

**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 M1¹ and M2² 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

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)					
<i>year-end</i>	359.44	647.38	682.45	956.13	1,282
<i>average</i>	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	-	-