year on-line basis. [2] As an agent of Tanzania Postal Bank.

Table 6

Transfer instructions handled by securities settlement system: value of transactions

(in billions of Tanzanian Shilling)

	1992	1993	1994	1995	1995
Treasury Bills	26.6	65.9	116.9	307.5	593.9
Government stock, bonds and notes	66.7	68.9	102.1	341.0	334.3
Shares	-	-	-	-	-
Bonds	-	-	-	-	-
Futures	-	-	-	-	-
Options	-	-	-	-	-
Other	-	-	-	-	-

Table 7

Indicators of use of various cashless payment instruments: volume of transactions

(in millions)

Instruments	1992	1993	1994	1995	1996
Cheques issued[1]	-	-	0.415	0.405	0.390
Payments by debit and credit cards	-	-	-	-	-
Paper-based credit transfers[2]	-	-	1.695	1.565	0.419
Paperless credit transfers[3]			0.414	0.424	0.421
customer initiated	-	-	-	-	-
interbank/large value					
direct credits	-	-	-	-	-
Direct debits	-	-	-	-	-
Other	-	-	-	-	-
Total	-	-	-	-	-

[1] Excluding intrabank cheques. [2] Includes Postal and Banks Mail Transfers. Postal Mail Transfers accounts for 85% of total volume. [3] Includes Postal and Banks Telegraphic Transfers. Banks Telegraphic Transfers accounts for 85% of total volume.

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THE PAYMENT SYSTEM IN ZAMBIA

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OVERVIEW OF THE NATIONAL PAYMENT SYSTEM IN ZAMBIA

In Zambia very little was done to modernise the payment system, given its economic and political background of a centrally controlled, command economy. With the advent of a liberalised market economy in 1991 (when the new government came into power), serious work was started with the help of international organisations like the International Monetary Fund and World Bank to look at payment system issues. Since then, various research and studies have been undertaken into payment systems. Risks have been identified and corrective measures put in place to modernise the payment system to ensure cost-effective, rapid and secure payments to promote trade and economic growth.

The programme of modernisation has resulted in:

– the formation of the National Payment Systems Committee (NPSC) - for policy formulation and implementation (with various working groups);

– creation of an independent Clearing House - operated and managed outside the Bank of Zambia;

– a reduction in clearing times for cheques;

– introduction of the Electronic Clearing House (to be implemented);

– bank/branch interconnection, i.e. by VSAT; and

– development of new supervision standards.

The main payment instruments are cash and cheques. The central bank is the sole issuer of notes and coins and operates settlement accounts for clearing banks.

1. INSTITUTIONAL ASPECTS

1.1 General legal aspects

Currently there is no specific legislation that governs the payment systems *per se*, but the payment system draws its legal backing from various legislation such as:

– Bank of Zambia Act 1996;

– Banking and Financial Services Act 1994 (BFSA);

– Bills of Exchange Act 1882 and Cheque Act 1989;

– various statutory instruments;

– other statutes for non-bank entities such as Building Societies Act, Insurance Act, Development Bank of Zambia Act and Cooperative Societies Act;

– Transitional Zambia Clearing House Rules;

– agreements between payment service provider and customers.

The cheque is the major payment instrument in Zambia and its issue and acceptance is determined by the Bills of Exchange Act and Cheques Act of 1882 and 1989 respectively.

1.2 Role of financial intermediaries that provide services

There are various providers of payment services and they can be classified as banks (registered commercial banks) and non-banks.

Non-bank financial institutions include the Post Office, the Savings Bank, building societies, specialised lending institutions and other institutions providing financial services.

Commercial banks hold a banking licence while non-banks hold a financial institution licence under the Banking and Financial Services Act. Others are established under specific legislation.

There are 22 registered commercial banks, one Savings Bank, one Cooperative Bank, three building societies, six specialised non-bank financial institutions and one Post Office.

Non-bank financial institutions are involved in the provision of various services such as money transmission, credit provision and mobilisation of savings. Most rural areas are served by these institutions.

1.3 Role of the central bank

The central bank (Bank of Zambia) has by law the general functions of:

- maintenance of price and financial system stability through the formulation and implementation of appropriate monetary and supervisory policies;
- issuing of bank licences, supervising and regulating the activities of banks and financial institutions to promote safe, sound and efficient payment mechanisms;
- issuing of notes and coins;
- acting as banker and fiscal agent to the Government;
- supporting the efficient operation of the exchange system; and
- acting as advisor to the Government on economic and monetary management.

The central bank also provides current accounts for commercial banks for settlement of commercial banks' transactions and it participates in the Zambia Clearing House.

1.4 Role of other private sector and public sector bodies

The Zambia Clearing House is a private organisation comprising commercial banks and the Bank of Zambia that operates and manages the clearing house for the clearing of cheques. Currently there are two clearing houses for cheques, one for local currency and the other for foreign currency denominated in US dollars and British pounds sterling.

2. SUMMARY OF PAYMENT MEDIA USED BY NON-BANKS

Cash payments (notes and coins) remain the predominantly used retail payment media in shops and between individuals and have shown a growing trend in the last few years. There is no maximum limit to the amount of notes and coins that can be accepted as legal tender. For non-cash payments, the cheque is the predominant media used by both individuals and corporate entities.

2.1 Cash payments

Legal tender in Zambia is Kwacha and Ngwee, denominated as follows:

- Notes: Kwacha 10,000, 5,000, 1,000, 500, 50, 20
- Coins: Kwacha 10, 5 and Ngwee 50, 25

A Ngwee is 1/100 of a Kwacha.

The value of notes in circulation in relation to total cash in circulation is 99.86%. In 1995 the share of cash (notes and coins) in circulation in the hands of the public of M1[1] and M2[2] was 32.7% and 17.8% respectively.

2.2 Non-cash payments

The main non-cash payment media used by the non-banks is the cheque. There are other instruments like credit/debit cards which have recently been introduced by some banks. The Post Office plays an important role in money transmission in rural areas through telegraphic transfers and money orders.

2.2.1 Credit transfers

The use of credit transfers is very limited. The main credit transfers are government transfers of salaries to various civil servants' accounts with commercial banks to reduce issuing of many individual cheques. Banks with a wide network of branches accept, at a fee, individual credit transfers to another branch account holder. There is no developed credit transfer system for utility companies like ZESCO (electricity bills) and ZAMTEL (telephone bills). To some extent large corporate companies transfer certain payments by instructing their bank to debit their account and credit the payee's bank account. These transfers are normally same day, large-value and settled through the central bank.

2.2.2 Cheques

Cheques are the most used payment media. Banks issue cheques to their customers on various types of accounts on which cheques can be drawn.

Only banks with settlement accounts at the central bank issue cheques. A cheque is an acceptable media especially for large amounts which would not be settled by cash. However, its popularity and acceptability is limited by a number of factors, such as the clearing period which ranges between four and eighteen working days for local and up-country cheques respectively and the high incidence of fraud. These two issues are being addressed under the payment system modernisation programme.

Most payments by employers to employees, for utilities, goods and services are made by cheque. To improve the acceptability of cheques, some banks are issuing cheque guarantee cards.

2.2.3 Direct debits

While cheques are the predominant non-cash payment instrument, banks and the Government are promoting other paperless payment media such as direct debits and standing payment

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[1] M1 is defined as currency in circulation, demand deposits and bills payable

[2] M3 is defined as M1 plus time and savings deposits

orders. These instruments are perceived as an improvement in providing an efficient service to customers by reducing the number of cheques issued for salary payments. Though currently these instructions are paper based, it is envisaged that large organisations that generate a large number of these payments will prepare them in electronic form for direct debiting of the organisations accounts and direct crediting of employee accounts.

Direct debits for the settlement of utility bills has not yet developed and such payments are made either by cash or cheque.

2.2.4 Payment cards

A variety of cards have been issued by the major banks and one non-bank for local use only.

Debit cards. One bank issues debit cards to its customers which are used in the bank itself (through its branches), hotels, filling stations and some supermarkets. The customer's account is debited on the use of the card.

Credit cards. One non-bank financial institution issues a credit card to its customers which is used in selected outlets. Customers are given a time limit within which to settle the bill.

Cheque guarantee cards. One bank issues its customers with cheque guarantee cards for amounts up to K 200,000 per transaction.

ATM and POS networks. In the last two years two banks have introduced ATMs at some of their branches for cash withdrawals. These ATMs are for the exclusive use of each bank except for a few remote (rural) branches.

2.2.5 Other payment instruments

Post Office. The Post Office service also plays a marginal role in funds transfer through its branch network throughout the country. The main instruments used are:

- postal orders;
- money orders; and
- telegraphic money transfers.

These are mainly local transactions. The Post Office also plays an important role in retail money transmission through its network for the remittance of Government pensions to retired civil servants.

Traveller's cheques. Most banks issue international traveller's cheques like VISA, Thomas Cook, American Express and Master Card denominated in US Dollars or British pounds sterling for international travel. Local traveller's cheques denominated in Kwacha are issued and acceptable in most outlets and for customs payments.

3. PRESENT INTERBANK EXCHANGE AND SETTLEMENT CIRCUITS

3.1 General overview

There are two distinct interbank exchange and settlement systems, one based on bilateral settlement (bank to bank, interbank dealing) and the other based on multilateral net clearing and settlement (through the Clearing House). The interbank dealing caters for large-value transactions of a time critical nature and provides same day value. The Clearing House transactions are small-value cheque payments. Settlements from the interbank dealing and the Clearing House are through the books of the central bank at the end of day.

Interbank dealing settlements are on a bilateral gross basis under advice and authority from the paying bank, while Clearing House settlements are on a multilateral net basis advised by the Controller of the Lusaka Local Clearing House.

3.2 Structure, operation and administration

3.2.1 Cheque clearing

Two cheque clearing exchange systems operate as:

– the Transitional Zambia Clearing House, operated and managed by the Bankers Association of Zambia with ten (10) operating centres; and

– the foreign currency clearing operated by the Bankers Association of Zambia with one clearing centre in Lusaka.

The Transitional Zambia Clearing House deals in cheques denominated in local currency while the foreign currency clearing deals in foreign currency denominated cheques drawn on banks in Zambia. Settlement is through the banks' correspondent banks.

For local currency cheque clearing, banks meet at the clearing centres every working day at 9 a.m. to exchange paper collected the previous day on a multilateral basis. The main controlling centre is in Lusaka; the other nine centres communicate their net multilateral clearing positions to the Controller at the Lusaka Local Clearing House. The net balances from all centres are consolidated and advised to the Bank of Zambia for settlement. Settlement will only be effected if all banks have sufficient credit balances on their accounts with the central bank.

3.2.2 Interbank dealing

The interbank dealing transfer system operates from 8.30 a.m. to 3 p.m. Banks with paying instructions will deliver these instructions to the central bank for debiting and crediting banks' accounts. Instructions that are not covered by sufficient credit balances will not be settled and concerned parties informed accordingly to make arrangements to make good their accounts to facilitate settlement.

3.2.3 Major legislation, regulations and policies

There is no specific legislation in place dealing with the processes of interbank exchange (dealing), clearing and settlement. Legislation is drawn from the various Acts and Statutes referred to in section 1.1. Various rules are drawn up for each system, such as the Rules of the Transitional Zambia Clearing House (TZCH) and Rules of the Foreign Currency Clearing House. Interbank exchange is based on bilateral agreement between banks.

Rules and regulations pertaining to the Clearing Houses are formulated by the Bankers Association of Zambia with the agreement of the Bank of Zambia as supervisor of the financial system. These rules cover membership criteria, daily deadlines, irrevocability and finality of settlements, settlement obligations, responsibilities and liabilities of participants, collateral requirements, etc.

3.2.4 Participants in the system

Participation in the Clearing Houses is set in the Rules. Though the rules are silent on the agency relation, this is possible as long as all paper that is introduced through this agency (indirect) is the responsibility of the direct member.

Membership criteria for TZCH (extracts from TZCH Rules):

- technical competence to participate in the TZCH and Local Clearing House;
- meet all prudential regulations and other Financial Supervision Department requirements of the Bank of Zambia (BOZ) for registered banks;
- admission to the TZCH will not adversely affect the integrity and efficiency of the interchange, clearing and settlement system;
- paper interchange annually will not be less than 0.5% in value or volume of the total eligible items interchanged annually;
- agree to pay entrance fees required by the Bankers Association of Zambia (BAZ);
- open to the public for a period of six months;
- transfer to the BOZ cash or eligible securities with a current market value as determined by the BOZ as collateral for the clearing.

Membership criteria for Foreign Currency Clearing House:

- must be a member of the BAZ;
- admission is by unanimous decision of the member banks upon receipt of application;
- must have a settlement account with a foreign correspondent bank.

3.2.5 Types of transactions handled

The eligible items for interchange in the Clearing House are authorised debits, bills of exchange, cheques, clearance vouchers, debits relating to service charges, promissory notes and returned items. The most prominent items processed are cheques and clearance vouchers.

3.2.6 Operation of the transfer system

The clearing system is paper based with a manual exchange of instruments. All participating banks meet at clearing centres and exchange paper in sealed stamped envelopes. The purpose of the clearing house is to facilitate the exchange of paper multilaterally, determine and agree upon the net settlement positions. Processing is done at each banks' clearing branch.

The clearing process starts at 9 a.m. and continues to 10 a.m. At 11 a.m. the Controller of the Lusaka Local Clearing will be advised of net clearing balances from all other local clearing centres for the consolidation of the balances of all the clearing centres. The Bank of Zambia is then advised to effect settlement.

Settlement is concluded at 12 noon and confirmed with the Controller of the Lusaka Local Clearing House. Where a participant fails to arrange for settlement (an insufficient credit balance) by 12 noon, the participant is given two hours in which to source funds to finalise settlement by 2 p.m. Should this fail, the participant's collateral will be liquidated to facilitate settlement and the participant suspended from the clearing. The participant will be reinstated after meeting the conditions for membership.

3.2.7 Transaction processing environment

The clearing process is manual. Cheques are exchanged at the local clearing centres. The result of each local clearing centre is communicated to the Lusaka Local Clearing House for consolidation.

3.2.8 Settlement procedures

Settlement is through the central bank books under advice from the Controller of the Lusaka Local Clearing House. Settlement will only be confirmed to the Controller if all participants have adequate funds in their accounts with the central bank.

Settlement is final and irrevocable once confirmed by the central bank and passed through the central bank books. However, finality between the customer and bank depends on the clearing period (refer 2.2.2) as stipulated in the rules according to zones.

Unwinding is not applicable to clearings. A bank that fails to arrange for settlement will be excluded from that day's clearing, and settlement will not be confirmed until all banks meet their obligations.

3.2.9 Pricing policies

When the Clearing House was under the operation of the central bank, a monthly minimum fee of K 250,000 per bank was charged for Clearing House services. The fee did not reflect the actual cost of the service. Under the management of the Bankers Association of Zambia, the fee will be based on full cost recovery.

3.2.10 Credit and liquidity risks

Participants are required to lodge securities as collateral for clearing to ensure that settlement can be completed if a bank fails to arrange sufficient funds for settlement. This limits credit risk to the central bank. However, in certain cases, collateral may be inadequate to cover the clearance in full, thus exposing the Bank to credit risk.

In terms of liquidity risk, if a bank fails to settle an obligation in full at the time of settlement, collateral is liquidated to finalise settlement. However, the extent of the credit risk that banks are exposed to from other participants is difficult to determine due to the non-availability of information, especially on off-balance-sheet items.

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

4.1 Exchange and settlement system for international transactions

Most exchange and settlement of international transactions is based on correspondent banking. Settlement of international transactions is done by each bank through correspondent banking arrangements with other foreign banks, not necessarily through the central bank. The central bank has its own correspondent banking relationships with other central banks and selected commercial banks.

Each bank uses its own network for international payments and the most notable are:

- telex;
- SWIFT; and
- CITI Pay Link (this is a Citi Bank communication system for secure funds disbursements - Citi Bank Zambia Limited uses it to communicate with other Citi Bank Offices worldwide and local Citi Bank customers also use it to communicate with the local branch).

The major currencies traded are US dollars, British pound sterling and the South African rand.

Few outlets (restaurants, retail shops and hotels) accept international credit cards. Traveller's cheques are widely accepted in banks and other outlets as an instrument for international payments.

4.2 Exchange and settlement systems for securities transactions

The securities markets in Zambia can be classified into a market for Government securities (bonds and Treasury bills) and a Stock Exchange for private securities (stocks, shares and investment unit funds).

Government securities are sold on behalf of the Government by the central bank, which also acts as the primary market for rediscounts of Treasury bills.

Settlement of Government securities is through the books of the central bank as only banks participate directly in the purchase of these securities. All other investors in Government securities have an indirect participation through the banks.

The settlement of transactions resulting from dealing on the stock exchange is made through the brokers' commercial banks.

5. THE ROLE OF THE CENTRAL BANK IN INTERBANK SETTLEMENT SYSTEMS

5.1 General responsibilities

The central bank plays an important role in the interbank settlement system through:

(a) participation in the settlement systems on its own account and on the government account, by direct membership of the Clearing House;

(b) maintenance of settlement accounts for commercial banks;

(c) sale of government securities and maintenance of securities registers;

(d) issue of notes and coins; and

(e) supervision and regulation of banks and financial institutions.

5.1.1 Statutory responsibilities

The central bank has statutory responsibilities under the Bank of Zambia Act and Banking and Financial Services Act. These relate to licensing, supervision, regulation of banks and financial institutions, promotion of efficient payment mechanisms and sponsorship of legislation.

5.1.2 Establishment of common rules

The central bank participates in the formulation of various rules, standards and procedures both as a member and regulator. The interdependencies of different functions of the central bank make the Bank an active participant in payment system issues to ensure coordination and cooperation in all sectors of the economy to ensure stability of the financial system. The central bank also provides technical and administrative support to the National Payment Systems Committee (NPSC). The NPSC provides a forum for discussions on matters relating to payment systems with all stakeholders.

5.2 Provision of settlement and credit facilities

5.2.1 Settlement accounts

The central bank provides settlement accounts to all banks to facilitate the settlement of member obligations arising from clearances, securities, foreign currency and interbank transactions. The account is also used for cash withdrawals and deposits.

5.2.2 Credit facilities

The central bank may provide credit facilities for settlement on specific request from a bank with approval of the Board.

5.3 Monetary policy and payment systems

The execution of monetary policy is one area that has a direct relationship with payment systems in the Bank of Zambia. The Bank may have to provide liquidity as a result of the clearing and settlement process and this may have monetary implications. There is, therefore, a need to monitor the process to effectively assess the impact.

5.4 Risk reduction measures

As a result of the studies referred to in the introduction, measures such as the separation of the clearing (Clearing House) from settlement (Bank of Zambia) have been implemented so that Bank of Zambia is no longer a guarantor of every settlement from clearing. It has given the Bank of Zambia the independence to reject settlement of the clearing if a participant has insufficient funds to settle the clearing. Secondly, membership of the Transitional Zambia Clearing House requires members to lodge securities with Bank of Zambia as collateral against adverse clearings. In case of the failure of a member to settle, the collateral can be liquidated to cover the clearing and thus limit the risk to other banks.

6. RECENT DEVELOPMENTS IN THE PAYMENT SYSTEM

6.1 Description of the new system

The liberalisation of the financial sector clearly dictated the need for a robust payment system that could respond to changes because it was recognised that:

(a) Zambia needed to develop its financial markets;

(b) Zambia needed to attract international investors with access to modern, secure, rapid payment arrangements;

(c) payment system risks and exposures were rising as the values and volumes of payments increased;

(d) Zambia needed to provide appropriate infrastructures and standards;

(e) supervision and regulation of the financial sector was required.

The NPSC was formed with a cross section of representative members from the central bank, banks, Government, industry and consumers to provide a forum for discussion and policy formulation and implementation in relation to modernising the payment system on a sound legal foundation.

The NPSC has since formed working groups to investigate and recommend appropriate measures for:

(a) clearing arrangements;

(b) intra/interbank communications;

(c) electronic clearing;

(d) supervision of the payment system;

(e) legislative changes.

The work of NPSC has resulted in the transfer of the Clearing House from Bank of Zambia and formation of an independent Clearing House run and managed by the Bankers Association of Zambia. At the same time clearing times have been rationalised and speeded up for the provision of final funds to depositors.

6.2 Other developments

The NPSC is continuing work in other areas such as the development of intra/interbank communication, introduction of MICR cheque processing and electronic clearing, recommending changes to legislation and development of payment systems supervision standards.

7. INFRASTRUCTURE

7.1 Telecommunications infrastructure

There are established telecommunication facilities such as telephone, telex, fax and satellite communication throughout Zambia. The telephone service has a public company as the major provider of service, while private companies are emerging to provide mobile telephone services.

Most urban areas are well serviced by telephone, while not all the rural areas have telephone facilities. The advent of satellite communication for those who can afford it is improving communication in rural areas.

The unreliability of the current telephone service has led to delays in the development of efficient communication facilities by banks between head office and branches which has had an adverse effect on funds transfer. However, some banks have moved forward in connecting all their branch networks through satellite links.

The NPSC is also looking at ways of finding a provider of satellite services to the small banks that cannot afford such services on their own in order to improve communication country-wide and to speed up the clearance of customer funds.

7.2 Availability of electricity

Electricity supply is concentrated in the urban areas. However, wherever there is a bank branch there is also an electricity supply of some form.

7.3 Road infrastructure

Zambia has a well-established road network, though most roads are gravel and become impassable in the rainy season. There is a good road network in areas (urban) where most banks are located, providing a valuable service to the payment system.

Table 1

Basic statistical data

	1992	1993	1994	1995	1996
Population (millions)	8.3	8.63	8.95	9.11	9.51
GDP (billions of Kwacha)	2.174	2.332	2.121	2.029	2.160
GDP per capita (Kwacha)	261.0	269.0	237.4	222.8	220.3
Exchange rate (domestic vis-à-vis USD)					
year-end	*359.44*	*647.38*	*682.45*	*956.13*	*1,282*
average	*172.21*	*452.76*	*669.37*	*864.22*	*1,207*

Table 2

Settlement media used by non-banks

(in billions of Kwacha at year-end, not seasonally adjusted)

	1992	1993	1994	1995	1996
Notes and coin	2.313	4.870	8.027	13.936	21.851
Narrow money supply (M1)	96.170	110.93	138.8	216.05	302.81
Broad money supply (M2)	51.279	237.44	330.1	492.58	561.53

Table 3

Institutional framework

(at end-1996)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (millions)
Central bank	1	2	-	-
Commercial banks	20	152	-	--
Savings banks	1	8	-	-
Public credit institutions	3	20	-	-
Post Office	1	408	-	-
Memorandum item:				
Branches of foreign banks	0	0	-	-

THE PAYMENT SYSTEM IN ZIMBABWE

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OVERVIEW OF THE NATIONAL PAYMENT SYSTEM IN ZIMBABWE

The opening up of the Zimbabwe economy which started in 1990 has resulted in notable developments in the number of participants in the financial sector and also in the range of payment instruments used. These developments have exposed banks to greater competition and increased operational and liquidity risks. The Reserve Bank has an interest in ensuring that banks and other stakeholders operate in a stable and efficient market and that the payment, clearing and settlement systems function smoothly. In this regard, the Reserve Bank has therefore undertaken to actively coordinate the development of the payment system and to work closely with banks in implementing the National Payment System Project (NPS Project).

A working party comprising the Reserve Bank and commercial banks' representatives was put in place in January 1996 to discuss issues pertaining to payment systems developments and make recommendations on the way forward.

The National Payment System Steering Committee, which is chaired by the Governor of the Reserve Bank, was subsequently formed in January 1997 as a result of one of the recommendations made by the working party. Its main objective is to act as the driving force of the National Payment System Project. Membership currently comprises the Chief Executives of commercial banks, the Reserve Bank, Posts and Telecommunications Corporation and the Registrar of Banks and Financial Institutions. What has been a striking feature of the project so far is the high level of cooperation between the banks and the Reserve Bank. Generally, there has been a realisation of the need for harmonisation and modernisation and this will greatly assist in driving the project towards the desired goal. A strategy formulation team has since been set up to map out a strategy for the NPS Project.

The current clearing and settlement system is manual and paper-based. Banks meet at the Reserve Bank Clearing House twice every business day to exchange paper instruments and establish their net positions before final settlement over their accounts held by the Central Bank. There is no electronic system for handling interbank transactions, and hence settlement of all paper instrument transactions is done on a deferred basis. Electronic data interchange within the interbank circuits is very minimal at present. An interbank switching system for Automatic Teller Machine (ATM) and Point of Sale (POS) transactions is the only electronic interbank system in existence. This is owned by a consortium of some commercial banks and building societies. However, settlement of positions over this system is still done on a deferred basis since the cheque instrument is used for settling.

As part of the reform of the clearing and settlement systems for interbank and securities transactions, there are plans to introduce a Real-Time Gross Settlement System (RTGS). This is the only way irrevocability of settlement and finality of payment can be guaranteed.

In order to realise this goal, institutional participants within the financial sector have to be prepared to invest in modern information technology systems. This, and a well developed telecommunications infrastructure, are pre-requisites for the success of the National Payment System Project. It is noted that considerable progress has been made by banks and the Posts and Telecommunications Corporation in this regard.

1. INSTITUTIONAL ASPECTS

1.1 General legal aspects

There are no special regulations or any specific law governing the provision of the national payment system in Zimbabwe. The Reserve Bank Act Chapter 22:10 of 1964 empowers the Reserve Bank to organise and provide facilities for the collection and clearance of cheques and similar instruments. However, the Act does not make specific provision for the Reserve Bank to set up and supervise the current payment system.

Commercial law, which has been influenced by both Roman-Dutch law and English law, is generally used to regulate payment systems in Zimbabwe. Banking payment services are governed by various Acts which include the following:

- the Banking Act, Chapter 24:01 of 1965;
- the Bills of Exchange Act, Chapter 14:02 of 1895;
- the Building Societies Act, Chapter 24:02 of 1965;
- the Post Office Savings Bank Act, Chapter 24:10 of 1965;
- the Reserve Bank Act, Chapter 22:10 of 1964;
- the Companies Act, Chapter 24:03 of 1952;
- the Insolvency Act, Chapter 6:04 of 1975.

The cheque is the major paper based instrument used in Zimbabwe. This is regulated by the Bills of Exchange Act, together with other instruments like promissory notes and bills of exchange. Electronic and credit card payment methods are currently controlled by private contracts concluded between the banks and their clients. Such contracts must, however, comply with the provisions of the Consumer Contracts Act Chapter 8:03 of 1994 and the Contractual Penalties Act Chapter 8:04 of 1992 which generally require fair play in the formation of contracts.

The Banking Act does not specifically provide for banking supervision activities by the Reserve Bank. The Banking Act is, however, currently going through amendment. The major focus of the proposed changes is to give the Reserve Bank a proper legal basis for all its responsibilities, including banking supervision. In the interim, the Reserve Bank has put in place a mechanism to carry out both off-site surveillance and on-site examination of banking institutions, and is receiving full cooperation from these institutions.

The Reserve Bank of Zimbabwe Act came into force in 1964. The power to control banking business and other general banking arrangements resides with the Reserve Bank through Section 22 and 24 of the Reserve Bank Act. In terms thereof, the Reserve Bank may make recommendations to banks or building societies and, with approval from the relevant Minister, issue directives to any bank or building society.

1.2 Role of financial intermediaries that provide payment services

The current structure of banking in Zimbabwe is characterised by segmentation which confines financial institutions to specific areas of operation. However, legislation governing the operations of financial institutions is currently being reviewed to ensure that there are no impediments to the growth of financial institutions and to enable the financial sector to effectively adapt to the dynamic and changing economic environment. This legislative review should therefore allow financial institutions to offer various financial services without being confined to particular segments of operation.

1.2.1 Commercial banks

There are currently seven commercial banks carrying out business in Zimbabwe through a network of branches, agencies and mobile facilities. With the opening up of the economy and increased competition in the financial sector, more banks are expected to join the market. Commercial banks are authorised and regulated under the Banking Act. They offer a wide range of commercial banking services which include the following:

(a) current and deposit account facilities;

(b) provision of loans and overdrafts;

(c) foreign exchange facilities including accepting foreign exchange deposits;

(d) financial advice and provision of facilities for the purchase and sale of investments;

(e) involvement in the clearing system.

1.2.2 Building societies

Building societies are authorised under the Building Societies Act. They are mainly involved in savings, fixed deposits, a wide range of share deposits and mortgage lending. Five building societies are currently carrying out business in Zimbabwe through a network of approximately 195 branches spread throughout the country. One building society is 100% foreign owned while the remaining four are locally owned. Building societies are not members of the Clearing Banks Committee, and hence their cheque clearing requirements are handled through commercial banks where they hold accounts.

1.2.3 Merchant banks

There are nine merchant banks licensed to operate in Zimbabwe under the Banking Act. Merchant banks mainly provide wholesale banking services to complement the banking facilities extended by the commercial banks. In particular, merchant banks are specialists in the money and capital markets, offering fee-based services such as corporate advisory services, underwriting of securities and portfolio management. They provide trade financing through acceptance credit facilities, short and medium term credit, negotiable offshore financing facilities and foreign exchange facilities. Merchant banks only hold reserve accounts with the Reserve Bank and are not part of the clearing banks community.

1.2.4 Discount houses

These institutions perform a unique function in Zimbabwe's banking system. Their main operation is to discount and hold bills with funds borrowed at call from the banks. These bills can then be rediscounted with the banks at the Reserve Bank. Discount houses are also not members of the clearing bank community and do not hold any accounts with the Reserve Bank. There are seven discount houses currently operating in Zimbabwe.

1.2.5 Finance houses

This segment currently comprises six finance houses whose activities are mainly concentrated on offering asset based instruments in the form of hire purchase and lease hire advances to the corporate and individual sectors. Factoring services are currently being offered by only one finance house.

1.2.6 The Post Office Savings Bank (POSB)

The POSB, which is governed by the Post Office Savings Bank Act Chapter 24:10, complements the payments processing infrastructure through its network of post offices and banking halls. There is, however, limited integration between the banking industry and the Post Office in that some of the payment instruments issued by the Post Office are not acceptable in the banking industry. The POSB is not a member of the clearing bank community. However, with its extensive network of

185 branches, the Post Office facilitates communication and provides convenient alternative banking services in remote areas where commercial banks are not represented.

Services offered by the Post Office include a cash transfer facility through money and postal orders, cash payment of government benefits, savings and fixed deposit account facilities. As at 31st December 1996, the Post Office Savings Bank attracted 12.84% of total deposits in the country.

1.2.7 Non-banking institutions

Apart from the banking industry and the Post Office, payment services are also provided by other non-banking bodies in the private sector. The instruments used by these non-banking institutions have mainly been confined to payment cards and credit cards which are used to obtain credit from retail outlets.

1.3 The role of the central bank

The Reserve Bank of Zimbabwe has its origins from the Bank of Rhodesia and Nyasaland which was established in 1956 as the note issuing authority of the Federation in succession to the Central African Currency Board. The dissolution of the Federation of Rhodesia and Nyasaland and the consequent winding up of the Bank of Rhodesia and Nyasaland led to the establishment of successor central banks in the three former Federal Territories, namely Reserve Bank of Rhodesia, Bank of Zambia and Reserve Bank of Malawi. Each of these central banks became responsible for the issue of banknotes in their respective countries.

1.3.1 Issuing of currency

Under the Reserve Bank Act, the Reserve Bank of Zimbabwe has the sole right to issue notes and coin which are accepted as legal tender in Zimbabwe. The notes are printed by the Bank's subsidiary company, Fidelity Printers and Refiners, while the coin is minted by the Royal Mint, United Kingdom.

1.3.2 Banker to government and banks

The Reserve Bank provides banking services to government and financial institutions. However, it does not undertake commercial risk lending, save for advance facilities given to government and the banks. The primary role of the Reserve Bank in government financing is to ensure that government borrowing needs are met at the lowest possible cost and the outstanding debt is efficiently managed.

A number of current accounts are held for government, while reserve and current accounts are held for commercial banks. Government cheques drawn on accounts held at the Reserve Bank and presented to commercial banks for payment are cleared to the Reserve Bank through the normal Clearing House procedures. Government deposits and cheques handled by commercial bank branches outside Harare and Bulawayo are subject to a handling fee which the Reserve Bank pays as turnover commission to the commercial banks.

1.3.3 Execution of monetary policy

The Reserve Bank of Zimbabwe is tasked with the responsibility of formulating and implementing monetary policy which essentially entails maintaining both the internal and external value of the Zimbabwe dollar.

1.3.4 Banking supervision

The Reserve Bank of Zimbabwe performs bank supervision and enforces the recommendations of Basle Committee for Banking Supervision. In carrying out this function, the Reserve Bank aims at promoting and maintaining a safe and sound banking system and preventing financial instability. It also aims at fostering efficient and competitive banking as well as protecting depositors' funds.

The supervisory function currently covers all deposit taking institutions namely, commercial banks, merchant banks, discount houses, finance houses and building societies. Arrangements are currently under way to incorporate the POSB into the supervisory framework.

1.3.5 Custodian of country's gold and other foreign assets

It is the Reserve Bank's function to ensure that the country has an adequate level of reserves for confidence purposes, operational reasons and to provide for contingencies.

1.3.6 Lender of last resort

This is a role that the Reserve Bank carries out in line with assisting the smooth functioning of the money market. If liquidity tightens, banks approach the Reserve Bank for accommodation. The Reserve Bank reserves the right to grant assistance on its own terms.

1.4 Role of other private sector and public sector bodies

1.4.1 Bankers Association of Zimbabwe

The main banking association in Zimbabwe is the Bankers Association of Zimbabwe whose membership comprises the commercial banks and merchant banks. The Bankers Association basically provides a forum through which its members can communicate freely and contribute towards the progress of the members' interests. All initiatives relating to new interbank payment arrangements are driven through the Association. The existence of this association also allows the creation of sub-committees like the Clearing Banks Committee which deals with any issues relating to retail operations. These sub committees make recommendations for policy changes on related matters.

1.4.2 Financial Traders Association of Zimbabwe

Membership includes the Reserve Bank, commercial and merchant banks. This association has an interest in local and foreign settlement of deals. Members meet monthly to discuss any matters arising, recommend policy changes and new products for the market.

1.4.3 S.W.I.F.T. users group

This group is made up of institutions who belong to the S.W.I.F.T. network in Zimbabwe. It represents the interests of its members in as far as they relate to day to day network operation at national level. The group also provides an easier way for S.W.I.F.T. to communicate with its users through an established body rather than communicate with them individually.

1.4.4 Treasury (Ministry of Finance)

The Treasury, through the Registrar of Banks and Financial Institutions, handles the registration of all banks and financial institutions. The Treasury also plays a pivotal role in the administration of all state payments through the cheque instrument.

2. SUMMARY INFORMATION ON PAYMENT MEDIA USED BY NON-BANKS

2.1 Cash payments

The Reserve Bank of Zimbabwe has the sole right to issue notes and coin under the Reserve Bank Act.

Five denominations of banknotes are currently printed, namely $5, $10, $20, $50 and $100 while the coin is minted in denominations of 1c, 5c, 10c, 20c, 50c, $1, and $2.

The cash is put into circulation through withdrawals made by commercial banks and the POSB from the Reserve Bank. Any surplus cash is likewise deposited back into the Reserve Bank.

As at 31st December 1996, the value of notes in circulation totalled approximately Z$2,342.4 million. This represented 84.57% of total currency issued, 17.6% of M1 and 9.12% of M2. (M1 - defined as notes and coin in circulation plus demand deposits with banking system. M2 - defined as M1 plus savings deposits plus under 30-day deposits with banking system.)

2.2 Non-cash payments

2.2.1 Credit transfers

Credit transfers are a commonly used payment medium in Zimbabwe. The transfer is usually executed from a standing order or a variable order that is given from time to time. The orders are mainly given in paper form. However, some customers deliver their payment orders to banks on diskettes and magnetic tapes. The main users of credit transfers are big institutions like government, pension funds and local authorities. Credit transfers are mainly used for recurrent payments like salaries, dividends and pensions.

2.2.2 Cheques

The cheque is still by far the most utilised instrument despite the increasing importance of other paperless means of payment.

Cheques are generally acceptable at purchase points as long as they are backed by a cheque guarantee card. The cheque guarantee cards act as a guarantee to the payee that the cheque will be honoured to the extent of the amount reflected on the card. This guarantee is binding whether or not there are sufficient funds in the drawer’s account to cover the cheque. Cheque guarantee cards are issued by the drawee banks to creditworthy customers and the extent of the guarantee is dependent upon the bank’s rating of the customer’s creditworthiness.

Only the Reserve Bank and the commercial banks offer cheque books to their customers. Building societies do however offer bank certified cheque facilities for customers wishing to withdraw substantial sums of money from their accounts.

2.2.3 Direct debits

Like credit transfers, direct debits are mainly used for recurring payments initiated by the receiver of the service being paid for. These recurring payments include public utility charges, insurance premiums, subscriptions, mortgage and loan repayments. Users of this payment medium include individuals and corporate bodies. This medium of payment is generally acceptable and offers certainty and convenience to consumers.

2.2.4 Payment cards

Debit cards. These allow the cardholder to withdraw funds from his account at the issuing bank. Debit cards require a personal identification number (PIN) to be keyed into the terminal before services can be provided. They are mainly used at Automatic Teller Machines (ATMs) and Point of Sale (POS) terminals.

Credit cards. These are generally issued by banks and allow cardholders to obtain cash advances from their accounts and to pay for purchases at the outlets of all participating merchants or service providers. Credit cards like Visa or Mastercard are issued by banks under licence from the international organisations. The international credit cards can be used locally and internationally. If they are issued for external use, banks are required to comply with certain Exchange Control requirements that govern the issuance of these cards.

A number of retail outlets also issue their own inhouse credit cards which allow their customers to conduct credit purchases within a specified credit limit.

Prepaid cards. The only prepaid card that is currently widely used is the telephone card issued by the Post and Telecommunications Corporation. This card allows telephone calls to be made from public telephones.

ATM and POS Networks. ATMs offer a wide range of services which include cash withdrawal, account balance enquiries, ordering of cheque books, funds transfer and utility bill payment facilities. Zimswitch, an on-line ATM network set up by six financial institutions, provides a shared network for switching ATM and POS transactions. Interparty indebtedness is currently being settled outside the clearing house through the cheque medium. Other financial institutions providing ATM facilities run their own individual networks for both ATMs and POS terminals. As at the end of 1996 there were approximately 200 ATM machines and 2,000 EFTPOS terminals operating on two and four networks respectively. With new banks emerging in the market and existing banks expanding their networks, the number of ATMs is expected to grow.

3. INTERBANK EXCHANGE AND SETTLEMENT SERVICES

3.1 General overview

There is currently no electronic system used for handling interbank transfers. The Bankers Clearing House which operates from the two major towns, Harare and Bulawayo, provides a manual and paper based interbank clearing system. Participants have to carry the paper debit instruments (mainly cheques) to the Clearing House and physically exchange them before establishing their settlement positions. Both large and low value items are channelled through the same route.

3.2 Structure, operation and administration

3.2.1 Major legislation, regulation and policies

There is no specific legislation that covers the field of interbank payments and settlement. Participants of the Clearing House have themselves put together a set of rules that regulate the operation of the Clearing House. This set of rules - the Bankers Clearing House Rules - lays down the criteria relating to specific areas which include membership, management, clearing times and processes. The business of the Clearing House is conducted in the Reserve Bank of Zimbabwe premises and is managed by a Committee composed of one representative from each member bank. The Reserve Bank of Zimbabwe chairs the Committee and also supervises the operations of the Clearing House. The Reserve Bank does not impose decisions but plays a coordinating role in order to ensure the efficient functioning of the system.

3.2.2 Participants in the system

Membership of the Clearing House is currently restricted to the Reserve Bank and the seven commercial banks that currently exist in Zimbabwe. There is a standing requirement for all registered commercial banks to automatically become members of the Clearing House since it is this category that handles payments through the cheque instrument. Transactions for other financial institutions like building societies and merchant banks are indirectly cleared through the respective commercial banks where they hold accounts.

3.2.3 Types of transactions handled

The cheque is the main instrument that is cleared through the Clearing House. However, physical exchange of credit items can be done through the clearing house. Such an exchange does not affect the banks' clearing accounts as it is used entirely as a means of channelling items to the intended destinations for processing.

3.2.4 Operation of the transfer system

Clearing banks meet twice every business day to exchange items and establish their net financial positions. At the morning clearing, each participant clears out any items processed on the previous day and drawn on the other banks. The indebtedness of each participant to the other is established, and through a multilateral netting process the net position of each participating bank is determined. The relevant entries are manually raised in the Clearing House and the responsibility for ensuring that the banks settle their positions lies with the Reserve Bank. The afternoon clearing is basically an exchange process for large value and wrongly cleared items. Because of its manual nature, this clearing system operates on a deferred settlement basis.

3.2.5 Transaction processing environment

The Clearing House operation is manual and paper based. Banks have in the past considered moving towards the establishment of an Automated Clearing House which would be jointly owned by all clearing banks.

This consideration did not get very far at that time due to problems posed by lack of standardisation of cheques. Government cheques were not MICR encoded and the quality of MICR printing was poor. However, this situation has improved to a point where some form of automated clearing can be considered. It is envisaged that the automation of the clearing house processes will be one of the first tasks to be considered under the National Payment System Project.

3.2.6 Settlement procedures

Every clearing bank participating in the clearing house operations has to hold a current account with the Reserve Bank of Zimbabwe through which settlement is effected. These accounts are not allowed to be overdrawn and are subject to certain minimum balances.

The Reserve Bank carries out the function of settlement agent. Once the multilaterally netted positions of the member banks have been established, they are posted into the individual banks' current accounts. The onus is on each participant to ensure that their positions are fully covered to avoid an overdraft position.

Once entries have been passed over the individual bank accounts, finality is basically deemed to have occurred. The current system has so far served the banking sector well. There has never been any case of a participant failing to settle since the Central Bank has always intervened as lender of last resort. The legal implications of participant failure and unwinding will be explored in greater detail under the new payment system initiative.

3.2.7 Pricing policies

The cost of running the Clearing House is borne entirely by the Reserve Bank of Zimbabwe. There are currently no arrangements in place for the recovery of the costs from the participating banks.

3.2.8 Credit and liquidity risk

These risks have never really posed a threat to the current payment system since the Reserve Bank has always intervened to provide liquidity where it is needed. Banks experiencing liquidity problems are always accommodated overnight by the Reserve Bank against acceptable securities.

There are no loss sharing agreements or specific risk reduction measures in place. Any inherent risks are currently borne by the Reserve Bank in that no intraday controls on banks' balances exist. Commercial banks therefore effectively get "free credit" from the Reserve Bank as the latter is not able to monitor the account balances on a real time basis. Risk reduction strategies will be considered under the National Payment System Project.

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

4.1 Exchange and settlement systems for international transactions

The Zimbabwean banking system is still, to a certain extent, governed by Exchange Control regulations. While a few Exchange Controls still exist on the current account, Zimbabwe acceded to Article VIII of the IMF Agreement where section 2(a) provides that subject to the stated provisions "no member shall without the approval of the fund impose restrictions on the making of payments and transfers for current international transactions". The Reserve Bank has plans to dismantle all Exchange Controls and completely liberalise the current account so that there will be no limits given to banks on current payments. Exchange Controls however, still significantly affect payments related to the capital account. These are mainly in the areas of cross-border investments and disinvestment proposals.

The main network used for transmitting information on international payments is the S.W.I.F.T. network. The telex system is also used mainly for communication with countries who are not on the S.W.I.F.T. network. Most banks in Zimbabwe have correspondent relationships with other banks abroad. These links are used for payments and receipt of foreign currency. The international transactions are conducted in any of the seventeen currencies that have been denominated as official trading foreign currencies in Zimbabwe, these are:

United States dollar, South African rand, Botswana pula, British pound, Deutsche Mark, Japanese yen, Italian lira, French franc, Dutch florin, Swiss franc, S.D.R., Mozambique meticais, Norwegian krone, Swedish krona, Danish krone, Canadian dollar and European Currency.

The most commonly used instrument for international face to face payments is the travellers cheque. This instrument is readily available to a wide section of the population. The use of international credit cards is still tied to Exchange Control restrictions. Banks issuing these cards cannot do so freely, without taking into account the conditions stipulated by Exchange Control. Up to four international credit cards may be issued to a business organisation for use on business trips. Credit cards may also be issued to individuals in their own right. However, these are also subject to Exchange Control conditions. Other instruments used for international transactions are bank cheques and bank drafts which are drawn on correspondent banking accounts.

4.2 Exchange and settlement systems for securities transactions

The Zimbabwe Stock Exchange which is located in Harare is governed by the Stock Exchange Act. Its main objective is to operate a stock exchange with due regard to the public interest and to maintain fair and efficient dealing in securities. The securities that are traded on the Stock Exchange include:

- equity;
- government stocks;
- municipal paper - long term paper issued by municipalities;
- parastatal paper - long term paper issued by parastatals.

There is no electronic system that is specifically dedicated to the clearing and settlement of securities transactions. Securities are recorded on paper and there is no central depository institution. There is a standing requirement for the settlement of trades to be fixed on the seventh day following the date of transactions (T + 7).

Only stockbrokers are allowed to deal in equity. However, government stock deals can be handled by both stockbrokers and banks. The means of settlement is manual and paper based with settlement between brokers being made by cheques which are subsequently cleared through the Clearing House. Buyers pay brokers either in cash or by cheque. There is no over the counter market for shares; all shares have to be traded through the Stock Exchange.

The Reserve Bank of Zimbabwe acts as issuers and transfer secretaries for government stock. Hence, once the stock changes hands, the Reserve Bank has to be notified in order to effect the transfer.

Government stocks can be traded over the counter. The market for government stocks includes commercial banks, discount houses, finance houses, pension funds and insurance companies. Apart from setting up policies relating to the inflows and outflows of foreign currency on the Stock Exchange, the Reserve Bank has no major role to play in the equities market.

Developments on the payment system project will encompass the Stock Exchange market. It is hoped that in the long term, investment in automation will be undertaken in order to cater for the needs of issuers and provide more efficient trading and settlement facilities for institutional and retail investors. The establishment of a central depository is a prerequisite if the securities market is to deal with the inconveniences caused by a paper based settlement system and keep abreast with developments around the world.

5. THE ROLE OF THE CENTRAL BANK IN INTERBANK SETTLEMENT SYSTEMS

5.1 General responsibilities

5.1.1 Statutory responsibilities

The Reserve Bank of Zimbabwe is empowered by the Reserve Bank Act to organise and provide facilities for the collection and clearance of cheques and similar instruments. There is no specific legislation that is directed at controlling the interbank clearing and settlement systems. However, the Reserve Bank has an interest in ensuring the efficiency and stability of the financial system. It supervises the banking system and ensures that banks settle their obligations in the interbank clearing system.

5.1.2 Establishment of common rules

The Reserve Bank's interest in ensuring the existence of a sound and efficient payment system stems from its statutory responsibility for monetary policy formulation and implementation. Under the current Clearing House operations, members have put together a set of contractual rules which govern the operations of the Clearing House. Initiatives have also been taken by the members to standardise the paper instrument by making it mandatory to have a MICR line encoded at the bottom of all cheques issued. This move was aimed at facilitating the processing of cheques through electromechanical item processors. The Reserve Bank plays an important role in ensuring that members comply with agreed rules and standards.

Under the new payment system initiative the Reserve Bank of Zimbabwe took a leading role in the establishment of a National Payment System Project, which is to facilitate the automation of operations throughout the processes. Banks have to collectively tackle standardisation issues and ensure existence of common rules for operation through various committees set up within the National Payment System Project.

5.2 Provision of settlement and credit facilities

Commercial banks are required to hold two types of accounts with the Reserve Bank, namely a current and a reserve account.

Current accounts are used for liquidity purposes and for settling interbank obligations. The Reserve Bank offers rediscount facilities to other banks and is able to intervene in the securities market to control liquidity. Overnight advances are also offered to banks in the event of liquidity problems. These are secured to the extent of 100% if security is in the form of Reserve Bank paper and 150% in the case of government securities. However, this facility is currently not being extended as paper is bought when the market is short.

Commercial banks, merchant banks and finance houses are subject to reserve requirements which do not qualify for settlement purposes. In practice, the statutory requirement is applied to banks' total liabilities to the public which include demand and time deposits, foreign currency deposits inclusive. However, the following are excluded:

- uncleared effects for discount houses, merchant banks and commercial banks;
- deposits secured by pledge of securities issued by the State which have a final maturity date of no more than twelve months;
- 50% shareholding in Venture Capital Company of Zimbabwe;

- foreign currency deposits of individuals, embassies and non-governmental organisations.

  The following reserve ratios are currently applied:

- for commercial and merchant banks:
  - local deposits 20%
  - foreign currency deposits 20%

  Adjustments for commercial and merchant banks are done every Friday based on the liabilities to the public of the previous Friday. Returns are submitted by close of business on Thursday;

- for finance houses; the ratio is 4% of total deposits on total liabilities to the public of the previous month (i.e. last day of previous month). Collection or adjustment is done mid-month (i.e. on the 15th). Returns must be submitted by the 14th of the current month;

- 0% - discount houses, building societies and the Post Office Savings Bank.

  The RBZ does not pay interest on the reserve amounts held by these banks.

5.3 Monetary policy and payment systems

The conduct of monetary policy in Zimbabwe is designed to influence the rate of growth in money supply (M3), which is the intermediate target, in order to achieve a low and stable inflation, the ultimate goal. This is consistent with the Reserve Bank of Zimbabwe's mission to maintain the internal and external value of the currency. The Bank uses a number of instruments to implement monetary policy. These include the reserve requirements, the rediscount rate and open market operations. The reserve requirements, currently at a ratio of 20% for deposit money banks, constitute a quantitative limit to credit creation by banks. The rediscount rate, which is set by the Reserve Bank in line with it's monetary policy objectives, is an indicator of the Bank's view of inflation as well as the floor rate for most short-term interest rates. Open market operations are designed to influence the supply of bank reserves as well as the liquidity situation on the market.

The payment system has important implications for the design, conduct and effectiveness of monetary policy. The Bank provides liquidity through repurchase agreements, rediscounting bills and extending overnight loans. The issuing of treasury bills and acceptance of deposits by the Bank withdraws excess liquidity from the banking system. Commercial banks, which are also the clearing institutions, maintain current accounts at the Reserve Bank through which settlement and other clearing transactions take place. New clearing and settlement arrangements effected by the Bank in August 1997 require that banks clear among themselves and that the Reserve Bank accommodate only the market position via commercial banks. The payment system in Zimbabwe is largely paper-based and the processing is manual. Clearing back-logs normally occur during the festive seasons due to large numbers of cheques and other paper-based transactions. This tends to affect money supply patterns and hence monetary policy. Uncleared effects, which are currently exempt from statutory reserve requirements, also impact on the effectiveness of the reserve requirement ratio as a monetary policy tool. The efficiency of the payment system, therefore, generally influences the transmission process of monetary policy.

5.4 Risk reduction measures

The delayed settlement in the current payment system has inherent risks which are not obvious to participants in the interbank clearing arrangements. The fact that there has never been any major disaster in the settlement system has given a lot of comfort to the participants. The Reserve Bank however, has the control of settlement risks at the top of its list. By controlling membership of the clearing house, the Reserve Bank cuts down on settlement risks and ensures that banks settle their positions. Penalties are levied on banks with insufficient funds to cover their liabilities in the conclusion phase of clearances. The gap between initiation and effective settlement of transactions could be drastically reduced through investment in modern automated processes. The final goal of the NPS Project is to introduce an RTGS system that will provide an almost complete control over risk. A comprehensive risk reduction programme will be put in place to address the various risks associated with payment systems.

6. RECENT DEVELOPMENTS IN THE PAYMENT SYSTEM

6.1 Description of the new system

There is no new system that has been put in place as yet. The Clearing House remains the major operation through which interbank transactions are cleared and settled. With the setting up of the National Payment System Project it is envisaged that more modern systems will be implemented for transaction processing and settlement. Risk reduction measures for containing both credit and liquidity risks will be clearly defined. The current set up whereby the Reserve Bank of Zimbabwe meets all costs incurred through the Clearing House operations will be a thing of the past. Banks have already started contributing towards the upkeep of the National Payment System Project. A more definitive cost structure will be put in place together with a cost sharing mechanism for all participants. The NPS Project is currently at the strategy formulation stage.

6.2 Other developments

Although not overwhelming in numbers, electronic payments are continuing to grow through ATMs and EFTPOS terminals. Smart cards have not been piloted in Zimbabwe, although some banks have seriously considered the prospects of introducing smart card technology.

There are plans by some building societies to provide convenience to customers by increasing the range of accounts that can be paid through the ATMs.

There has generally been a lot of cooperation amongst the banks in as far as reforming the payment system is concerned. It is envisaged that this cooperation will extend to the provision of payment instruments in order to save on costs through shared structures. One of the building societies introduced telebanking service in November 1996. This basically provides the convenience of paying accounts from home or office using swift and secure means. Electronic commerce (e-commerce) developments are expected to grow following the launching of Zimbabwe’s first electronic commerce company in October 1997. It is envisaged that most businesses will take advantage of this and move to a situation where they undertake transactions electronically instead of the current manual methods that are becoming economically unviable and sometimes lead to organisations losing competitiveness.

7. INFRASTRUCTURE

7.1 Telecommunications infrastructure

The Posts and Telecommunications Corporation (PTC) is the sole provider of telecommunications services in Zimbabwe. While the present telecommunication system lags behind in terms of international trends, various projects are under way to rectify the situation with digitalisation of the national trunk transmission network and major strides are being made in upgrading the local distribution network. While PTC has operated under various constraints, it has managed to expand the telephone network from 2,416 new customers in 1991 to 20,689 in 1996 and 36,687 in 1997 giving an equivalent compound annual growth of 136%. Electronic data transfers to and from the rest of the world are possible through the PTC's packet-switching data network - ZIMNET. This network was expanded to provide X-400 E-mail services during the last quarter of 1996. Plans are under way to expand the recently launched cellular mobile telephone service (CMTS) to 70,000 lines by the year 2002.

Despite these improvements, the demand for service is high and the quality of service in some areas is still unsatisfactory. The telecommunications infrastructure is mainly concentrated in the major urban centres of the country. The rural areas are poorly serviced. However, there are a number of projects lined up for the development of rural networks. Telecommunications is a key driver of economic growth and an essential conduit to payment systems. The current telecommunications infrastructure is inadequate to fully support payment systems developments. In some instances, disruption in telecommunications have led to revenue losses for some sectors of the economy.

The various projects that the PTC has embarked on show its commitment to rectifying the current situation. As part of its thrust to contribute to economic development, the PTC has continued to modernise, expand and improve the quality of the telecommunications services. According to its approved plans to the year 2002, the PTC intends reducing its waiting list to zero. The commercialisation of the Corporation (which is currently government owned) is a necessary pre-condition for the achievement of these plans. The reform process therefore needs to be speeded up in this regard in order to bring into effect the necessary instruments that will improve finance conditions, speed up procurement, establish favourable tariff policies and provide flexibility in the hiring of skilled and professional manpower.

7.2 Availability of electricity

The Zimbabwe Electricity Supply Authority (ZESA), a parastatal body, is solely responsible for supplying electricity throughout Zimbabwe. The urban areas of Zimbabwe enjoy almost 100% availability of electricity. Reticulation has kept abreast of the growth in these urban areas and in some instances, in advance of the building structures being put in place. The national electrification rate is 20% which means that 80% of the population have no access to electricity. The majority of those people live in the rural areas. The rural electrification programme under ZESA's Master Plan is concentrating on providing supplies to service centres. These service centres are ranked on the basis of their viability. The communities surrounding the service centres will benefit from this programme provided they can afford to pay for their connection fees and electricity bills thereafter. Considerations are being made for a 1% rural electrification levy to be charged on customers in order to improve the financing of the project.

The absence of a backbone infrastructure in the rural areas has particularly hampered the development of payment systems in the rural areas. Banks have generally not extended their services to rural areas resulting in most of the rural societies remaining totally unbanked. In some instances, communal farmers have to travel a long distance to access banking facilities, at the nearest Post Office or major town.

Currently, the availability of electricity supplies is dependent on growth or expansion of the urban centres. However, there are plans to embark on closer consultations with local authorities in order to synchronise the development plans of the two bodies.

ZESA is mindful of the fact that it will take many years and a huge financial outlay to electrify the entire country. In this regard, a pilot scheme on solar energy is currently underway to connect 500 households throughout the country. If this pilot scheme proves to be viable, households resident in outlying areas will be offered solar systems in an endeavour to provide them with cleaner energy for light and power appliances.

7.3 Road infrastructure

Zimbabwe, as a landlocked country, depends heavily on the road and rail network for its transportation needs. In comparison with countries of similar development, a good road network exists, with tarred roads linking the main urban centres and well maintained gravel roads leading to the rural areas. Tarred roads cover about 15,000 km throughout the country. These are maintained by the state. The rural areas have a 77,574 km road network consisting mainly of gravel and single lane tarred roads which are maintained by local, rural and district councils. In some instances, accessibility in the rural areas becomes a problem during the rainy season as some of the roads become waterlogged and bridges are submerged under floods. The existing road infrastructure has facilitated the development of postal and courier services to remote parts of the country using rural transportation. In the main centres, inter-branch remittance of paper-based instruments has been enhanced by the good road network. The local authorities and government have invested in the rehabilitation and maintenance of the road network through financial support from the World Bank and African Development Bank. Under the transport reform programme the government envisages the participation of the private sector in the provision and maintenance of the road infrastructure. The involvement of the private sector will go a long way towards improving and expanding the existing infrastructure.

7.4 Economic reforms

In 1990 the Zimbabwean Government embarked on a five year Economic and Structural Adjustment Programme (ESAP) commencing in 1991 and ending in 1996. This Programme was a package of reforms that represented a fundamental departure from the comprehensive system of direct controls that characterised Zimbabwe’s pre-and post independence era. The main objective of the economic reform programme was to create an economic structure whose premise was to rely more on market forces and indirect instruments of economic management in order to encourage growth, increase employment opportunities and reduce poverty.

ESAP had a number of components which included the following:

- reduction of central government budget deficit from 10% to 5% GDP by fiscal year 1994/95;
- monetary policy and financial sector reform;
- implementation of a trade and exchange liberalisation programme which would result in a fully market based foreign exchange system by 1995;
- reform of public enterprises with the aim of eliminating their budgetary burden and making them more efficient.

It is the component of monetary policy and financial sector reform that led to the current developments in the payment systems arena. The liberalisation and deregulation of the financial sector has been underpinned by the opening up of the sector to new entrants and the introduction of new payment instruments.

In order to promote activity on the Zimbabwe Stock Exchange (ZSE) the latter was opened up to foreign investors at the end of June 1993. Foreign investors have also been allowed to invest on the local capital market up to a maximum of 35% per primary issue of government bonds and stocks.

The liberalisation of the financial sector requires that both legislative and supervisory systems be transformed to reflect the changing market conditions. While financial sector liberalisation has broadly presented new opportunities to the financial sector, the vulnerability of some institutions to increased risks, after operating for more than a quarter of a century under controlled conditions, cannot be ruled out. In this regard it is imperative that legislative measures and supervisory mechanisms are strengthened in order to adequately cope with potentially damaging developments in the financial sector.

Government, the Reserve Bank and business sector all have important roles to play in the implementation of economic reforms. The achievement of objectives relating to the reform programme is therefore dependent on the performance of each of these players. Apart from Government and the Central Bank taking care of their traditional responsibilities, the business sector has to contribute towards economic growth through production and increased export earnings.

The economic reforms are expected to boost economic growth and maintain macro-economic stability. The introduction of a new economic reform programme, ZIMPREST is envisaged to further consolidate the performance of the market economy.

Table 1

Basic statistical data

	1992	1993	1994	1995	1996
Population (millions)[1]	10.40	10.80	11.20	11.50	11.90
GDP (billions) Z$[2]	34.40	42.50	56.40	66.60	85.60
GDP per capita (US$ millions)	601.00	571.00	603.00	621.00	665.00
Exchange rate (domestic vis-à-vis US$)					
year end	*5.50*	*6.90*	*8.40*	*9.30*	*10.80*
average	*5.09*	*6.59*	*8.22*	*8.67*	*10.00*

Table 2

Settlement media used by non-banks

(in billions of Zimbabwe dollars at year-end, not seasonally adjusted)

	1992	1993	1994	1995	1996
Notes and coins	1.0	1.3	1.4	1.8	2.3
Transferable deposits:					
Corporate sector	2.3	4.2	5.4	8.3	10.9
Household	-	-	-	-	-
Other	-	-	-	-	-
Narrow money supply (M1)	3.1	6.2	6.9	10.1	13.3
Broad money supply (M3)	7.2	10.3	22.2	28.8	36.8

Table 3

Settlement media used by banks

(in billions of Zimbabwe dollars)

	1992	1993	1994	1995	1996
Reserve balances held at central bank	0.9	1.1	1.8	1.5	3.4
Transferable deposits at other institutions	-	-	-	-	-
Accounts at the Post Office	-	-	-	-	-
Accounts at the Treasury	-	-	-	-	-
Required reserves	0.9	1.1	1.8	1.5	3.4
Institutions' borrowing from central bank	0.4	0.2	0.4	1.3	1.3

Table 4

Banknotes and coins

(in millions of Zimbabwe dollars)

	1992	1993	1994	1995	1996
Total banknotes and coin outstanding	997.17	1,346.7	1,720.2	2,158.4	2,769.7
Banknotes and coin held by credit institutions	135.8	155.3	287.8	407.8	427.3
Total banknotes and coin outside institutions	861.3	1,191.4	1,432.4	1,750.6	2,342.4
Banknotes held in overseas territories...........	-	-	-	-	-

Table 5

Institutional framework

(as at end-1996)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (millions of Zimbabwe dollars)
Central bank	1	2	-	7,370.0
Commercial banks	5	131	-	17,193.6
Merchant banks	-	-	-	-
Savings banks	10	11	-	4,143.4
Building societies	5	195	-	12,259.2
Post Office Savings Bank	1	181	-	5,738.8
Finance houses	6	16	-	3,145.8
Discount houses	5	5	-	2,248.4

Table 6

Cash dispensers, ATMs and EFTPOS terminals

	1992	1993	1994	1995	1996
Cash dispensers and ATMs:					
Number of networks	-	-	-	-	2
Number of machines	-	-	-	-	200
Volume of transactions (in millions)	-	-	-	-	11.0
Value of transactions (in billions)	-	-	-	-	4.0
EFTPOS:					
Number of networks	-	-	-	-	4
Number of machines	-	-	-	-	2,000
Volume of transactions (in millions)	-	-	-	-	2.0
Value of transactions (in billions)	-	-	-	-	0.5

Table 7

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

	1992	1993	1994	1995	1996
Members:			8	8	8
of which: live...	-	-	*8*	*8*	*8*
Sub-members:					
of which: live...	-	-	*2*	*2*	*2*
Participants:					
of which: live...	-	-	*0*	*0*	*0*
Total users:					
of which: live...	-	-	*10*	*10*	*10*

Source: S.W.I.F.T.

Table 8

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

	1992	1993	1994	1995	1996
Total messages sent of which:					
category I	-	-	*13,800*	*78,376*	*95,442*
category II	-	-	*14,188*	*67,905*	*85,846*
sent to domestic users					
Total messages received of which:					
category I	-	-	*9,122*	*69,634*	*83,167*
category II	-	-	*1,314*	*8,981*	*11,251*
received from domestic users					

Category I = customer (funds) transfer); Category II = bank (funds) transfer.

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