MEFMI

Macroeconomic and Financial Management Institute of Eastern and Southern Africa

FINAL REPORT

THE STUDY ON THE OPERATIONS OF FOREIGN CURRENCY DEPOST ACCOUNTS AND THE LOCAL FOREIGN CURRENCY CHEQUES CLEARING ARRANGEMENTS IN MEFMI MEMBER COUNTRIES

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FOREWARD

In the last three decades or so, most of the countries in the MEFMI region have been undertaking economic and financial reforms aimed at liberalising their trade and exchange rate regimes. One result of that liberalisation is the emergence of foreign currency deposit accounts in the domestic economy. These foreign currency accounts have created the need for efficient and safe mechanisms through which account holders can transfer value to one another for payment settlement. This report presents the findings of a survey conducted among the MEFMI member countries to look into the nature and operation of these foreign currency deposit accounts and in particular the arrangements that member countries in the MEFMI region apply in the clearance of the locally issued foreign currency cheques.

Since clearance of the locally issued foreign currency cheques takes place alongside the domestic currency cheques and in some cases on the same settlement platforms, the report has explored payment systems developments generally within the selected MEFMI member countries. In this connection, the report has reviewed the appropriateness of the institutional, legal and policy framework for the maintenance of these foreign currency accounts.

Deposits liabilities of the financial system, payment instruments and systems used in a country usually have implications or do influence economic activities giving rise to occasional interventions by monetary authorities in order to achieve some desired outcomes such as low inflation or exchange rate stability. This report therefore looks at how the operations of the foreign currency deposit accounts have influenced monetary authorities in the conduct of their monetary and exchange rate policies and financial system supervisory strategies.

National payments, clearing and settlement systems have their own inherent risks, which include susceptibility to fraud, failure to settle for various reasons, exchange rate risks, etc. In a globalised world, there is increasing desire for payment systems in a country to conform to some internationally recognised standards and best practices in order to reduce counterparty risks. This report therefore looks at the extent to which payment systems and in particular the clearance and settlements of the locally issued foreign currency cheques conforms to these international standards.

A common fear among countries hesitant in allowing and developing clearance systems for locally issued foreign currency cheques is the impact of dollarisation on their economies, especially the possibility of complications on the conduct of monetary policy and domestic financial markets stability.

This report examines the circumstances that lead to dollarisation and its impacts on the domestic economy. Interestingly, the report finds that there has not been any in-depth study of the issue in any of the MEFMI member countries and that much of the fear has to do with historical hang-up with the regimes of exchange controls. For instance, in those countries where the level of dollarisation of the economy was found to be high, the affected countries were cognisant of its existence and had developed mechanisms for dealing with it.

Finally, this report presents a proposal for an open architecture in the design of a clearing and settlement system for locally issued foreign currency cheques. The architecture provides parameters or benchmarks against which the monetary authorities in the MEFMI region can use to set up clearing and settlement systems for locally issued foreign currency cheques or other clearable items. The parameters can also be used by countries wishing to assess the extent to which their existing systems comply with the internationally recognised standards as articulated by the BIS Committee of Payment and Settlement Systems.

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The report is based on a survey of the operation of foreign currency accounts and clearing and settlement systems in MEFMI member countries. We would like to take this opportunity to acknowledge the support accorded to us by various people and organisations that made the preparation of this report possible. First, we would like to recognise the support of the Governors of the selected MEFMI member central banks for granting access to their staff members and information/data pertaining to their institutions. In this connection we would like to recognise the support of Prof. Njuguna Ndungu - Central Bank of Kenya, Ernesto G Gove - Bank of Mozambique, Prof Tumusiime Mutebile - Bank of Uganda, Prof Benno Ndulu - Bank of Tanzania, Dr. Caleb Fundanga - Bank of Zambia, Dr. G Gono - Reserve Bank of Zimbabwe. Within the central banks, we had free and open discussions with their appointed officers. We got information that we needed to understand the background and operational modalities of the foreign currency deposits accounts and their respective payment systems. This was only possible because of the interest and support of the Heads of Departments and their senior staff who took time from their busy schedule to meet with us. We also thank them for the effective arrangements that they made for us to meet with their countries' commercial banks and industry associations.

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Wilson Kinyua
Director-Bell Consulting Services

ACRONYMS AND ABBREVIATIONS

ACH	Automated Clearing House
AMB	Association of Mozambican Banks
AML	Anti-Money Laundering
ATM	Automatic Teller Machine
ATS	Automated Trading System
BAFSA	Banking and Financial Services Act
BAM	Bankers Association of Malawi
BAS	Bankers' Association of Swaziland
BAZ	Bankers Association of Zambia
BAZTECH	Bankers Association of Zambia Technical Committee
BCCI	Bank of Credit and Commerce International
BCS	Bell Consulting Services
BIS	Bank for International Settlement
BNR	Banque Nationale du Rwanda
BON	Bank of Namibia
BOM	Bank of Mozambique
BOT	Bank of Tanzania
BOTECH	Bank of Tanzania Electronic Clearing House
BOU	Bank of Uganda
BOZ	Bank of Zambia
BRB	Banque de la Republique du Burundi
BSM	Banking Survey Monthly
BRCP	Central Reserve Bank of Peru
CBK	Central Bank of Kenya
CBL	Central Bank of Lesotho
CBPSC	Central Bank Payment System Committee
CBS	Central Bank of Swaziland
CDS	Central Depository System
CEOs	Chief Executive Officers
CFC	Customer Foreign Currency
CMAK	Capital Markets Authority - Kenya
CMA	Common Monetary Area
CMSA	Capital Markets and Securities Authority
COSSE	Committee of SADC Stock Exchanges
CPSS	Committee of Payments and Settlement Systems
CRR	Cash Reserve Ratio
CTF	Countering Terrorist Financing
DECH	Dar es Salaam Clearing House
DSE	Dar es Salaam Stock Exchange
DVP	Delivery versus Payment
EAC	East African Community
ECA	Exchange Control Act
EFT	Electronic Fund Transfer
FCAs	Foreign Currency Accounts
FCDs	Foreign Currency Deposits
FCCC	Foreign Currency Cheque Clearing
FCCH	Foreign Currency Clearing House
FSMP	Financial Sector Management Programme
GBP	Great Britain Pound
GDP	Gross Domestic Product
HIPC	Highly Indebted Poor Countries
HKICL	Hong Kong Inter-bank Clearing House Limited
HSBC	Hong Kong and Shanghai Banking Corporation
IFEM	Inter-bank Foreign Exchange Market
IFEMO	Inter-bank Foreign Exchange Market Operations
ILF	Intra-day Liquidity Facility
ITB	Investment Trust Bank
IMF	International Monetary Fund
KBA	Kenya Bankers Association
KEPSS	Kenya Electronic Payment Settlement System
KSMS	Kenya School of Monetary Studies
LCCC	Local Currency Cheque Clearing
LFCCs	Locally Issued Foreign Currency Cheques
LFCCCS	Locally Issued Foreign Currency Cheque Clearing System
LIBOR	London Inter-bank Offer Rate
LUSE	Lusaka Stock Exchange
MAC	Monetary Affairs Committee
MCSH	Maseru Clearing and Settlement House
MALSWITCH	Malawi Switch
MDRI	Multilateral Debt Relief Initiative
MEFMI	Macroeconomic & Financial Management Institute of Eastern and Southern Africa
MICR	Magnetic Ink Character Recognition
MPC	Monetary Policy Committee
MPOC	Monetary Policy Operations Committee
MSC	Malawi Switch Centre
MZN	Metical - Currency of Mozambique
NAC	National Payment Advisory Committee
NAD	Namibian Dollar
NAMFISA	Namibia Financial Institutions Supervisory Authority
NBC	National Bank of Commerce
NBFIs	Non Bank Financial Institutions
NCSS	National Clearing and Settlement System
NGO	Non Governmental Organisation
NISS	Namibia Inter-bank Settlement System
NSI	Net Settlement Instructions
NPS	National Payment System
NPSC	National Payment System Committee (Swaziland)
NSE	Nairobi Stock Exchange
NSSF	National Social Security Fund
OECD	Organization for Economic Cooperation and Development
OMO	Open Market Operations
OTC	Over the Counter
PAN	Payment Association of Namibia
POS	Point of Sale
PSMB	Payment System Management Board
REER	Real Effective Exchange Rate
RBM	Reserve Bank of Malawi
RBZ	Reserve Bank of Zimbabwe
REPO	Repurchase Agreements
RTGS	Real Time Gross Settlement
RWF	Rwanda Franc
SACU	Southern Africa Customs Union
SADC	Southern African Development Community
SAECH	Swaziland Electronic Clearing House
SCHA	Singapore Clearing House
SDCCS	Singapore Cheque Clearing System
SDR	Special Drawing Rights
SIPS	Systematically Important Payment Systems
SSX	Swaziland Stock Exchange
SWIFT	Society for Worldwide Inter-bank Funds Transfer
SWIPSS	Swaziland Inter-bank Payment and Settlement System - RTGS System
TBA	Tanzania Bankers Association

TISS	Tanzania Inter-bank Settlement System
TNNSS	Tanzania National Net Settlement System
TNSS	Tanzania Net Settlement Services
TRA	Tanzania Revenue Authority
TT	Telegraphic Transfer
UBA	Uganda Bankers Association
UNICTRAL	United Nations Committee on International Trade Laws
UNISS	Uganda National Inter-bank Settlement System - RTGS System
URA	Uganda Revenue Authority
USD	United States Dollar
USDCCS	US Dollar Cheque Clearing System
USE	Uganda Stock Exchange
VNNSS	Visa National Net Settlement System
ZAR	South Africa Rand
ZECH	Zambia Electronic Clearing House
ZECHL	Zambia Electronic Clearing House Limited
ZETSS	Zimbabwe Electronic Transfer and Settlement System - RGTS System
ZIM$	Zimbabwe Dollar
ZIMRA	Zimbabwe Revenue Authority
ZIPSS	Zambia Inter-bank Payment Settlement System - RTGS System
ZKM	Zambia Kwacha Million
ZNCB	Zambia National Commercial Bank

EXECUTIVE SUMMARY

In the last three decades or so, most of the countries of the MEFMI region have been reforming their forex regimes and in particular their payment, clearing and settlement systems to conform with international best practices and standards and the respective regional payment systems modernisation projects in enhancing their responses to economic and financial reforms within their national boundaries. One outcome of the foreign exchange market liberalization has been increased use by residents of foreign currency accounts as a store of wealth and for transactions. As a result, central banks have allowed commercial banks to maintain and operate foreign currency denominated accounts for their eligible customers and in some countries, central banks have taken the lead in the development and facilitation of the open architectures for the clearing of locally issued foreign currency denominated cheques (LFCCs).

The risks associated with the clearing and ultimate settlements of the LFCCs are not fully understood by all key market participants within the MEFMI member countries. This prompted the Governors of central banks of the EAC countries under the framework of their Monetary Affairs Committee (MAC) to request MEFMI to undertake the study on the operations of the foreign currency deposits and the clearing of the locally issued foreign currency cheques. MEFMI agreed to undertake the study with a widened coverage of the MEFMI region. The inclusion in the study of the other countries outside the EAC was felt necessary to have a more balanced view of the issue taking into account the MEFMI membership. In addition, it was considered that other MEFMI member countries struggling to establish clearing arrangements of their own could benefit from the outcome of the study. MEFMI as a regional capacity building institution contracted Bell Consulting Services to undertake the study.

The Study Objective

The overall objective of the study was to examine the role of central banks in the domestic clearance of LFCCs and to indicate how best the banks can facilitate the development and operation of these clearing arrangements within or outside the central bank. Other key objectives of the study were to: examine the nature and operations of all types of FCDs accounts; examine the implications, if any, of these operations on the conduct of monetary policy; review the appropriateness of the institutional, legal and policy framework for the maintenance of these foreign currency deposit accounts; and identify any risks they may pose to monetary and financial stability. The study was also expected to deliver a proposal on an appropriate institutional, legal and policy framework for establishing efficient and risk free foreign cheque clearing systems.

The Methodology

An exhaustive performance of this task required examining the current clearing and settlement arrangements and the underlying basis for the institutional, legal and regulatory frameworks prevailing within the MEFMI countries. However in view of the communications difficulties across African countries, the exercise was scaled down to reduce time and cost of undertaking it. In the circumstances, it was considered appropriate to visit a sample of six MEFMI member countries including the initial three EAC countries. The selected countries were Kenya, Tanzania, Uganda, Mozambique, Zambia and Zimbabwe. The study team identified and interviewed departments of central banks involved in monetary and exchange rate policy formulation, financial markets, and banking operations and payments system developments. Other stakeholders interviewed were commercial banks and their industry associations because they are generally involved in setting rules for orderly conduct of cheques clearing systems. Relevant information from other MEFMI member countries not visited by the study team was obtained using a structured mail questionnaire. Although Burundi is not currently a member of MEFMI, it was included in the study at the request of MAC.

As a preamble to the study, the team reviewed some cross-cutting issues that had a direct bearing on the assignment. These included the role of central banks in national payment systems since a central bank has important roles in the development and operation of payment systems in a country as a user of payment system, operator of the payment system, member of payment systems, settlement agent and overseer of the payment system. Other cross-cutting issues examined included: risks associated with payment systems; international best practices and standards (BIS Core Principles) as the benchmark against which the proposed design for an open architecture for clearing and settlements of LFCCs is to be based; and lastly, the dollarisation depth and penetration within the domestic economies due to its impact on monetary policy stances and strategies and financial markets stability.

Observations

The legal and institutional frameworks for operation of the FCAs differ substantially among the MEFMI member countries on account of their historical background and regional cooperation arrangements. In some countries, central banks have allowed commercial banks to open foreign currency savings accounts only while in others they have allowed current, time deposits and loan accounts as well. One feature that is common in all these countries except where exchange controls still exist is the freeing of current account transactions and partial liberalisation of capital accounts. These developments have not been without challenges. The main obstacles to their operation have been the implications of the inter-bank forex operations on the conduct of monetary policy and the challenges of managing payments system risks within the clearing arrangements of the locally issued foreign currency denominated cheques.

Main Findings of the Study

i. All MEFMI member countries covered by the study had allowed operation of FCAs by their residents. However not all countries had put in place formal mechanisms for exchanging of value between holders of the FCAs. Mechanisms for facilitating LFCCC differed considerably ranging from infant systems where cheques are exchanged bilaterally between banks as is the case in Mozambique and Rwanda, Club systems as in Uganda and Malawi, to the more established systems in Kenya and Zambia where clearing and settlements are conducted over electronic platforms.

ii. None of the selected MEFMI member countries offered Intra-day Liquidity Facility (ILF) to facilitate the clearance and settlement of the LFCCs.

iii. In the banking systems where the LFCCC systems have been most successful, it as observed that they shared certain common characteristics. These common features include:

a. Active involvement of the central banks was a critical factor in terms of operations and compliance with the Core Principles;

b. Existence of governance structures that gave a careful balance between the role of central banks and commercial banks;

c. Establishment of a consultative forum to coordinate payment system reform to accommodate the LFCCC arrangement; and,

d. A legal framework that enabled central banks to carry out their oversight role and development functionality.

iv. An effective and efficient LFCCC system can be operated, not only within the central banks but also outside the central banks as epitomised by the Zambian scenario.

v. All MEFMI member countries covered by the survey, were observed to experience varying levels and forms of dollarisation ranging from insignificant as in the case of Kenya and Malawi to high dollarisation as the case in Mozambique, Rwanda and Zimbabwe. It was also observed that dollarisation was unofficial in all countries except in Lesotho, Namibia, and Swaziland which were semi-officially dollarised with the ZAR having the status of the 'alternative legal tender.' Although dollarisation appeared to be a source of concern, and in some instances feared, none of the countries surveyed had undertaken any specific empirical study to ascertain its potential negative or positive impacts on the economy generally, and on the conduct of monetary policy. However it was noted that the operation of FCAs had influenced the central banks choice of instruments for conduct of monetary policy. Nearly all central banks in the respective countries had put in place measures to mitigate against potential monetary and systemic risks of dollarisation. Some of the measures taken to mitigate potential risks include:

a. Targeting money supply (M2) in combination with Inter - Bank foreign exchange (IFEM) operations or the broad money aggregate (M3) in the determination of cash reserve requirements;

b. Strict enforcement of foreign exchange rules, guidelines and regulations aimed to reduce foreign exchange exposure risk to the banking system;

c. Requiring comprehensive risk management plan which sets out policies, procedures and other safeguards necessary to manage and control foreign exchange risk;

d. Imposing single borrower exposure limits, forex limits based on core capital and stringent offshore placements requirements, all aimed at reducing market risks; and,

e. Requiring commercial banks to make extra provisions for forex credit facilities provided to non-exporters of goods and services.

Conclusions

In conclusion, central banks need to regulate the inter-bank foreign exchange markets (IFEM) operations as they may influence monetary policy stances to varying degrees depending on the mitigating measures deployed by the banks while at the same time, the central banks should facilitate the introduction of open LFCCC systems to level the playing field in the forex trade. Central banks must get concerned about the settlement arrangements in the IFEM to minimise systemic risk. However, the range of clearing and settlement arrangements available today is a reflection of the economic, business and technological environment existing in the MEFMI region. The application of information and communication technologies to payment system processes has led to gradual change in the provision of clearing and settlement arrangements within the selected MEFMI member countries.

An appropriate LFCCC arrangement must pass the test of compliance with the Core Principles. The Core Principles should be complemented by the international corporate governance standards and best practices and prudent payment system risk management guidelines if regional countries are to realise the benefits of efficient payments systems as the transformation conduits of monetary policy formulation and implementation. If these standards are applied, an efficient and secure LFCCC arrangement can be established within or outside the central bank.

Dollarisation occurs in response to economic instability and high inflation and the desire of residents to diversify and protect their assets from the risk of devaluation of their own currencies and the introduction of both FCDs accounts and open architecture LFCCC arrangements are no causal factors nor do they exacerbate the depth of dollarisation in the domestic economy. Not all countries viewed dollarisation as a threat. The countries in the CMA had benefited from their semi-official dollarisation status. It would be in the interest of both central banks and all commercial banks to introduce the open LFCCC system as it does reduce the cost of doing business in this regard and consequently, the reduction of financial costs to the consumers of financial services, apart from the convenience it offers them.

PART ONE: MAIN REPORT

1.0 INTRODUCTION

1.1 Background

In the last three decades or so, countries of the MEFMI region have been liberalizing their trade and payments regimes as part of their economic reforms in response to exchange rate, inflation and other macroeconomic imbalances. Trade regimes which involved export compensation schemes, pre-export finance facilities and preferential lending to selected sectors of the economy, import licensing etc, were abandoned in favour of liberalised trade regimes. Direct monetary controls were replaced with indirect controls such as open market operations (OMO) and allowing market forces to determine interest rates and exchange rates. This progressed to the liberalisation of the current accounts and to some varying degrees the capital accounts. The other stimulus for liberalization has been adjustment conformity to globalization trends generally.

One outcome of that liberalization has been increased desire of foreign currency by residents for accounting, store of wealth and transactions. As a result, central banks have in many countries allowed commercial banks to operate foreign exchange denominated accounts (FCAs) for their customers. The currencies that are commonly used for that purpose are the US Dollar, Pound Sterling and the Euro.

The legal and institutional frameworks for operation of these FCAs differ substantially between these countries on account of their historical background and regional cooperation arrangements. In some countries, central banks have allowed commercial banks to open foreign currency savings accounts while in others they have allowed checking foreign currency accounts as well. Lines of credit denominated in foreign currencies are also being offered. These developments have not been without problems. The main obstacle to their operation has been clearing of the LFCCs within the domestic banking system.

The first clearing modality in operation, prior to the introduction of the open architecture for LFCCs, was presentation of the cheques to the local bank on which the cheques were drawn for offshore collection. This arrangement proved to be a costly and cumbersome process in terms of delay in determining the fate of the cheques with the added disadvantage of operational and foreign exchange risks. To reduce these inconveniences, the major banks in some countries such as Kenya and Uganda formed Clubs for exchanging these kinds of cheques. This arrangement introduced distortions and inefficiencies in the payments systems due to a lack of competitiveness as they excluded some banks and their customers, further marginalising non-members. Apart from distorting the clearing arrangements and marginalizing non-members, the Club arrangement was also not adhering to the BIS Core Principles. It is in this context and augmented with the growth of foreign currency deposits (FCDs) and transactions in the domestic economy that some central banks, in collaboration with the industry associations, have initiated and facilitated the operationalisation of the open architecture for the clearing of the locally issued foreign currency cheques (LFCCs). The operation of foreign currency denominated accounts has not been without risks. At an E-commerce and Monetary Policy workshop held in Nairobi in March 2006, it was observed that domestic clearance of locally issued foreign currency cheques posed settlement risks, which have implications on monetary and financial stability. That view was debated further during the 9th East African Community (EAC) Monetary Affairs Committee (MAC) held in May 2006 in Arusha, Tanzania. Consequently, the Governors of the EAC countries central banks decided that a study is undertaken to address these critical issues to the smooth functioning of the regional financial markets and prudent conduct of monetary policy issues. The Committee mandated the Central Bank of Kenya (CBK) to prepare terms of reference for the study and to request MEFMI to undertake it. Pursuant to that decision, the Central Bank of Kenya prepared the terms of reference for the study and accordingly requested MEFMI to undertake this study.

MEFMI agreed to undertake the study but with a broadened coverage of the MEFMI region. The inclusion of the other countries outside of the EAC was felt necessary in order to have a more balanced view of the issue by taking into account the varying historical, economic and financial spectrum of the MEFMI membership. In addition, it was considered that other MEFMI member countries struggling to establish their own clearing arrangements could benefit from the outcome of the study. Although MEFMI is a regional capacity building institute owned by 13 member countries, the study was initially carried out in six countries comprising the three East African countries that initially requested the study i.e. Kenya, Uganda and Tanzania and three other MEFMI countries consisting of Mozambique, Zambia and Zimbabwe. Other MEFMI member countries were covered through a mail questionnaire designed to obtain comparative information from those countries. This included Burundi which though not a current member of MEFMI was covered at the request of MAC.

1.2 Study Objectives

The overall objective of the study was to examine the role of central banks in the domestic clearance of locally issued foreign currency cheques and to indicate how best the banks can facilitate the establishment and operation of these clearing arrangements within or outside the central bank. This entailed examining the current arrangements in each of the countries covered in the study with the remit to propose appropriate legal and policy frameworks for establishing efficient and risk free foreign clearing systems.

1.3 Terms of Reference

The detailed terms of reference for the study as agreed between Bell Consulting Services and
MEFMI were as follows:

i) Study the nature and operations of all types of foreign currency deposit accounts;
ii) Examine the implications, if any of these operations

on the conduct of monetary policy;

iii) Review the appropriateness of the institutional, legal and policy framework for the maintenance of these foreign currency deposit accounts;

iv) Examine the current arrangements for domestic clearance of locally issued foreign exchange cheques and identify the risks, if any, they pose to monetary and financial stability;

v) Assess the adequacy of the legal framework establishing the existing clearing arrangements;

vi) Assess the adequacy of the rules and regulations governing the operations of these arrangements and their compliance with best practice for payment systems;

vii) Examine the implications of extending intra-day loan facility to foreign currency transactions;

viii) Examine how best central banks can facilitate the introduction and operation of the cheques clearing arrangements within or outside central banks;

ix) Propose an appropriate institutional, legal and policy framework for establishing efficient and risk free foreign cheques clearing systems;

x) Establish if all the above arrangement may lead to dollarisation of the domestic economy; and,

xi) Prepare and submit, initially, an inception report and then a draft report and later a final report of the study.

1.4 Structure of the Report

This report is organized into two main parts. Part one is the Main Report. It is presented in five Chapters. Chapter 1 provides the background to the study regarding how it was conceived, its aims and objectives. Chapter 2 describes the methodology applied by the consultant to obtain information used in producing this report. Chapter 3 provides a comparative analysis of the information obtained on the operation of FCDs and the LFCCCs obtaining in various MEFMI member countries. Chapter 4 provides the main findings aimed at addressing the specific terms of reference for the study while Chapters 5 makes conclusions derived from the team's analysis, observations and findings. Part Two of the report contains the individual country reports based on the discussions held by the study team with the stakeholders in the countries they visited and the responses to the structured mail questionnaires submitted to the countries the study team was not able to visit.

The report also contains a number of annexes which were part of team's literature review and which provided important background material for it. These annexes include the BIS Core Principles and best practices in the operations of clearing and payments systems, the experiences of Peru, Hong Kong and Singapore that have traveled on similar roads and a framework on which MEFMI member countries could transform or enhance their LFCCC systems to conform to internationally recognized standards and best practices.

2.0 THE METHODOLGY

2.1 Project Design and Implementation

In order to fulfil the requirements of the detailed terms of reference, the Consultant after agreement with MEFMI divided the assignment into four phases as explained below.

Phase One - Inception

This stage of the project was planned to take 4 weeks. It comprised the following four main activities:

i) Entering into contract with the Client;
ii) A broad determination of key stakeholders in the FCDs and LFCCC systems after which a checklist of persons/institutions to be consulted during the study was prepared;
iii) A comprehensive desk review of the literature on some crosscutting issues that had a direct bearing on the assignment. These included the role of central banks in national + payment systems; risks associated with payment systems; international best practices and standards (BIS Core Principles) as the benchmark against which the proposed design for an open architecture for clearing and settlements of LFCC was to be based; and lastly the measurement and impact of dollarisation on monetary policy stances and financial markets stability. The literature for the desk review was obtained from the client, monetary authorities in the MEFMI member countries, BIS Committee on Payments and Settlement Systems, IMF/World Bank, internet and other relevant material as indicated in Annex II; and,
iv) Development of a diagnostic template for collecting information and data. This was necessary to ensure that the information collected was comparable across countries and rendered itself to scientific analysis. In addition, the template was designed to ensure that data/information collected was comprehensive enough to facilitate evaluation of policy and institutional framework for the FCD clearing systems. The information sought included the number of banks in a country, total local currency deposits, total FCDs, volume and value of cheques cleared, GDP, money and credit, trade volumes, balance of payments, exchange rates, etc. The template was further broken down into questionnaires to be applied on specific type of stakeholders. For the purpose of this assignment the stakeholders that were identified included the relevant departments of central banks involved in monetary and exchange rate policy formulation, financial markets, and banking and payments systems. Other stakeholders were commercial banks and their industry associations because they are generally involved in setting rules for orderly conduct of cheques clearing systems. The instruments developed are shown as Annex III.

Phase Two - Pilot Test

In order to test the efficacy of the diagnostic template developed, the study team carried out a pilot test of the instruments in Kenya after agreement with MEFMI. The choice of Kenya as a pilot site was based on two main considerations: Firstly, Kenya has a fairly developed FCD cheques clearing system that could serve to benchmark systems in other countries; Secondly, the involvement of the whole team in the pilot test was considered vital for members to develop a common approach and standards in gathering information in countries where they would be deployed. Since the Consultant was based in Nairobi, it was observed that Kenya provided the opportunity for all team members to get involved without much movement and resource requirements. The main output from Phase Two was a refined diagnostic template and questionnaires. The exercise took one week to complete.

The outputs from Phase One and Two were combined to form an Inception Report which was prepared and presented to the client for review and comments. The Inception Report was useful in three ways: Firstly, it provided a litmus test for the Consultants understanding of the terms of reference and the Client's expectations from the study; Secondly, it provided opportunity to state clearly how the consultancy was to be carried out, in terms of the methodology and timelines, as well as the anticipated limitations/constraints; and finally statement of the progress made and problems/challenges encountered. The comments of the Client were incorporated in the further refinement and finalization of the data/information capture template.

Phase 3: Field Work and Collection of Data/Information

The third phase of the study comprised of three main activities: Selection of sample countries; development and application of mail questionnaire; and field work. Collection, analysis and synthesizing of information formed the main part of this study and took about six weeks.

Sample Size and Design - MEFMI member countries are spread out widely across Eastern, Central and Southern Africa. Communications in Africa are not only inefficient but also expensive. Therefore to make the assignment affordable and reduce the time for carrying it out, it was decided to take a representative sample of seven countries to be visited by the study team. The selected countries comprised the three EAC countries that initiated the study, and four other MEFMI member countries - in total 53.8% of membership. The choice of the four other MEFMI member countries was based mainly on ease of communications and logistics such as accommodation. Eventually, only six MEFMI member countries i.e. Kenya, Mozambique, Tanzania, Uganda, Zambia and Zimbabwe were actually visited by the team. The Consultant with agreement of MEFMI split the study team into two groups. Group A covered Mozambique and Zimbabwe, while Group B visited Uganda, Tanzania and Zambia. This arrangement was intended to reduce travel time and cost, and also to make logistics manageable. To ensure that the skills mix in each group was complementary, each group had a macro-economist and a banking and payments expert. It is to be noted that all study team members were involved in the pilot study in Kenya.

Mail Questionnaire - In order to get a total view of the membership, it was agreed with MEFMI that a structured mail questionnaire be developed and used to solicit relevant information from central banks of member countries not visited by the study team. That questionnaire is attached as Annex IV. Completed returns were consequently received from central banks of Lesotho, Malawi, Namibia, Rwanda, and Swaziland which were not visited by the study team. At the request of MAC Burundi was also included in the mail survey.

Field Work - was devoted to field collection of data/information using the refined template and questionnaires. A maximum of two days excluding travelling time was allocated to each country visited. In order to facilitate the collection of information and also enable staff of the respondents to prepare for the study teams, the questionnaires were distributed to the member central banks in advance. Each group interviewed staff of departments of central banks involved in monetary and exchange rate policy formulation, financial markets, and banking operations and payments system developments.

To facilitate the interview of other stakeholders, central banks were requested by MEFMI to make appointments on behalf of the study teams. The other stakeholders interviewed were commercial banks and their industry associations because they are generally involved in setting rules for orderly conduct of cheques clearing system.

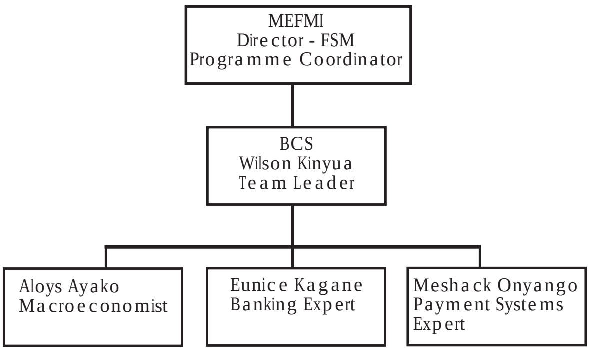
Phase 4: Preparation and Presentation of the Report

The final part of the study was planned to take 4 weeks in which the study team was to synthesize all the information obtained from the field including the returns of the structured mail questionnaire. The main outputs of this phase were a Draft Report for the client to review and comment on and the Final Report which incorporates the comments of the client. The finalisation of the report was however affected by the post-election violence in Kenya and delay in obtaining information from the mail questionnaire. A presentation of the Final Report is also envisaged.

2.2 Project Management

Project Organisation and Structure - The implementation of study was structured to ensure that the Client (MEFMI) and the Consultant (BCS) were in touch and understood each other through out the study period so that the outputs from the study met the stated objectives. In this connection, the Director, Financial Sector Management Programme under which the study was being carried out appointed Patrick Mandidi to be the contact person on behalf of MEFMI. The Consultant also appointed Wilson Kinyua to be the Team Leader and liaison between the Client and the Consultant on all administrative and contractual issues.

Figure 1: Project Organisation Structure



Logistics - Most of the work was performed at the offices of the Consultant except the interviews of stakeholders which were conducted at the agreed sites. MEFMI provided all logistical support that was needed to undertake the assignment.

Documentation - The Consultant will create electronic copies of all reports and major documents used in the study. The Final Report together with electronic documents created will be submitted to the Client in a CD.

Communications - All instructions from the Client to the Consultant and vice versa are documented by electronic mail and hard copies.

3.0 THE ANALYSIS

3.1. Introduction

This section of the report presents a summary of the foreign exchange regimes in the MEFMI member countries, the nature and practices on operations of foreign currency accounts. The Chapter also makes a comparative analysis of the factors that influenced the adoption of various practices and the environment under which the operations are undertaken. In this connection, the issues examined include the IFEM operations, LFCCC arrangements, the intra-day loan facilities and any linkages to the domestic foreign currency transactions and dollarisation in the domestic economy

3.2 Inter-bank Forex Market Operations

Evolution and Status Of Foreign Regimes - As shown in Table 3.1, the majority of the countries in the MEFMI region liberalised their forex regimes in the period 1993 -1997. This coincided with the period when the IMF was articulating the case for liberalised financial systems and the introduction of foreign currency deposit accounts. In most cases, the liberalisation process was tied to the balance of payment support for those countries that were willing to embrace liberalisation. The nature of the liberalisation status took the form of full liberalisation where both current and capital transactions were freed or partial liberalisation where some exchange controls were retained in current account, capital account or both. The most common feature of forex regimes as shown in Table 3.1 is partial liberalisation where the current accounts are open but there are still in place restrictions on some transactions.

Resulting from that wave of liberalisation, it was observed that all MEFMI member countries[1] except Angola, Burundi and Mozambique, including those with exchange controls, had as at December 2006 acceded to the obligations of Article VIII, Sections 2, 3, and 4 of the IMF's Articles of Agreement. These countries were therefore expected to maintain exchange systems that are free of restrictions on the making of international transfers and payments of current account transactions. However, it was noted that the provisions of Article VIII were not fully adhered to in all countries. The IMF Annual Report on Exchange Arrangements and Exchange Restrictions, 2007 also notes that some countries imposed restrictions on current account transactions or engaged in multiple currency practices contrary to provisions of Article VIII, Sections 2, 3, and 4 without IMF approval. These restrictions were over and above the normally accepted administrative procedures for Anti-Money Laundering (AML) and prevention of financing or facilitating terrorism activities. As far as capital accounts were concerned, it was also observed that most of the countries covered by the study maintained restrictions on capital accounts transactions because the provisions of Article VIII do not require capital account convertibility. Nevertheless, it was noted that most countries had removed some restrictions on capital account particularly on inward investments.

Nature and Operations of the Forex Accounts - One of the main outcomes of forex regime liberalisation was that all MEFMI member central banks have allowed commercial banks in their jurisdictions to maintain and operate foreign currency denominated accounts for their eligible customers. However, as shown in Table 3.1, the types of FCAs operated differ amongst the countries. A number of factors may explain these disparities between countries of which the main ones are that:

i) While it is recognised that all MEFMI member countries were under external pressure to liberalise their financial systems, the extent and depth of the liberalisation undertaken depended on capacities of the specific economies to implement the reforms. These capacities included the ability of countries to absorb the forex shocks associated with liberalisation. In this connection, a stable export base or substantial external funding was a prerequisite. The other factors related to capacity were the level of development and size of the money and capital markets including financial infrastructure such as the stock exchanges; and the size of the private sector players; and the general absorption capacity of the respective economies;

ii) The external pressure for change particularly the liberalisation of the capital accounts has eased in the light of global developments relating to money laundering and speculative investments;

iii) Although pressure to liberalise has eased and countries can now move at their own pace, resistance to liberalisation still exists due to fear of attracting undesirable investments especially where regulatory frameworks are weak, or speculators as happened in Kenya at the onset of the liberalisation, together with the hot money that accompanies this phenomena and the capital flight that may occur as a result. These potential developments have the capacity to destabilise monetary systems of small economies and may explain the restrictions still in place in some countries; and,

iv) The types of accounts, the eligible foreign currencies, and market players depend on the respective countries' central banks rules and guidelines in place and the depth of the liberalisation process.

Although commercial banks in their day-to-day operations transacted in all major currencies, the FCAs were maintained, as shown in Table 3.1, only in the USD, GBP, and the Euro. For the MEFMI member countries in Southern Africa, FCAs were also maintained in South African Rand (ZAR) and the Botswana PULA. In some countries, central banks have allowed commercial banks to open forex savings accounts only, while in the majority, they have allowed current, and time deposits. In conformity with the KYC requirements, it is mandatory in all these countries that a prospective customer must demonstrate the source of inflow(s) of foreign exchange earnings to be allowed to open a forex account. In most of the countries under the study, account opening balances were in the range of USD 200-500. Majority of these countries

[1] Angola, Burundi and Mozambique have not acceded to the obligations of Article VIII of the IMF Articles of Agreement. They are all, however, compliant with Article XIV which allows transitory arrangements for members. Burundi is not yet a member of MEFMI but is covered by the study at the request of MAC.

also imposed limits on cross currency transfers and on both the number and amount of daily deposits and over the counter withdrawals. It may also be noted that in the majority of countries, banks are allowed to extend foreign currency denominated loans domestically. The interest rate applied on FCAs in all MEFMI member countries was based on LIBOR in addition to local market forces, except in Zimbabwe where the central bank determined rates on FCDs held with it. The situation in Zimbabwe may be a temporary measure to attract forex needed for vital imports of goods and services.

Institutional and Regulatory Framework - The major market players are the commercial banks, forex bureaus, the NGOs, the corporate customers, individuals and the respective central banks with the central banks acting as the main regulators. It was observed that there are three approaches that are applied in regulating the IFEM operations in the region: the specified central banks' regulations, rules and directives; the specific parliamentary legislations; or a mixture of the former and the latter. For example, in Kenya and Uganda they use central banks' guidelines and AML regulations while in Mozambique, Zimbabwe, Tanzania, Swaziland and Zambia they use specific regulations and legislations.

Implications on the conduct of Monetary Policy - In the examination of the impact of the FCAs on the conduct of monetary policy, it was observed that some countries in the region have recently experienced substantial inflows of forex from external donors for investment and budget support, exports and transfers from Africans in the Diaspora. Some of the impacts of these increased inflows have been appreciation of local currencies, depression of interest rates and heightened level of speculative investments. Monetary authorities in the region have responded to these developments in a variety of ways in managing the excess liquidity arising from these forex inflows. The mitigating measures deployed across the board by the regional monetary authorities to ensure monetary and financial system stability include foreign currency based OMO, sterilisation of the excess forex inflows, capital based foreign exposure limits, limitations on offshore funds placements and deposits, surveillance over the appointment of offshore correspondent relations based on their international ratings, percentage limitations to single borrowers and lastly monetary targeting and returns benchmarked on foreign currency equivalents.

Table 3.1: Comparative Analysis of IFEM Operations

Country and Issue	Burundi	Kenya	Lesoptho	Malawi	Mozambique	Namibia	Rwanda	Swaziland	Tanzania	Uganda	Zambia	Zimbabwe
Status of Fx Operations												
Accession to Article VIII	No	Jun 1994	Mar 1997	Dec 1995	NO	Sep 1996	Dec 1998	Dec 1989	Jul 1996	Apr 1994	Apr 2002	Feb 1995
Current Account	Yes	Yes	Yes*	Yes	Partial	Yes*	Yes	Yes*	Yes	Yes	Yes	No
Capital Account	No	Yes*	No	Partial	No	No	Partial	No	Partial	Partial	No	No
Year FCDs introduced	1999	1993	N.A	1994	1997	1994	1994	1994	1993	1993	1993	1996
Type of Accounts Allowed												
Chequeing	Yes	Yes	NS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n.a
Savings	Yes	Yes	NS	Yes	-	Yes	Yes	No			Yes	Yes
Time Deposits	Yes	Yes	NS	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
FX loans	No	Yes	No	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Major Currencries												
USD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
GBP	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
Euro	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ZAR	-	-	Yes	Yes	Yes	Yes	-	Yes	Yes			Yes
Interest benchmark	Local Market	Libor	NS	Libor	Libor	Libor	Libor	Libor	Libor	Libor	Libor	RBZ rate
Any regulations	Yes	Yes	Yes	Yes	Yes	Yes	NS	Yes	Yes	Yes	Yes	Yes

Source: Respective central banks of countries, *Exchange Control Laws in place or some f formms of restrictions, N.A = Not Available, NS = Not Stated

3.3 Local Foreign Currency Cheque Clearing System

The three methods commonly used for LFCCC arrangements within the MEFMI region are the open architecture (which is transparent and accountable), the Club (that is an exclusive arrangement of a few participating banks) and the traditional collection abroad approach. Although nearly all MEFMI member countries had permitted the operation of current FCAs, only Kenya, Tanzania, Zambia and Mozambique had open clearing and settlement architectures as shown in Table 3.2. The other MEFMI member countries surveyed have a mixture of Club and traditional collection arrangements running parallel to each other. The introduction of the open and Club arrangements, appears to have followed the developments in the liberalisation of the forex regimes with the subsequent introductions of foreign currency deposit accounts. The dominant underlying clearing effects are all the same within the region, namely, the cheques denominated in USD, Euro, and GBP with the Rand being also applicable among some member countries of SADC e.g. Lesotho, Namibia, Swaziland, and Zambia. However, the US Dollar remains the dominant forex-clearing instrument being cleared in their LFCCC systems. The open architecture has important advantages over the other clearing arrangements. Firstly, the arrangement has a shorter clearing cycle of the forex cheques than both the Club and collection arrangements. Secondly, the concomitant operating costs are lower for both the participating institutions and their customers. Thirdly, the open system offers a sound basis for central banks enhanced oversight role. It is for these reasons that some commercial banks in the MEFMI member countries that did not have an open system had expressed their desire to their respective central banks to facilitate their introduction.

In the context of operations, the Club arrangements have a shorter clearing cycle than its traditional model counterpart. Its main shortcoming, however, is that the practice is discriminatory. The club members' customers have a competitive edge over the other banks' customers. This arrangement distorts the market and goes against the Core Principles of open access to all participants. It is these considerations that made the Central Bank of Kenya and others to intervene and facilitate the development of the open LFCCC system.

Despite its clear advantages, only four out of the eleven central banks covered by the survey had facilitated the open architecture. A number of reasons may be responsible for the low uptake of the open LFCCC system. Firstly, some central banks contend that they lack the legal empowerment as is the case of Uganda. But even where legal incapacity is not an impediment, most central banks

Table 3.2 Local Foreign Currency Cheque Clearing System

Country and Issue	Burundi	Kenya	Lesoptho	Malawi	Mozambique	Namibia	Rwanda	Swaziland	Tanzania	Uganda	Zambia	Zimbabwe
Type of LFCCC Architecture												
Open	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	No
Club	No	NA	No	Yes	No	Yes	NA	No	NA	Yes	NA	No
Traditional	No	NA	Yes	Yes	No	Yes	Yes	Yes	NA	Yes	NA	Yes
Year of operation	2004	2004	NA	NA	1997	NA	NA	NA	1993	NA	1994	NA
Parties Involved in LFCCCs												
Central Bank	Yes	Yes	No	No	Yes	No	No	No	Yes	N/A	No	No
Commercial banks	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Independent manager	Yes	Yes	NS	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Are there governence rules and structures?	No	Yes	No	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
LFCCC Clearing Technology												
Any RTGS Linkage?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Failure to settle arrangements	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes

N.A = Not Available, NS = Not Stated, Auto = Automated, Man = Mannual have not taken advantage of their oversight functionality. This is due to a lingering fear of dollarisation in the domestic economy as an open LFCCC system would pose some competition to the local cheques clearing. Other reasons for the slow uptake of the open LFCCC system within the MEFMI member countries include lack of capacity, appropriate technologies and understandings of the expected central banks' oversight functionalities. As to the central banks, formal oversight role the requisite legal requirements in the form of explicit NPS Act remains a challenge. It was observed that some countries were in the process of promulgating payment systems legislations, but so far only Zimbabwe, Zambia and Namibia have NPS Acts in place.

The settlement systems vary from automated multilateral netting system to bilateral manual. This scenario has been driven by the state of the technological development within the respective clearing systems and the cooperation of the industry players and the central banks. A manual LFCCC system exposes the system to many payment system risks especially operational, credit and liquidity risks and, hence, the driving force behind some MEFMI member central banks to transform the Club arrangements to open and structured systems. It should be noted that appropriate open and risk free LFCCC systems can be developed and operationalised effectively within and outside the central banks and also still comply with the international best practices.

Kenya and Zambia happen to have a multi-currency settlement system, which is more ideal and convenient to open economies and the banking industry customers. In Kenya, however, settlement is facilitated over Real Time Gross Settlement (RTGS) platform while Zambia has a manual bilateral gross clearing and settlement system through the correspondent banks as the settlement leg does not pass through the central bank. In terms of failure to settle mechanisms, it was only in Kenya and Zambia where there was an elaborate mechanism to address 'failure to settle' of a net obligation by a participating member bank. The issue of failure to settle remains a challenge, as most central banks do not want to trade systemic risk with their profitability. Many central banks believe that they should not underwrite any losses form the clearing and settlement systems. Since commercial banks are profit-making organisations, there is no justification for central banks' financial support. It is in this context that central banks must use their oversight and regulatory powers to ensure that the banking industry associations institute 'failure to settle' mechanisms to mitigate against market or systemic risks.

The major market players are the central banks, commercial banks, and designated forex dealers in economies with exchange controls, corporate customers and with SWIFT as the main service provider. The involvement of central banks in the LFCCC arrangements in the MEFMI region is low. Out of the 12 central banks covered by the study only five had open architectures. As shown in Table 3.2 only the central banks of Kenya, Zambia and Tanzania were actively involved in the operations of LFCCC arrangements. They are playing active roles in the operations of the LFCCC arrangements in terms of their introductions, developments and facilitation of their operations within the clearing houses and/or the provision of and maintenance of settlement accounts. However, the central bank roles and degrees of involvement vary from country to country.

The impact of the LFCCC arrangement on monetary and financial stability was considered remote for three main reasons. The LFCCC systems were of retail nature and not wholesale market segment. Secondly, in most countries, LFCCC systems are not designated as systemically important payment system in comparison to the local currency cheque clearing and settlement systems.

Thirdly, central banks have put in place mitigating mechanisms to address any possible influence of foreign currency related operations on monetary policy and stability. These measures include, capital based forex exposure limits, targeting monetary aggregates and using local currency based returns for monetary purposes, limitation of offshore placements and deposits based on international ratings of the correspondent relations.

3.4 Intra-day Loan Facility

The importance of timely and secure payment system was shared among MEFMI member countries. All MEFMI member countries surveyed with exception of Mozambique and Rwanda had in place an RTGS system for transfers of large value payments and real time settlement strictly for local currency clearing effects. It was observed that even Mozambique and Rwanda had commenced the process to introduce RTGS. To ensure smooth functioning of the RTGS system and to avoid possible gridlock, central banks extend short-term intra-day credit to eligible financial institutions especially commercial banks. While it is reasonable for central banks to provide intra-day facilities as a safety-valve mechanism to meet the day to day needs of the banking system, it is important for the central banks to maintain proper control on this facility. This is because if the intra-day liquidity facility is converted into an overnight loan, this may lead to an increase in reserve money thus adversely affecting reserve money levels.

The linkage between RTGS systems and local foreign currency clearing operations was noted to be absent in all countries, except in Kenya which has multi-currency arrangement where the 'net' LFCCC settlement obligations from the clearing house are settled on the funded foreign currency accounts domiciled within the Kenyan RTGS system. This settlement arrangement has enhanced CBK supervisory and oversight functionality in a number of ways: Firstly, it has provided CBK with an additional platform for monitoring the individual bank's risk profile which is useful for developing the entire banking system risk profile; Secondly, the transfer of funds is real time which has reduced operational costs for banks with spill-over benefits to customers; Thirdly, customers get their value at a relatively shorter period compared to other settlement arrangements; and, fourthly, it is in conformity with best practices which require settlement in central bank money. The main limitation of this arrangement, however, is that it is only applicable where the LFCCC arrangement is operated within the central bank and the RTGS is linked to an automated LFCCC system.

It should be noted, however, that in all the countries covered, the intra-day loan facility only supports liquidity requirements of participating banks in strictly local currency. This is for a number of reasons: Firstly, a central bank cannot act as a lender of last resort in a currency, which it does not issue and secondly, in liberalised regimes even the central bank has to compete with the rest of the IFEM players for its local foreign currency transaction requirements. In addition, the BIS Committee on Payment and Settlement recognises the difficulty of the Core Principle requirement of settlement in central bank money. The implications of providing intra-day loan facility to LFCCC arrangements, does not therefore arise. Any central bank trying to do this would be doomed to fail.

3.5 Developmental Role of Central Banks

As shown in Table 3.3, many central banks in the MEFMI region have not been involved in the development of LFCCC systems. This is not surprising because historically the development of LFCCC systems has been the domain of commercial banks (especially the foreign banks) as a business case. However, in the recent period, central banks have become increasingly more involved than before in the development of the LFCCC systems, largely in recognition of the importance of payments systems to the growth of their economies and in exercise of their oversight responsibilities. In addition, the potential of IFEM operations to influence the conduct of monetary policy has made central banks to get interested in the LFCCC arrangements. In Kenya, Tanzania, and Zambia, the systems were developed with the direct involvement of the central banks. In Kenya, the central bank, in collaboration with the industry association, steered the transformation of the Club arrangement into the current open and all-inclusive LFCCC arrangement. The central bank got involved because the Club arrangement was not competitive, was oligopolistic in nature and was not conforming to the BIS Core Principles. In Tanzania, the role of the Bank of Tanzania (BOT) is presently limited to that of the traditional central banking role of providing clearing and settlement facilities. However, BOT owns the clearing house (BOTECH) and has developed it to the international best standards and practices in terms of the technological aspects.

The situation in Zambia is considerably different from others. The role of the Bank of Zambia (BOZ) is like that of any other participating member of the Zambia Electronic Clearing House (ZECH) and the Foreign Currency Clearing House (FCCH). However, this does not derogate BOZ from any powers vested in it to supervise and regulate the financial and payments systems. These powers include the powers to supervise payment systems and clearinghouses under the Payment System Act of 2007. The Bank does not, however, play the customary role of settlement agency in the LFCCC arrangements as member banks manually settle bilaterally through related correspondent banks offshore. In Zimbabwe there is no IFEM and LFCCC

system at present due to the restrictive exchange controls. That notwithstanding, the Reserve Bank of Zimbabwe (RBZ) has a formal oversight role over the national payment systems including overseeing the operations of the Clearing House. RBZ has also been on the forefront in the development of payments system infrastructure. It is therefore expected that when foreign transactions are liberalised, RBZ will take the lead in the development of the LFCCCs clearing and settlement.

Looking at the roles played by various central banks in the development of LFCCCs clearing arrangements, it would appear that the main functions of central banks can be summarised as:

i) To initiate the development of an enabling legal framework such as an encompassing NPS Act. This is because the usual parliamentary legislations establishing central banks limits the oversight responsibility of central banks only to those institutions licensed and supervised by it;
ii) To exercise oversight functionality;
iii) To provide leadership in the establishment of LFCCC system where private commercial banks may lack the capacity or willingness to do so;
iv) While it is recognised that LFCCs clearing houses can be privately run and established outside the central banks not all countries have that capacity.

Table 3.3 Comparitive Analysis of Central Banks Role

Country and Issue	Burundi	Kenya	Lesoptho	Malawi	Mozambique	Namibia	Rwanda	Swaziland	Tanzania	Uganda	Zambia	Zimbabwe
Is the Central Bank involved in facilitation or development of LFCCCs infrastructure?	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	No
Is the Central Bank Yes involved in development of LFCCCs legal framework?	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	No

Source: Central banks of the respective countries

In those countries where a privately and commercially operated LFCC clearing arrangement may not be feasible, central banks may want to establish one, own it and run it or, at least, provide the initial infrastructure such as accommodation and communications; and,

v) To provide settlement services.

3.6 Appropriate Architecture for LFCCC System

Secure and efficient payments systems are needed for the attainment of a country's economic growth and social objectives as well as essential mechanisms in the management by individual commercial banks of their assets and liabilities, and in the settlement of their own and customers' transactions. These are some of the compelling reasons why central banks must get concerned about the settlement arrangements within the inter-bank foreign exchange markets to minimise market risk. Some of the recent global bank failures have arisen due to liquidity and credit risks problems originating from foreign exchange clearing and settlement operations. This led the BIS Committee to designate foreign exchange and settlement system as a Systemically Important Payment System (SIPS) requiring central banks focused oversight attention within their operations and statutes.

It is in the above context that the understanding and implementation of an appropriate LFCCC arrangement must pass the test of compliance with the BIS Core Principles. To complement the Core Principles, are the international corporate governance standards and best practices and prudent payment system risk management guidelines. It is desirable for central banks, as part of their oversight functionality, to ensure that the systems whether open or closed, comply with the benchmarks as enumerated under Annex 3. Observations made during the study, indicated that LFCCC systems in various MEFMI member countries had varied compliance levels. An example is the Kenyan banking system where the central bank ensured that a joint committee of the central bank and the bankers association tested the proposed LFCCC system compliance with the BIS Core Principles before implementation. In other MEFMI member countries, it was found that all the central banks understand the importance and implications of Core Principles on the smooth operations of the financial system and on conduct of monetary policy. However, the regional central banks have only focused on the application of the Core Principles on the clearing and settlement of the locally issued domestic currency cheques with little regard to the stipulations of the Core Principles as pertains to the central banks oversight role.

It is worth noting that the failure of the regional monetary authorities to perform that role is not due to legal incapacity, as they do not need any further statutes than the ones contained in their respective Central Bank's or Banking Acts. The factors that explain this failure were observed to include lack of appropriate institutional structures, initiative, general understanding and capacity to undertake the oversight functionality. However, the regional central banks are yet to enhance their oversight role where there is a cardinal requirement for the designation of these payments circuits. Many may still believe that LFCCC systems are not Systemically Important Payment Systems requiring the designation process.

It may also be noted that payment systems development as a subject and the central banks roles in their operations is a fairly recent phenomenon and still evolving. The BIS Committee on Payment System evolved with the OECD central banks and IMF initiatives during the mid 1990s.

Consequently, in the design of an open architecture for LFCCC system, whether managed from inside or outside the central banks, the following pillars need to be built into the foundation structure:

i) A sound corporate governance structure - with defined management structure, functions and roles among the system participants;

ii) A sound and well-founded legal basis - a well-founded legal basis with rules to govern the transfer of means of payments in a predictable, timely, safe and efficient manner;

iii) Well articulated rules and procedures - to enable participants have a clear understanding of the system's impact on each of the financial risk they incur through participation in it and their obligations;

iv) Prudent management procedures for both credit and liquidity risks - a clearly defined procedures for the management of credit risk and liquidity risks, which specify the respective responsibilities of the system operator and the participants and which provide appropriate incentives to manage and contain those risks. One way to enable quantification of possible risks and enable banks to manage both credit and liquidity risks is for Central Banks to set in the system limits e.g. capping of cheques;

v) A defined mechanism for completion of daily settlement - to provide prompt final settlement on the day of value, preferably during the day and at the end of the day;

vi) A defined mechanism for finality of settlement of large value payments - be capable of ensuring timely completion of daily settlements in the event of an inability to settle by the participants with the largest single settlement obligation. The solution in this regard is the introduction of the RTGS system and a complementing 'failure to settle mechanism';

vii) Settlement in central bank money - assets used for settlement should preferably be a claim on the central bank. Where other assets are used they should carry little or no credit risk and little or no liquidity risk.

viii) An Operational and Reliable Cutting-Edge Technology and Business Continuity Mechanisms - The system should ensure the operational reliability of technical systems and the availability of back-up facilities capable of completing daily processing requirements. The system should also ensure a high degree of security;

ix) An open and competitive system - the system should have objective and publicly disclosed criteria for participation, which permit fair and open access; and,

x) A defined central bank oversight functionality for the LFCCC arrangement - the central bank should define clearly its payment system objectives and should disclose publicly its role and major policies with respect to the LFCCC operations while ensuring compliance with the Core Principles.

3.7 Dollarisation in the Domestic Economy

Dollarisation occurs when residents of a country extensively use a foreign currency alongside or instead of the domestic currency. There are three varieties of dollarisation, namely, unofficial dollarisation, official dollarisation and semi-official dollarisation. Annex 1 describes in greater detail the circumstances of the three forms of dollarisation. As shown in Table 3.4, all countries in the MEFMI region suffer some form and degree of dollarisation. Unofficial dollarisation is the most prevalent among the MEFMI member countries. Nine out of the 12 countries covered by the survey had unofficial dollarisation. Lesotho, Namibia and Swaziland were characterised by a semi-official variety of dollarisation. In these countries, the ZAR acts as the 'other legal tender' alongside the Lesotho Loti, Namibian Dollar (NAD) and Swazi Emalangeni (SWE) respectively. In this context, the traditional measurement of dollarisation is not very meaningful for the CMA countries. However, the ZAR plays a secondary role to both the Loti, NAD and SWE in the payment of wages, taxes and everyday expenses like groceries and utility bills in these countries. Furthermore, the Loti, NAD and SWE dominate deposits in the respective local banking systems. A unique form of unofficial dollarisation was observed in Zimbabwe. Here, the prices of most goods and services were expressed in domestic currency (ZIM$), but were indexed to the USD or other convertible currencies.

Owing to incomplete data on residents' holdings of their financial wealth in foreign currency, the depth of unofficial dollarisation in the surveyed countries was estimated by the ratio of foreign currency deposits to broad money aggregate (M3). As shown in Table 3.4, the depth of dollarisation based on this measure ranged from a low of 2% in Malawi, Namibia and Swaziland to a high of 49% in Mozambique. Using a deposit dollarisation classification adopted by an IMF Study (1998), Mozambique, Zambia and Zimbabwe were categorised as highly dollarised (>30 per cent) while the remainder of the countries were classified as low or moderately dollarised (<30 per cent). However, the depiction of Namibia and Swaziland as low or moderately dollarised is misleading. As noted above, both Namibia and Swaziland are semi-officially dollarised countries with ZAR playing the role of 'other legal tender'. Therefore, the ratio of foreign currency deposits to M3 is not a very useful indicator of dollarisation for these bimonetary countries. In the case of Zimbabwe, the financial situation has fundamentally changed since the IMF 1998 Study making the conventional measurement of dollarisation meaningless. This is because the growth of money supply in the recent past has been so rapid, that it reduced the ratio of the existing forex deposits to M3 to a ridiculously low number. In addition, the thriving parallel market for goods and services made nonsense of any conventional measure of dollarisation.

The variation in the depth of dollarisation among the countries is attributed mainly to macroeconomic stability, dollarisation of domestic budget, presence of large number of international NGOs and regional economic integration agreements. It may also be observed that the depth of unofficial dollarisation tended to correspond to the prevailing inflation and confidence in the local currency. The moderately dollarised countries enjoyed low to medium inflation levels. The highly dollarised countries, on the other hand, suffered high inflation as is the current case in Zimbabwe. The levels of dollarisation in Mozambique,

Table 3.4: Dollarisation Issues in MEFMI Member Countries

Country and Issue	Burundi	Kenya	Lesoptho	Malawi	Mozambique	Namibia	Rwanda	Swaziland	Tanzania	Uganda	Zambia	Zimbabwe
Nature of Dollarisation	UN	UN	SB	UN	UN	SB	UN	SB	UN	UN	UN	UN
Depth of dollarisation (Forex deposits/M3) %	11.3	15	NS	2	49	2	21	2	29	21	32	**
Any impact study of dollarisation on monetary and financial stability?	No	No	No	No	No	No	No	No	No	No	No	No
Is there active use of dollarisation mitigation mechanisms in place?	No	Yes	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes
Is Dollarisation a cause of concern currently?	No	No	No	No	Yes	No	Yes	No	No	No	No	Yes

NB: UN - Unofficial, SB - Semi-official/bi-monetary, NS - Not Stated, ** - Not significant

Tanzania, Uganda and Zambia were attributed to high budget dollarisation accruing from debt relief for HIPC under the MDRI. For example, Mozambique receives over 50% of its budget resources from external donors. Finally, countries with high presence of foreign NGOs were observed also to have high level of dollarisation. These factors can act singly or in combination.

As shown in Table 3.4, most of the MEFMI member countries did not consider dollarisation a major issue in the management of their economies. None of the countries surveyed had undertaken any in-depth specific study to investigate the potential destabilizing effects of dollarisation, yet 8 out of 12 had instituted measures to mitigate against the harmful effects of dollarisation. This indicates that despite the denial of concern, dollarisation was still a factor in policy formulation and psyche influencing the choice of LFCCC arrangements. Some of the main mitigation measures put in place included:

i) Targeting the broad money aggregate (M3) and inclusion of FCDs in computation of cash reserve requirements;
ii) Strict enforcement of foreign exchange rules, guidelines and regulations aimed to reduce foreign exchange exposure risk to the banking systems;
iii) Requiring comprehensive risk management plan, setting out policies, procedures and other safeguards necessary to manage and control foreign exchange risk;
iv) Imposing single borrower exposure limits, forex limits based on core capital and stringent offshore placements requirements all aimed at reducing market risks;
v) Requiring daily, weekly, monthly and quarterly returns of foreign exchange receipts and payments;
vi) Requiring minimum deposit to open an FCA which ensures that not everyone can do it except those with high incomes and most likely receive high earnings in foreign exchange;
vii) Disallowing transfer of local currency funds into FCA;
viii) Imposing punitive provisions to banks loans denominated in foreign currencies;
ix) Requiring registration and exchange control approval for qualified operations;
x) Imposition of daily deposit and withdrawal limits from FCAs; and,
xi) Price controls on commodities.

As indicated above, all countries in the MEFMI region with or without LFCCC clearing arrangements are currently experiencing some form and degree of dollarisation. Introduction of LFCCC arrangements in those countries currently without them is not going to expose their banking systems to any more risk than they are currently exposed. In fact, as shown in Table 3.4 Namibia and Swaziland which are semi-officially dollarised economies have the lowest forex deposits dollarisation. The FCAs and LFCCC arrangements could complicate dollarisation if the socio-political and economic fundamentals of a country severely undermine the local currency. At the moment, all MEFMI member countries are experiencing a stable macro-economic environment and growth, except Zimbabwe which is undergoing a severe bout of hyperinflation. The introduction of LFCCC arrangements is therefore unlikely to dollarise these economies any further.

4.0 THE MAIN FINDINGS

This section of the report provides the main findings of the study in relation to the detailed terms of reference provided. The section also makes observations on other issues that may not have been included in the terms of reference but were observed to be relevant to the study

4.1 The Evolution and Nature of Inter-bank Forex Market Operations

The genesis of FCAs was observed to be the financial liberalisation wave of the early to mid1990s which resulted in commercial banks being allowed to operate FCAs in all MEFMI member countries (including Burundi). However, the type of accounts permitted and the requirements for their operation differed considerably between MEFMI member countries on account of the respective country's historical background, prevailing regulatory framework, and individual commercial banks' practices. The differences in commercial banks' practices may be attributed to the size and level of financial sophistication in the individual member countries and regional affiliations. The larger economies such as Kenya, Tanzania, Zambia and Zimbabwe had more sophisticated institutional financial infrastructures than their smaller counterparts. Similarly, regional affiliation significantly influenced the nature and operation of the FCAs. For instance, in the case of CMA countries, the nature and operation of FCAs was dictated by the requirement to align their forex regimes and conduct of monetary policy with that of South Africa. Similarly, it may be noted that in the EAC and COMESA regions, there is a move towards convergence of economic and financial infrastructures and payments systems harmonisation strategies. In all countries studied, the most common types of accounts offered were current and fixed deposit accounts with the US Dollar being the main vehicle currency.

4.2 Impact on Efficacy and Conduct of Monetary Policy

There was no strong indication from the central banks that the operation of the FCAs had impacted negatively on conduct of monetary policy or financial system stability. This may be due to the various regulatory, supervisory and oversight measures put in place by the central banks. In addition, commercial banks have themselves put in place risk management policies and strategies. The foreign-owned international banks appeared to have more comprehensive risk management policies than the locally-owned banks. A major reason for this dichotomy is due to the fact that risk-based management and supervision is a relatively recent development. Therefore, the regional central banks are still in the process of internalising and integrating these approaches in their management and supervision guidelines. In fact, many regional central banks have yet to develop capacity to prudently guide the local banking institutions. Another reason for the differences in risk management practices between local and foreign-owned banks is that, the foreign-owned banks, have adopted practices developed by their mother companies from much more developed and sophisticated financial systems than obtains in the local market. In this connection, they must satisfy not only the local requirements as a minimum, but must also comply with global corporate guidelines based on international best practices.

One other reason why FCAs may not have significant impact on conduct of monetary policy is that the facility is utilised by only a small proportion of the banking system customers even where the total FCA balances may constitute a large proportion of total banking system balances. As indicated, FCAs were operated mainly by NGOs, international organisations, diplomatic missions, some corporate customers and a few individuals who received income in foreign currency.

Although central banks did not strongly indicate that the operation of the FCAs had impacted negatively on the efficacy of monetary policy formulation and implementation, there was palpable complaint from some members that high levels of FCDs in the domestic banking system and their inclusion in monetary aggregates was distorting domestic money multiplier effects resulting in poor forecasts of monetary targets. This weakness was attributed to seasonality in aid inflows and the fact that lending in the economy was effected mainly through the local currency and not foreign currencies in which significant deposits were denominated. However, this

Table 4: Relationships between Monetary Targets, Instruments, and Dollarisation in 2006

Country and Issue	Burundi	Kenya	Lesoptho	Malawi	Mozambique	Namibia	Rwanda	Swaziland	Tanzania	Uganda	Zambia	Zimbabwe
Depth of dollarisation	11.3	15	NS	2	49	2	21	2	29	21	32	**
Monetary target	M2 M3	M3	NA	M2	M3	NA	M2	NA	M3	M3	M3	M3
Use of FEMO for liquidity management	No	No	NA	Yes	Yes	NA	Yes	NA	Yes	Yes	Yes	Yes
Statutory Reserves	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
OMO	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Source: Central Banks of the respective countries assertion was difficult to establish, as it appeared that most member countries' central banks rarely attained their monetary targets. It is therefore possible that other factors such as seasonality in demand for money, rapid changes in financial systems and structural economic relationships and inability to relate accurately currency outside banks to a defined geographic area are responsible for the large variances in monetary between monetary targets and actual outcomes observed by the monetary authorities. This is one area that central banks may want to study more deeply and exchange experiences. As shown in Table 4, there is no clear pattern between the levels of deposit dollarisation and the choice of intermediate monetary targets. It would appear that each country made a choice of monetary targets that most suited its particular environment. However with regard to choice of operative instruments, all central banks used CRR and OMO. The use of inter-bank foreign exchange market operations (IFEMO) would appear to have been a favourite of those countries with high levels of dollarisation, reflecting, perhaps its efficacy in siphoning liquidity in the absence or scarcity of domestic script and other intervention mechanisms for liquidity management e.g. Mozambique, Rwanda, Tanzania and Zambia. The CMA countries, whose monetary policies must be aligned with that of South Africa, did not have intermediate monetary targets, but actively applied CRR and OMO to achieve that alignment. Burundi, Kenya and to some extent Malawi which have low levels of dollarisation engaged in IFEM operations mainly for exchange rate management.

4.3 Local Foreign Currency Cheque Clearing System

The purpose of LFCCC systems is basically to facilitate transfer of value between FCAs holders otherwise the accounts can be operated without LFCCC arrangements. However, considerations of cost and security in transfer of value without LFCCC make that option unacceptable. Therefore an LFCCC is a natural progression from FCAs operation. Out of the three types of LFCCC arrangements observed in the MEFMI member countries, namely the open architecture, the Club system and the traditional offshore collection arrangements it is the open architecture system that has most comparative advantages. A manual LFCCC system exposes the system to many payment system risks especially operational, credit and liquidity risks and, hence, the driving force behind some MEFMI member central banks to transform the Club arrangements to open and structured systems. It is also important to point out that an appropriate open and risk free LFCCC system can be developed and operationalised effectively within or outside the central banks and still be compliant with the international best practices as is the case with the Zambian banking system except for its offshore settlement leg. However, the LFCCC system operated within the central bank framework had the advantage of providing the central bank with an additional opportunity for constructing risk profile of the individual banks and the system as a whole including accountability and transparency.

The legal and regulatory framework for LFCCC is the same as for locally issued cheques clearing and settlement systems for two main reasons. First, the underlying clearing instrument is the cheque. Hence, the legal basis governing its operation must be the Cheques Act. Secondly, the main intermediaries are commercial banks that are the sole participants in the clearing. In addition, commercial banks are themselves regulated by the respective central banks the legal basis of which is contained in the central bank and banking statutes. Hence, there is no legal hindrance to introduction of LFCCC by commercial banks themselves. However, establishment of LFCCC by central banks may encounter some problems because statutes establishing central banks in some countries may not provide sufficient powers for central banks to do so. This is one reason why central banks in addition to their own statutes might require specific NPS legislations to establish LFCCC. Another reason is that central banks are limited by their own statutes to deal only with institutions that they license and supervise. Payment systems however extend beyond institutions supervised by central banks such as Western Union, MoneyGram and international credit cards issuers. Hence there is a need for a more comprehensive NPS legislation to facilitate the central banks' global oversight functionality within their domestic economies.

In all the countries studied, the operations of the LFCCC arrangements were stipulated in documented clearinghouse regulations and rules where all participants sign the compliance and penal agreements under the law of contract. This is the best practice globally even in Tanzania where the clearinghouse belongs to the Bank. However in terms of compliance with the Core Principles, it was only the central banks of Zambia and Kenya that had tested their systems against the BIS Core Principles.

4.4 Intra-day Liquidity Facility

None of the MEFMI member countries that had operational LFCCC arrangements facilitated liquidity for LFCCC system operations. It was observed that central banks could not perform that role since they did not have inexhaustible supply of foreign currency, and in any case, it would compromise prudent monetary policy formulation and implementation strategies if that were to be allowed to happen.

4.5 Central Banks Developmental Role in the LFCC Arrangement

The study finds that the introduction of open LFCCC architecture has been driven by direct involvement and interest of the central banks. In countries where the central banks have taken an active role in the facilitation of LFCCC systems, operations have been smooth and are mostly compliant with the BIS Core Principles. However, where central banks have been non-partisan and left the development of LFCCC arrangements to individual players in the market, operations have many weaknesses and challenges including payment system risks. For example, it was noted that the high standards of the operation of both the Kenyan and the Zambian Clearing Houses for LFCC clearing arrangement is due to the active developmental roles of the CBK and BOZ undertaken in the facilitation of the whole arrangements. It may also be noted that, it is only in these two LFCCC systems where 'failure to settle arrangements' have been mitigated. It is also to be noted that even within those banking systems without the open LFCCC system, their central banks are still playing a pivotal facilitation role e.g. Tanzania where the BOT owned clearing house is facilitating the presentation and exchanges of foreign currency cheques.

4.6 Appropriate LFCCC Arrangement

The most appropriate LFCCC system is the open architecture system that complies with the BIS Core Principles for the Systemically Important Payment Systems. It was found that all the central banks are conversant with the Principles. Compliance with the Core Principles is well articulated within their vision and NPS reform objectives. However, it was found that most central banks had confined their oversight role to the clearing and settlement of domestic currency cheques architecture where most of the Core Principles have been tested. Only the central banks of Zambia, Swaziland and Kenya indicated having tested the compliance of their LFCCC systems with the Core Principles.

4.7 Dollarisation in the Domestic Economy

Dollarisation remained an issue of concern even in those countries where its level was low. Nearly all countries had taken mitigation measures even though the matter was not fully understood. No country had undertaken any in-depth empirical study to establish its likely impact on the economy. Focus has been on the perceived likely negative impacts on economic management. The fear of dollarisation in some countries has been used to delay the introduction of open LFCCC systems even when the benefits in the countries that have adopted it are evident. The solution to this fear will be for MEFMI member countries to undertake specific studies. It may however be observed that, dollarisation is a factor of low level of confidence in the local currency or high degree of macro-economic instability which can be triggered by conflict or economic mismanagement. High dependence on foreign aid for financing of government operations is also a potential source of dollarisation for those economies with low absorptive capacity.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Central banks need to regulate the IFEM operations as they may influence monetary policy stances to varying degrees depending on the mitigating measures deployed by the banks. At the same time, the central banks should facilitate the introduction of open LFCCC systems to level the playing field in the forex trade as most of locally owned commercial banks are disadvantaged and cannot compete effectively with the international banks for clientele.

Secure and efficient payment, clearing and settlement systems are needed for the attainment of a country's economic growth and social objectives as well as essential mechanisms in the management by individual commercial banks of their assets and liabilities, and including in the settlement of their own and customers' transactions. It is for this reason that central banks must get concerned about the settlement arrangements in the inter-bank foreign exchange markets to minimise systemic risk and to help reduce financial costs of doing business in Africa. However, the range of clearing and settlement arrangements available today is a reflection of the economic, business and technological environment existing in the MEFMI regional countries. The application of information and communication technology to payment system processes has led to gradual change in the provision of clearing and settlement arrangements within the selected MEMFI countries.

An appropriate LFCCC arrangement must pass the test of compliance with the Core Principles. To complement the core principles, are the international corporate governance standards and best practices and prudent payment system risk management guidelines if regional countries are to realise the virtues of efficient payments systems as the transformation conduits of monetary policy formulation and implementation. It is in the interest of both central banks and commercial banks to introduce the open LFCCC system as it does reduce the cost of doing business in this regard and consequently the reduction of financial costs to the consumers of financial services, apart from the convenience to them. For central banks, it further offers a reliable source of data and information for their various payments system developments and oversight policy formulation and implementation, including both monetary and financial system policy refinements

Dollarisation occurs in response to economic instability and high inflation and the desire of residents to diversify and protect their assets from the risk of devaluation of their own currencies. The introduction of both FCDs accounts and open architecture LFCCC arrangements are not therefore causal factors nor do they exacerbate the depth of dollarisation in the domestic economy. Dollarisation in the economy could also be influenced by the international /regional trading patterns where a country in the trading pact is comparatively disadvantaged by the terms of trade-being a net importer of goods and services augmented with a comparative weak currency which is not also a convertible tender. This is well epitomised by the small countries operating within the Common Monetary Area i.e. Swaziland Lesotho and Namibia whose economies are semi-dollarised by virtue of having their native currencies operating alongside the South Africa Rand. It is in this context that these comparatively small countries view dollarisation impact in the domestic economy positively.

Arising from the observations and conclusions cited above, it is recommended that:

i) Central banks in the MEFMI member countries in which there are no open architecture LFCCC systems take the lead in promoting their development, because, left on their own commercial banks are unlikely to do so or at best will only develop exclusive Club arrangements which are not optimal and in most cases tend to discriminate against the local and emerging financial institutions. This will have economic benefits of reducing business costs in the region and also give emerging local banking institutions a fair playing field;

ii) Central banks should create an enabling environment for carrying out the requisite and appropriate oversight functionality over the foreign currency cheques clearing and settlement arrangements. There are compelling reasons for this recommendation:

   a. The central banks in the MEFMI region will need to strengthen and undertake their supervisory and oversight responsibilities more seriously in compliance with BIS Core Principles;

   b. More importantly, it is to be noted that the local financial institutions are beginning to expand their operations in the neighbouring countries. It is therefore important for central banks to ensure that these financial institutions are properly supervised in their home countries and that they follow best practices in whichever country in the region they do business. The spin-offs are financial system stability across the region and detection and containment of any systemic problems at an early stage.

iii) To allay the fears of dollarisation, central banks should undertake specific studies to find out its potential impact on monetary policy and economic management generally; and,

iv) Since all central banks appear to have difficulties in forecasting monetary targets, central banks should undertake specific studies and share information on factors that influence their monetary environments.

PART TWO: COUNTRY REPORTS

1.0 Introduction

1.1. Overview of the Country

Structure of the Economy and Economic Trends - Burundi is emerging from a long period of civil unrest that for most of 1990ís, took a heavy toll on human lives and on the country's economic and social fabric. It is also a landlocked and resource-poor country. The manufacturing sector is largely underdeveloped. Agriculture forms the mainstay of the economy accounting for about 45% of GDP and with more than 90% of the population dependent on subsistence agriculture. Economic growth depends on coffee and tea, which account for 90% of foreign exchange earnings. Coffee alone accounts for about 78% of all exported goods. The level of commodity export concentration implies vulnerability of the country's development prospects to vagaries of the weather and international commodity prices. The country's other agricultural products include cotton, maize, sorghum, sweet potatoes and bananas (of which Burundi is one of the world's ten largest producers). The services and industrial sectors respectively account for about 34% and 21% of GDP. The industrial sector is estimated to have grown by about 7.5 % in 2007. The sector comprises manufacture of light consumer goods such as blankets, shoes, and soap; assembly of imported components; public works construction; and food processing. rate averaged 5%. Political stability and the end of the civil war have improved aid flows and economic activity has increased. The high rate of growth and recovery was supported by extensive donor financing and public works reconstruction. Burundi is highly dependant on donor support for its budgetary financing. It is a recipient of enhanced aid under the HPIC and MDRI. The country has been able to control inflation to within single-digit. Table 1 provides a summary of the country's key economic indicators.

Monetary Policy Framework - Banque de la Republique du Burundi (BRB) as the country's central bank is charged with the responsibility to formulate and conduct monetary policy to achieve price stability. Prior to the adoption of the Structural Adjustment Program in mid-1986, BRB intervened with administrative instruments of monetary control, namely credit ceilings and interest rate controls. Under credit ceilings, the central bank followed an accommodation policy aimed at administratively channelling credit towards priority sectors. Under interest rate controls, the central bank fixed discount rates by sector and interest rates floors on deposits and ceilings on loans and spreads. After 1986, the BRB adopted a monetary targeting framework. The central bank reported use of two anchors of broad money (M2 and M3) as its intermediate targets[2]. To achieve its monetary targets, BRB uses a combination of three indirect instruments of monetary control, namely the refinance facility, auction of 91-day treasury certificates (since 1998) and reserve requirements (since March 1992). The main challenges of monetary policy for BRB relate to the absorption capacity and the management of liquidity accruing from high inflows of donor support.

Table 1: Selected Economic and Financial Indicators

	2001	2002	2003	2004	2005	2006
Population (mn)	6.84	7.05	7.29	7.57	7.86	8.17
Nominal GDP (mn Francs)	549.980	584.605	644.680	748.486	862.100	986.601
Real GDP growth rate (%)	2.1	4.5	-1.2	4.4	0.9	5.1
Cash reserve ratio (%)	7.5	7.5	8.0	5.0	7.0	7.0
91-day tresury bill rate (%)	19.0	19.48	15.83	13.92	8.18	9.45
Overall inflation (%)	9.0	-1.3	10.7	8.3	13.2	2.7
Exchange Rate (BUF/US$)	830.4	1 100.9	1 081.6	1 029.0	830.4	1 100.9

Source: Banque de la Republique du Burundi

Burundi is densely populated with an estimated population density of 315 per square kilometre in 2007. The country's total population is estimated at over 8 million, of which about 3 million are in the labour force. Distribution of the labour force mirrors the structure of the Burundi economy with 94 % in agriculture, 4 % in services, and 2 % in industry. With an estimated GDP per capita of US$90 in 2007, Burundi was one of the poorest countries in the world. It is estimated that about 68% of its population lived below the poverty line in 2002. According to the World Food Programme, the majority of children aged under 5 (56.8%) suffer from chronic malnutrition. The economy of Burundi, like that of Rwanda, has demonstrated considerable resilience after the genocide of 1994 which wiped out nearly one-third of its human capital. During the period 2006 - 2007, GDP growth

Foreign Exchange Regime - Burundi has a managed float exchange rate regime with no predetermined path for the exchange rate (IMF, 2007). Under the regime, the Burundi Franc (BUF) is pegged to the value of a composite of currencies, consisting of Burundi's major trading partners. Burundi has not acceded to the obligations of

[2]The IMF (2007) classified Burundi among countries that have no explicitly stated nominal anchor but that rather monitor various indicators in conducting monetary policy.

Article VIII, Sections 2, 3 and 4 of IMF Articles of Agreement. The country is, however, compliant with Article XIV which allows transitional arrangements including multiple currency practices for members. BRB is undertaking reforms to liberalize the exchange system. In 2004, the central bank abolished the mandatory nature of its auction reference price. The determination of the exchange rate was also changed from the weekly auction to the daily average of market rates. The surrender requirement (50% for coffee, tea and cotton exports) was also abolished in 2005.

1.2 Overview of the National Payment System

General Legal Aspects - Laws governing payments system in the Republic of Burundi are the Central Bank statute and the Banking Act. The Bank is yet to develop and enact the NPS Act to facilitate central bank's oversight functionality and scope of the national payment system out of the banking system operators.

Institutional Framework - The financial structure in Burundi is generally underdeveloped. It comprises the central bank, 7 commercial banks, several forex bureaux, Savings and Credit Organisations, the National Post Office and micro finance institutions, all of which offer payments services in Burundi. Other financial institutions are a Libyan-Burundian financial institution, National Economic Development Bank, the Central Fund for Mobilisation and Finance, Micro-Finance institutions, and money changers. The two largest banks are the Commercial Bank of Burundi and the Credit Bank of Bujumbura which are majority-owned by the State. Major operations of the commercial banks are in the capital city of Bujumbura and have a branch network covering about 81% of the country. It is to be noted that 3 out of the country's 16 provinces are not served by any of the seven commercial banks, and hence, remain un-banked. One commercial bank-the Popular Bank, is under liquidation. The capital market is rudimentary as there is no stock exchange, and there are also no stock or bond markets in Burundi. Bank credit is the main source of investment financing in an environment where savings are very weak and low.

Major Payment Instruments and Media -The most commonly used payments instrument is cash. Other instruments include cheques and transfers system. Of the total payment instruments in use, cash forms 14% while cheques and transfers form 28% and 58% respectively

The payment media include the cheque clearing and settlement system through the clearinghouse, which is domiciled within BRB. Membership is confined to the commercial banks, National Post Office Bank and BRB. The operations of the cheque clearinghouse are manual with a single session at 11.00 am - 12.00 noon. The clearing cycle for domestic currency cheques is T+2. There is no RTGS system in the Burundian banking system. The central bank owns and enforces the clearinghouse rules. The rules governing the clearinghouse operations is the Clearinghouse Regulation of March 26, 2004. There is no cheque capping provision.

The Role of the Central Bank of Burundi -The role of the BRB is as the overseer of the payment system, settlement and credit service provider to the system and the driver of the NPS reform agenda. It is also a participant in the System. The CBRB has no formal legislation over the payments system. However, the Bank implements CBRB oversight policy. However the Bank is yet to start conducting oversight functionality of the payment systems in accordance with BIS core principles. The Bank is also presently engaged in the NPS modernisation agenda.

Role of Other Private and Public Sector Bodies - The other related payments system body include the Cheque Clearing House Committee within the Foreign Banking Operations Department of the Central Bank. There is also the NPS Technical Committee to steer the NPS modernisation process through the widely accepted best practice- the Strategic approach. There is also the Association of Banks and Credit Institutions the objectives of which consist of the creation, maintaining, and strengthening the permanent relations between members with the view of finding together solutions to any question pertaining to their activities. There are also international money transfers services including those provided by Western Union and MoneyGram.

2.0 Inter-bank Foreign Exchange Market

Nature and Operations of the Market - There is no inter-bank foreign exchange market within the banking system. All legal payments and receipts in foreign currency are allowed. Some current account transactions are allowed since November 12, 2008 while some capital account transactions are not allowed. There are no strict controls on inward investments, but some monitoring is maintained to regulate wholesale importation of capital which may end up siphoning foreign exchange from the country later. Controls are maintained on outward investments to avoid excessive capital flight. The major operational currencies are the US Dollar, Sterling Pound, and Euro. The Central Bank is committed to pursuing the liberalization of the exchange system. In late 2004, the Central Bank abolished the mandatory nature of its auction reference price for commercial transactions. The determination of the official exchange rate was also changed, from the weekly auction to the daily average of market rates.

Rules Governing the Operations of the Market - The rules governing the operations of the foreign currency market are the Exchange Control regulations, Guidelines from the Central Bank and the Anti-money laundering laws

Foreign Currency Market Operations - Commercial banks and other institutions are allowed to operate foreign currency denominated accounts by offering current, fixed and savings deposit accounts since November 12, 1999. One has not to demonstrate inflow of foreign exchange earnings to be allowed to open a forex account. Transfers from local to forex accounts are not allowed. The major market customers are the international bodies, NGOs and foreign missions. Table 2 shows the depth of the foreign currency market operations in Burundi. Commercial

Table 2: The Depth of forex Market in Burundi (Millions of BUF)

	2001	2002	2003	2004	2005	2006
Total deposits of banking system	92,463	121,566	160,002	168,428	212,084	279,646
Total foreign currency deposits of banks	5,825	10,695	17,713	19,382	20,176	38,928
Total local currency deposits of banks	86,640	110,871	142,289	149,046	191,908	240,718
Total loans and advances of banking system	NA	NA	NA	NA	NA	NA
Total foreign currency loans and advancesof banks	NA	NA	NA	NA	NA	NA
Total local currency loans and advances	NA	NA	NA	NA	NA	NA

Source: Banque de la Republique du Burundi

banks are not allowed to extend credit / loans to other fellow banks as there is no official IFEM in the Burundian banking system.

The Role of Central Bank and Intervention Mechanism - Forex market exists in form of foreign exchange auctions at the Central Bank and spot rates at forex bureaus. BRB intervenes in the forex market to supply foreign exchange through forex auctions daily. BRB monitors the market through mandatory daily returns and on-site surveillance.

3.0 The Local Foreign Currency Cheque Clearing System (LFCCCS)

Historical Developmental Perspective - Burundi has an open architecture for LFCCC arrangement which has been operational since 2004. The LFCCC arrangement is open to all the seven commercial banks. The central bank steered the development of the LFCCC arrangement by formulating the clearinghouse rules and co-ordinating all activities related to the clearing of the locally issued foreign currency cheques. Commercial banks maintain forex accounts at the central bank.

The Major Players - The major players are the commercial banks and the Central Bank and their eligible customers and correspondent banks offshore.

The Operations of the LFCCC System - Commercial banks maintain foreign currency settlement accounts at the Central Bank to facilitate the ultimate settlement of locally issued foreign currency cheques. The clearing cycle is on T+2. The eligible clearing instruments are the cheques and credit notes. There is only one session at the Clearinghouse on a daily basis beginning at 10.00 am. The LFCCC arrangement is yet to be automated.

Rules Governing the System Operations - The general rules governing the operations of LFCCC are the Clearinghouse Regulations of March 24, 2004 issued by the Foreign Banking Operations Department of the Central Bank.

The Role of the Central Bank - BRB plays the role of the settlement agent and the overseer of the operations of the clearinghouse. The supervisor of the clearinghouse is an official of the Central Bank. The applicable rules of engagement are issued by the Bank.

4.0 Intra-day Loan Facility

There is no intra-day loan facility within the BRB as the Bank is yet to introduce the RTGS system.

5.0 Role of the Central Bank in the Development and Operationalisation of the LFCCC System

The Central Bank Oversight Role - Although the Central Bank steered the development of the LFCCC arrangement by formulating the clearinghouse rules and co-ordinating all activities related to the clearing of the locally issued foreign currency cheques, it has not yet developed its oversight role of the operations of the LFCCC, and the general National Payment System as a whole. The Bank has, however, initiated a strategic approach to the modernisation of the Burundi's payment system starting with the stocktaking exercise.

6.0 Dollarisation in the Domestic Economy

Burundi may be categorised as unofficially dollarised country. The major foreign currencies, comprising the USD, GBP and Euro are readily acceptable in most outlets for procurement goods and services even where prices are quoted in BUF. Residents of Burundi have been permitted to hold their financial assets in foreign currency since 12th November 1999. While banks and other institutions are allowed to operate foreign currency denominated accounts they are not allowed to book loans and advances in foreign currency. Consistent with unofficial dollarisation regimes, foreign currency is not legal tender in Burundi and most transactions including payments for utilities are settled in BUF. Nonetheless, a few high value transactions like real estate leases and imports of vehicles, equipment and machinery are invoiced and settled in foreign currency. Information on foreign currency denominated assets of Burundi people is scanty. However based on commonly used proxy for dollarisation, as shown in Table 3, it is apparent that the level of dollarisation is moderate in Burundi.

Table 3: Dollarisation Penetration in the Burundi Economy

	2001	200	2003	2004	2005	2006
Total deposits of banking system (Mn BUF)	92,464	121,566	160,002	168,428	212,084	279,646
Total foreign currency deposits of banks (Mn BUF)	5,825	10,695	17,713	19,382	20,176	38,928
Total local currency deposits of banks (Mn BUF)	86,640	110,871	142,289	149,046	191,908	240,718
Forex Deposits/Total Deposit Liabilities (%)	6.3	8.8	11.1	11.5	9.5	8.6
Forex Deposits/GDP (%)	16.8	20.8	24.8	22.5	24.6	

Source: Banque de la Republique du Burundi

Burundi has not undertaken any specific study to ascertain the potential negative (destabilising) effect of dollarisation on the conduct of monetary policy and/or its positive (stabilizing) effect on the local banking system. However, both the IMF and the Burundi authorities are keenly aware of the complications on monetary policy that the large inflows of foreign aid that Burundi receives for budget support causes. As a mitigation measure BRB actively uses forex auctions to siphon liquidity from the market in order to attain its reserve money targets. For this reason, in its definition of broad money aggregate (M3), BRB includes forex holdings. Secondly, BRB strictly enforces its foreign exchange rules, guidelines and regulations aimed at reducing foreign exchange risk exposure of the banking system.

2.0 KENYA

1.0 Introduction

1.1 Overview of the Economy

Structure of the Economy and Economic Trends -Kenya is primarily an agricultural country with agriculture contributing about 26% directly to GDP and another 27% indirectly through linkages with other sectors. The country has also a large external sector with total trade (i.e. imports and exports) accounting for 30 per cent of its GDP. In the recent period, the service sector particularly tourism and telecommunications have emerged as leading sources of growth and employment.

The performance of the economy since independence is characterized by distinct periods of growth interspersed with stagnation. In the 1960s and 1970s, the economy experienced buoyant growth overall. Between 1968 and 1973, for example, real GDP grew by an average of 6.7 per cent per annum. The agricultural and manufacturing sectors respectively grew by 7.8 per cent and 9.5 per cent. This rapid economic growth was however not sustained. From 1974 to 1979, the average annual economic growth rate declined to 5 per cent mainly due to the oil crises in 1974 and 1979. This trend continued into the first half of the 1980s with real GDP growing by 3.7 per cent between 1980 and 1985. By 2002, GDP growth fell to 0.6%. The general deceleration in the country's economic growth during the period 1980-2002 was attributed to several factors including global economic recession, attempted coup in 1982, unfavourable weather conditions, aid freeze by donors in November 1991, declining terms of trade for the country's major exports, the Gulf War in 1991, and political agitation that preceded the advent of multiparty politics. Since 2003, the economy consistently strengthened with the annual GDP growth rate rising from 2.9% to 6.1% in 2006. Table 1 provides a summary of key economic and financial indicators.

Monetary Policy Framework - A key statutory responsibility of the Central Bank of Kenya is to formulate and implement prudent monetary policy aimed at achieving and sustaining low inflation. CBK currently uses monetary targeting as its monetary policy framework. Under this framework, the intermediate target is broad money (M3) while the operating target is reserve money. Hence, monetary policy of the CBK is directed towards controlling the rate of expansion in the total money supply as an intermediate objective with the ultimate goal of protecting the currency. To attain its objectives CBK uses three types of monetary policy instruments: Open market operations in which CBK engages in repurchase and reverse repurchase REPO agreements with commercial banks; cash ratio requirement (CRR) currently set at 6% of the domestic and foreign currency deposits held by residents and non-residents; and rediscount facility under which banks can borrow and rediscount using their holdings of government paper without limit at a price determined by the Monetary Policy Operations Committee (MPOC) commonly referred to as the Central Bank Rate (CBR). The rate is determined every two months and currently stands at 8.75%.

Foreign Exchange Regime - Kenya adopted a free floating exchange rate regime in 1992. Previously, the Shilling was variously pegged to the Pound Sterling (up to December 1971), U.S Dollar (until October 1975) and the SDR (up to August 1992). Under the prevailing exchange rate regime, the shilling exchange rate is freely determined

Table 1: Selected Economic and Financial Indicators

	2000	2001	2002	2003	2004	2005	2006
Population (mn)	30.2	30.9	32.2	33.2	34.2	35.1	36.1
Nominal GDP (Ksh Bn)	967.8	1020.0	1035.4	1138.1	1286.5	1445.5	1642.4
Real GDP growth	0.6	3.8	0.6	3	5.1	5.8	6.11
Nominal Income per Capita (Ksh)	32 046	33 010	32 155	34 280	37 617	41 182	45 496
Reserve Money Target KSHs	69.30	76.00	80.00	88.70	93.00	103.50	116.90
Cash reserve ratio	10	10	10	6	6	6	6
91-day tresury bill rate	12.9	11.01	8.38	1.46	8.04	8.07	5.73
Overall inflation (%)	10.0	5.8	2.0	9.8	11.6	10.3	14.5
Underlying inflation (%)	5.9	5.5	2.5	3.3	5.9	5.5	4.4
Exchange Rate (KSh/US$)	78.0	78.6	77.1	76.1	77.3	72.4	69.4

Source: Central Bank o Kenya

by demand and supply of tradable currencies in the foreign exchange market. However, the CBK is statutorily empowered to intervene in the foreign exchange market to smooth any significant and persistent exchange rate fluctuations that are not attributable to economic fundamentals such as speculative behaviour by market players. In the past one year, the Shilling exchange rate has persistently strengthened, but CBK has resisted pressure from some stakeholders to intervene in the market, attributing the persistent strengthening of the Shilling to flows of foreign exchange from exports, tourism and remittances from Kenyans in Diaspora.

1.2 Overview of the Payment System

General Legal Aspects - The Central Bank of Kenya Act and the Banking Act govern the operations of banking business in Kenya. However, a National Payments System Bill (NPS Bill 2007) has been drafted and forwarded to the Kenyan Parliament for legislation. A number of other laws have a bearing on payment instruments and institutions in Kenya. The laws include the Bills of Exchange Act and the Cheques Act that govern how cheques are drawn, accepted and paid; The Building Societies Act; Microfinance Act and The Companies Act (insolvency law included therein). There is also The CDS Act governing the Central Depository System for trading in equity debt instruments on the Nairobi Stock Exchange and an Internal Loans Act to accommodate the Central Depository System operations for the Treasury debt instruments. To promote public confidence in the banking system, a legal mechanism for liquidating the assets of and paying off the liabilities of problem banks and financial institutions has been bestowed upon the Deposit Protection Fund board under the Banking Act.

Institutional Framework - Major institutions that provide payment services in Kenya are commercial banks, non-bank financial institutions, Post Office Savings Bank, Building Societies, mortgage finance companies and forex bureaus. The banking sector comprises of 45 institutions, 41 of which are commercial banks, 2 mortgage finance companies, one non-banking institution and one building society. Out of the 45 banks, 34 are locally owned and 11 foreign owned. The bank network consists of over 600 branches and Automated Teller Machines (ATMs) and POS which are spread all over Kenya.

Major Payment Instruments and Media - The most common and predominantly used instrument is cash with the Kenya Shilling as the legal tender. Non-cash instruments, account for the bulk of the value of monetary transactions. Non-cash payment instrument include cheques and a range of varied electronic payment instruments, including credit and debit cards, direct credits and debits and the Electronic Funds Transfers through SWIFT technology and recently mobile phone companies. Cheques are the most common and predominantly non-cash payment instrument by volume of transactions. There has been a general trend of cheques being replaced at the retail level by credit and debit cards as all banks now issue cards to their customers to access their services through the ATMs and POS transactions.

The main payment media or streams include the clearing and settlement circuits. The main ones include the cheque clearing system through the automated Nairobi Clearing House for both local currency and foreign currency denominated instruments. Another related retail media is the ATM and POS terminals. The settlement media for the large value transfer system is through the RTGS system called KEPSS-the Kenya Electronic Payment and Settlement System.

The Role of Central Bank - The Central Banks role in Kenya is, by its own statutes, to formulate and implement such policies as best promote the establishment, regulation and supervision of efficient and effective payment, clearing and settlement systems. It is in this legal context that the Central Bank of Kenya gets involved in the Kenya's National Payment System in the following ways: as a service provider for inter-bank transfers for large value settlements through its Real Time Gross Settlement System (RTGS); as the supervisor and settlement service provider for the Automated Clearing House (ACH) operations etc. Payment system oversight is yet to evolve as an autonomous function. However, the Central Bank plays a partial formal oversight role through moral suasion and guidelines as provided under the legal provisions of legislations such the Central Bank of Kenya, Banking and Micro Finance Acts. The NPS Act is yet to be promulgated to give the Central Bank full oversight functionality over the NPS.

Role of other Private and Public Sector Bodies - The other sector bodies with interest in payment systems include the following: the Kenya Bankers Association which is the industry association of commercial banks that safeguards the common interest of its membership especially with issues to do with the regulator and the government. The other related body is the Nairobi Automated Clearing House that is owned by the industry with Central Bank as a member and a facilitator to the clearing process.; National Payments Systems Operations Committee which is the highest NPS reforms and developments decision making organ comprising of KBA and the Central Bank of Kenya; The Kenya SWIFT User Group which is simply a club for users of SWIFT in Kenya and which includes the Central Bank of Kenya. Lastly for the capital market securities segment, there is the Capital Market Authority as the regulator of the industry while the Stockbrokers Association through its membership oversee the operations of the Nairobi Stock exchange which has also developed a Central Depository System for quoted securities.

The NSE automated its clearing and settlement function in November 2004 and subsequently the Central Depository and Settlement Corporation, an associate company of the NSE, manages the clearing and settlement systems of the Kenyan capital markets. The automated trading system (ATS) of the NSE went live on September 11, 2006.

2.0 Inter-bank Foreign Exchange Markets

2.1 Evolutions and Development of the Market

Kenya began to liberalise its foreign exchange transactions in 1993 when banks were allowed to operate foreign exchange retention accounts for clients who were recipients of foreign exchange after the repeal of the Exchange Control Act. This was preceded by the issuance of Forex C certificates against receipts of foreign currency. The system involved sale of foreign exchange to commercial banks that in turn sold it to the Central Bank of Kenya. The certificate entitled the holder to foreign exchange without hindrance if there was need to make a foreign payment. The provision of foreign exchange was not guaranteed. It was subject to discretion and availability at the Central Bank. The other development was that the Forex C certificates could be encashed for equivalent amount in Kenya Shillings. This latter property made Forex C certificates a tradable instrument. The system did not, however, last for long as it was grossly abused leading to massive losses at the Central Bank. It was therefore discontinued and succeeded by fully-fledged FCAs. The Central Bank of Kenya via Banking Circular No.12 of 1996 encouraged Kenya residents whose payments (receipts and remittances) were then in foreign currency to open FCAs to facilitate current account payments. Their introduction created the need for the interbank transfers between FCAs holders and this was the advent of the inter-bank forex market.

2.2 Nature and Operations of the Market

The Rules Governing the Operations of the Market - The Central Bank Guidelines and especially the Banking Circular No 12 of 2005 and the Prudential Guidelines are the main rules governing the operations of the inter-bank forex market in Kenya. The Banking Circular provides for the requisite documentation for each and every category of forex operations, and returns to be made to the Central Bank. Under the prudential guidelines, banks are required to adhere to guidelines on Anti-Money Laundering and Proceeds of Crime. Commercial banks also have their own in-house governance frameworks that limit their operations. Foreign owned banks also apply their group's governance framework that stipulates the manner in which risks will be addressed across the group.

The Major Players - The major players are the commercial banks and their corporate customers, the offshore correspondent banks, the forex bureaus and CBK.

Market Operations - Banks open forex accounts for both their resident and non-resident customers who have evidence of official sources of foreign currencies. The common accounts include current, savings, and deposit accounts. Some of the banks especially the large ones offer credit facilities denominated in foreign currency. In most cases these loans must be matched by forex inflows and where flows are not matched, extra collateral is taken to cover the exchange risk. In the major banks FCDs account for 17% of the deposits while the loan book may be around 20%. The currencies that are used to open accounts are the USD, GBP, and the EURO. Interest rates on the FCDs are based on LIBOR minus a margin while the loans are on LIBOR plus a margin

The main customers that operate FCAs are corporate, NGOs, embassies, foreign missions and their employees who receive salaries in foreign currency. A few local individuals also operate FCAs. Conditions for opening accounts include adherence with anti-money laundering principles of 'Know Your Customer', having counterpart local currency accounts and demonstration of income in the hard currency. They also book foreign loans in their books and the benchmark interest rate on the operations of these accounts is LIBOR.

Trading in forex is conducted online on Reuter Screens. Banks normally make a two way quote i.e. "Sell and Buy". Quotes in excess of $250,000 must be honoured. This measure protects the market from speculators. There is an active horizontal Repo market (Repo agreements transactions among banks themselves) to facilitate inter-bank lending transactions by the commercial banks in foreign currencies. However, in Kenya there is no vertical Repo market (Repo transactions between commercial banks and the Central Bank as lender of last resort) for short-term liquidity management in foreign currency Commercial banks make periodic returns to the central bank on payments and receipts which include:

i) Summary of daily transactions;
ii) Summary of the weekly transactions;
iii) Inward remittances by Kenyans living abroad - problematic;
iv) Foreign currency holdings; and,
v) Monthly foreign exchange statistics.

Role of CBK in the IFEM - Banks open forex accounts for their both residents and nonresidents customers who have evidence of official sources of foreign currencies. There is an active horizontal Repo market (Repo agreements transactions among banks themselves) to facilitate inter-bank lending transactions by the commercial banks in foreign currencies. However, in Kenya there is no vertical Repo market (Repo transactions between commercial banks and the Central Bank as lender of last resort) for short-term liquidity management in foreign currency.

Market Risks and Mitigation - The market is exposed to varied risks, namely settlement risks and related risks like credit, liquidity risks; operational risks like system failure, systemic, legal, and fraud. However, in line with international practices, it is now a mandatory and a regulatory requirement that all banks institute Risk Management and Compliance Department. Banks manage inherent forex risks in different ways but majority reconcile their forex portfolios at the end of every business day. The Central Bank has also instituted a 20% exposure limit to be maintained by the banks at all times.

3.0 The Local Foreign Currency Cheque Clearing System

Historical Perspective - Soon after the approval of banks to operate FCAs, cheques when issued had to be cleared through direct presentation to the drawer banks which in turn either issued a draft or settled by TT for each individual cheque item. This method of operation proved to be time consuming, inefficient and very costly to banks especially those that were handling large volumes of foreign currency cheques. Consequently, in 1994, Citibank and Barclays Bank of Kenya Ltd pioneered the club system - a private foreign currency cheque clearing arrangement where 13 member banks would exchange the currency/credits locally and only settle abroad on a net basis. Any non-member wishing to participate was obliged to align with a member bank to act as its clearing agent. It was the feeling of non-members that the Club was operating as an elite (cartel) group that was selective on its membership and hence promoting oligopolistic practices in a liberalised money and forex market. Meanwhile the Club members argued that in the absence of an open architecture, there was a need to have an authoritative organ such as the KBA or the Central Bank to develop a clearing system.

In 1998, a proposal to improve local foreign cheques clearing arrangements was forwarded to the Kenya Bankers Association (KBA) by the Clearing House Rules Committee. In March 2000, the Club agreed to formalise local foreign cheque clearing arrangement by recommending that KBA/CBK be approached to take over and formalise an open and integrated Local Foreign Cheque Clearing System. KBA was subsequently approached to take over the clearing but declined. As a result of the stalemate between the two camps the National Payment Systems Operations Committee adopted the Local Foreign Cheques Clearing System (LFCCS) as one of its projects in 2001, and requested the CBK to carry out a study on LFCCS with the objective of establishing whether there is a case for a universal and industry-regulated LFCCS. The study was carried out and a case for a formal, open and integrated Local Foreign Cheque Clearing System was established. Following the recommendation of the Study Group the project was initiated and began operations on 3rd September 2004. CBK and KBA played pivotal roles in the formation of the LFCC system. The CBK formed an in-house LFCC implementation committee and the KBA formed a Foreign Currency Clearing Sub-committee that included the central bank as the secretariat and commercial banks.

Major Market Players - The market players in the LFCCC arrangement are the Central Bank of Kenya, which provides clearing settlement account for LFCC participants to facilitate settlement in US Dollar, Euro and Sterling Pounds; Kenya Bankers Association (KBA), which owns the automated clearinghouse; and Commercial Banks and their corporate customers. Lastly, the other player is SWIFT - a service provider for secure transmission of payment instructions.

Rules Governing the Operations of the System - Central Bank of Kenya issued guidelines for participation in Domestic Foreign Currency Cheque Clearing. The rules governing the operations are contractual as all banks sign a master agreement to comply with the Clearing House Rules, which are backed by periodical Central Bank prudential guidelines in this regard. KBA formulates the LFCC system rules and regulations and combine them with the local currency Automated Clearing House Rules.

The Role of the Central Bank - The role of CBK as settlement agent is pivotal to the functioning of the LFCCC system as it maintains the clearing settlement account for LFCC participants to facilitate settlement in US Dollar, Euro and Sterling Pounds. CBK is also a service provider, as it owns KEPSS on which settlement takes place. CBK is also a participant on the LFCCC system.

The Clearing and Settlement Arrangement

The Local Foreign Currency Cheque Clearing System handles clearing and settlements only in Euro, Sterling and US Dollar denominated cheques drawn on banks in Kenya. It is one of the few multi-currency clearing systems in the world. The Kenya LFCC system is modelled on experiences of central banks of Singapore and Peru. The system significantly reduced the time needed to clear local foreign currency cheques from the previous two to four weeks to only 7 days as the clearing cycle is T+7 as shown in Table 5.

Table 5: Clearing Cycles for Local Currency and Local Foreign Cheques Clearing Arrangement

Local Currency	Domestic Foreign Currency
Monday - Day 0: Collecting bank receives cheque(s) from customers Tuesday - Day 1: Date of lodgement at the Clearing House Wednesday - Day 2: Thursday - Day 3: Latest day of return/ advise unpaid	Monday - Day 0: Collectig Bank receive s cheque(s) fro m customers Tuesday - Day 1: Collecting Bank receives cheque(s) from customers Wednesday - Day 2: Date of exchange at the clearing House Thursday - Day 3: Settlement Date Off-Shore Friday - Day 4: Latest day of return/advised unpaid (High Value I Items) Monday - Day 5 Tuesday - Day 6: Final day of Return (Normal Items) Wednesday - Day 7: Customer Gets Value

Note: While the local currency clearing sessions are held every working day, the Domestic Foreign Currency sessions are held on alternate working days.

The Central Bank is both the appointed operator of the system and the settlement bank. For the settlement of the cheques, participating banks must maintain accounts in the three designated foreign currencies with the Central Bank with minimum aggregate balance of US Dollar 10,000 equivalent. One of the requirements of participation is that the bank must be on SWIFT which is the medium for funds transfer for security and safety concerns.

The clearing and settlement process of local foreign currency cheque follow the steps indicated below:

1. The payer sends a cheque to the payee;
2. The payee deposits the cheque to the presenting bank, which credits the payee's account provisionally ('on hold' cheques);
3. The presenting bank sends MICR information (Electronic Clearing System data) of cheques to the 1st session of the ACH using Bankconnect - a dial-up electronic data file transfer system. For the banks sending Electronic Clearing System data, corresponding physical cheques are sent to the ACH by 10:00 a.m;

4. At the ACH the physical cheques are exchanged and the electronic data is processed. Only the settlement files are processed to determine the net settlement amount for each participating bank;
5. After the net settlement figures are known the ACH disbands. At this time the settlement files and the electronic journal are available for banks to download at their respective clearing centres;
6. The paying bank has until 12:00 noon to determine the fate of high value LFCCs. (USD - 50,000.00+, Euro - 60,000.00+ and GBP- 40,000.00+). If the paying bank rejects a high value cheque, it may return the unpaid cheque to the presenting bank through the ACH by the second clearing session;
7. The ACH will process the returned cheques and forward them to the respective presenting banks. The settlement amount for both paying and presenting banks will be adjusted accordingly by the ACH;
8. The 2nd Session of ACH begins at 12:00 noon and after any adjustments for high value unpaid cheques the final net settlement is finalized. The clearing banks representative sign the irrevocable settlement certificates and ACH disbands;
9. The paying bank with deficit in foreign currency accounts (euro, sterling pound, USD) will have to fund the Central Bank of Kenya's offshore settlement accounts domiciled at Standard Chartered Bank, London for GBP and Euro and New York for USD;
10. The following day the ACH prepares the net settlement figures which are then sent to the RTGS for settlement. Foreign currency clearing sessions are held on alternate days to allow for settlement in Central Bank's offshore accounts;
11. Central Bank of Kenya will sight and update the mirror accounts, of paying banks in deficit, upon successful funding arrangement. If the funding is unsuccessful, Central Bank steps in and funds the defaulting bank's account using the banks guarantee as collateral and thereafter penalizes the bank;
12. The following sitting of the ACH must return high value cheques not returned on the day of exchange at the ACH after cheque presentation. All other cheques must be returned unpaid by the 2nd sitting of the ACH after cheque presentment; and,
13. If the cheque is cleared successfully, the payee can get value on the 7th day under the T+7 Day clearing cycle.

The Management of Settlement Risk - Settlement takes place in KEPSS and is final and irrevocable. Participants provide cash pledges, guarantees or Letter of Comfort to mitigate against failure to settle risk. To reduce the forex risk, the system is on a multilateral netting arrangement and the ultimate settlement is done through the forex accounts at CBK through RTGS system. The system is also on multicurrency settlement system. To ensure finality of settlement the operating rules require non-interest bearing minimum deposit account ($10,000), which is placed with the CBK correspondent, Standard Bank Chartered International. The other requirement is the transfer of a pledge in the sum of US$ 100,000. The banks must also have a guarantee or a Letter of Comfort from banks with offshore parent relations. The Letter of Comfort is acceptable solely at the discretion of CBK. CBK is not under any obligation to accept a Letter of Comfort from any commercial bank by virtue of the bank having met the above requirement. The extent of the guarantee or cash pledge is based on computation of three months daily average of inward debit clearing plus twenty-five percent (25%) margin. Recalling the guarantee or the cash pledge attracts a penalty of 25% of the default rate.

Management of Operational and Other Risks - The other strategies for containing and managing operational risks include: communications between the banks and the ACH is by dedicated lines. The ACH operating system and clearing settlement system (CSS) have a backup server on site and a disaster recovery site at Kenya School of Monetary Studies (KSMS). The KEPSS system used for settlement has a back up and a disaster recovery site at KSMS and the RTGS system assists to mitigate against risks of settlement, forex, credit, and liquidity; unwinding, system and legal because transactions will not be permitted to go through until conditions that would lead to these risks are fulfilled. The Kenya Bankers Association Clearing House Rules and Net Settlement Instructions to KEPSS set the rules governing the operations of the local and foreign currency cheques clearing.

Implications on Monetary and Financial System Stability - From the way CBK handles the LFCCC arrangement, there is little likelihood of the system compromising monetary policy efficacy and financial stability. This is due to a number of factors built into the system:

i) The forex exposure by the banks is limited to 20% of their core capital. This means that in the event of major exchange rate depreciation, the assets of the banks would not be impaired beyond 20% because the local assets would remain intact. In addition, the limit of 20% covers all foreign currency assets net of liabilities. The foreign exchange exposure limit of 20% was adopted from recommendations of a Committee set up by central banks of 16 Eastern and Southern African (ESAF) countries to harmonise prudential guidelines on foreign exchange exposure within the region;
ii) All the forex currency accounts are denominated in Kenya Shillings in their books. This means that the CBK does not bear the forex risk in the clearing and settlement arrangement. It also means that CBK does not need to keep adjusting its monetary targets when there are movements in exchange rates since the foreign assets of commercial banks are included in the monetary aggregates;
iii) All the mandatory returns to the CBK for purposes of monitoring liquidity ratio and reserve ratio requirements are in Kenya Shillings;
iv) There is no lender of last resort in foreign currency for both advances and discounts and the intra-day facilities; and,
v) The inability of LFCCC system to impact significantly on monetary policy and financial stability is further

reinforced by existence of full liberalisation of the forex market, stable macro-economic environment which has made dollarisatison a non-issue.

Applications and Compliance with International Best Practices - The Kenya LFCCC system meets most of the BIS core principles from the legal stand point, appropriate technology and management of failure to settle rule. The Clearing House Technical Committee comprising KBA and Central Bank officials in 2003 undertook an exercise, which reviewed all the risks in the arrangement and introduced all mitigating measures. For example one major requirement is that settlement must be central bank money and the CBK ensured that banks open forex accounts at the Bank and the requisite extra funding of the accounts are in designated Central Bank offshore accounts to further address the finality of settlement requirement. The CBK also ensured that there is an appropriate legal basis for the operations of the local forex cheques. However the system is susceptible to both credit and liquidity risk since banks have to source funding from outside the bank. In addition, since CBK does not acknowledge settlement until funds are sited in its correspondent accounts, the procedure causes delay and hence exposes parties to forex risk. Despite this weakness, systemic risk is mitigated by existence of the collateral guarantee and cash pledges.

4.0 Intra-day Loan Facility and Foreign Currency Transactions

The Nature of Operations and Policies - Intra-day loan facility is referred in Kenya as Intra-day Liquidity Facility (ILF). On July29, 2005 when the RTGS was formally launched and went live, the Central Bank of Kenya begun to offer intra-day credit to the participants in the bank exchange. However ILF is only available for the Local Shilling Clearing and not for Local Foreign Currency Clearing, which is supported by cash pledges, and offshore bank guarantees in forex.

The Role of RTGS - It facilitates settlement of the Net Settlement Instructions (NSI) from the Automated Clearing House on Domestic Foreign Currency. A Net Settlement Instructions (NSI) is an account transfer involving multiple debits and credits, initiated through the multilateral netting clearing system at the Clearing House. The NSI for LCCC is entered into KEPSS the following day after the exchange of items at the Clearing House. Once the validity of the data is confirmed it is then loaded in the RTGS. The NSI is then cleared as a batch only if there are sufficient funds for all the commercial banks with net debit position. The NSI is expected to clear on settlement day by 12.30p.m.

Linkage with Foreign Currency Transactions - As stated above there is no linkage between ILF and domestic foreign currency transaction.

5.0 Role of Central Bank of Kenya in Development of LFCCC System

Oversight Role - A major responsibility of the Central Bank of Kenya is to ensure that the cheques clearing systems that operate under its supervision comply with the BIS Core Principles. As the overseer of the clearing system, the CBK has also the role of promoting system developments.

System Development - CBK though the NPS Division is charged with responsibility of promoting development of efficient and secure settlement systems. It is in this context that CBK in collaboration with KBA steered the transformation of the LFCC club arrangement of 13 banks into the current open and all-inclusive LFCC arrangement. The CBK got involved because the Club arrangement was not competitive, was oligopolistic in nature and was not conforming to the BIS Core Principles. The system became operational in September 2004 with CBK as the operator and settlement agent. Although the system is a substantial improvement over its predecessor, there are still areas that CBK needs to give attention and improve in tandem with best practices. These areas that require improvement include:

i) Clearing is done on alternate days which lengthens clearing cycle and therefore denies bank customers immediate value and exposes them to forex rate risks. During the clearing period, the commercial bank of the recipient carries the float;
ii) Settlement is on site of value and not based on SWIFT instructions;
iii) Settlement through the nostro accounts poses additional costs to banks which are passed on to customers; and,
iv) Absence of intra-day facility to provide system liquidity.

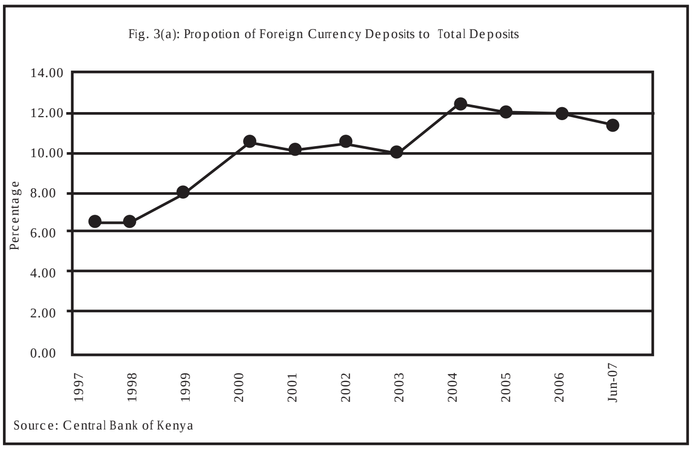
Despite the above weaknesses the system meets most of the BIS Core Principles listed in Section 2.3 except the requirement for same day value and settlement. Therefore one of the challenges that remain is to reduce the clearing cycle from T+7 to T+3 as is the case with the local cheque clearing arrangement. CBK as a member of KBA and NPS Operating Committee is involved in all policy and operational forums including training of industry staff.

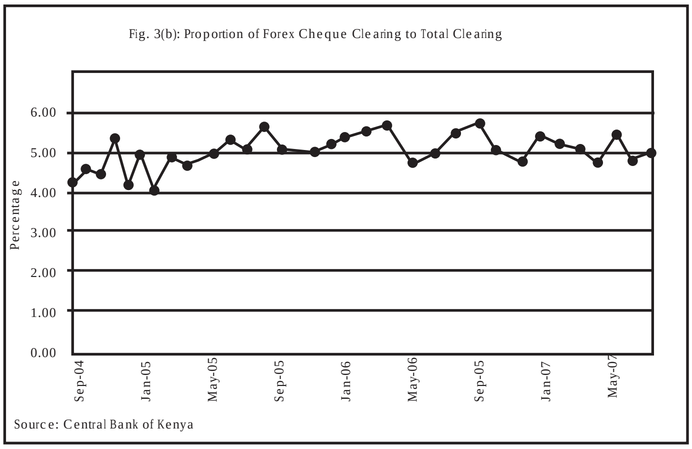
6.0 Dollarisation in the Economy

In terms of the varieties of Dollarisation identified in the literature, Kenya can be characterized as an unofficially dollarised country. The unofficial nature of dollarisation in Kenya is signified by the fact that foreign currency has not been designated legal tender. Consequently, wages, taxes and every day expenses such as groceries and utility bills are paid in domestic currency, but expensive items such as automobiles and houses are in some instances invoiced and paid for in foreign currency. Owing to the sustained stability of the local currency, residents generally do not think in terms of foreign currency and prices in domestic currency are not indexed to the exchange rate.

Owing to lack of accurate statistics on how much Kenyan residents hold abroad in foreign bonds and bank deposits and locally in foreign currency notes and coins, the extent of the country's dollarisation is difficult to determine. However if the proportion of FCDs in the domestic banking system and the proportion of LFCCC to total cheque clearing are applied as proxies for dollarisation, it can be safely concluded

Figure 3: The Significance of FCDs and LFCCC in Kenyaís Banking System





that dollarisation is not an issue in Kenya. This is because the proportion of FCDs in Kenya's domestic banking system stabilised at about 10-12% after an initial rise following liberalisation of forex market as shown in Figure 3(a). In addition, the significance of foreign currency in daily non-cash transactions in Kenya is low as evidenced by the low level of forex clearing which stands at about 5.0% as shown Figure 3(b).

The conclusion that dollarisation is not an issue in Kenya is also supported by senior CBK staff. They reported during the interview that there was no evidence of instability effects of the little unofficial dollarisation on the domestic economy. If anything, they reported that complications of unofficial dollarisation on the conduct of monetary policy had largely been mitigated by the choice of appropriate broad money aggregate (M3) that included FCDs and by the application of the monetary policy instruments using the local currency. Table 2 below reveals the extent to which the Kenyan economy is dollarised.

Table 2: Indicators of Dollarisation in the Kenyan Domestic Economy (%)

Parameters	2002	2003	2004	2005	2006
Forex Deposits/Total Deposit Liabilities	0.16	0.15	0.16	0.17	0.17
Forex Lending/Total Loan Assets	n.a	n.a	n.a	n.a	n.a
Forex Deposits/M3	0.13	0.12	0.15	0.15	0.15
Forex Deposits/GDP	0.05	0.05	0.06	0.06	0.06
Imports to GDP	0.29	0.28	0.33	0.35	0.36
Exports to GDP	0.24	0.24	0.26	0.26	0.26
Total Trade To GDP	0.54	0.53	0.59	0.63	0.62

Source: Central Bank of Kenya, n.a - not available

7.0 Lessons Learnt from Kenya LFCC System

The involvement of CBK was vital to the development of the open LFCCC system in Kenya. Without the intervention of the CBK, the Club arrangement which was dominated by the big banks would not have evolved into an open system as the big banks were using this facility as competitive weapon against the smaller and emerging financial institutions.

One of the challenges to ensuring finality of settlement is the lack of both intra-day facility and lender-of-last resort in foreign currency. This is a challenge to the efficient settlement required and is increasing the operational costs of participating banks as they have to resort to the forex inter-bank market where sometimes the required currency may not be available and hence have to go to the offshore market as a last resort. Given that the central bank is ultimate source of liquidity within the banking system, the failure to settle mechanism is currently being reviewed by the industry due to the challenge it is posing to the central bank as the settlement agent and the commercial banks as issuers of Local Foreign Currency Cheques.

The other challenge is the sighting of central bankís offshore settlement accounts with the Standard Bank International Ltd and the use of secure SWIFT which increases the clearing cycle to T+7. The lengthy cycle is a recipe for injection of more risk to the system and more operational costs to the participating banks. Ideally the cycle should be reduced to T+3 by eliminating offshore sighting of the accounts and rely on SWIFT for confirmation of receipt and availability of settlement funds.

3.0 LESOTHO

1.0 Introduction

1.1 Overview of The Country

Structure of the Economy and Economic Trends - Lesotho is one of the smallest, low-income countries in Africa. It has few natural resources and a narrow production and export base. It maintains a close economic linkage with South Africa but with a high degree of openness with imports accounting for about 90% of GDP. It relies heavily on SACU receipts and workers' remittances. South Africa is the main trading partner accounting for about 77% of imports.

The economy of Lesotho performed well in 2006 with real GDP growth rate rising to 7.2% from 2.9% in 2005. The improved performance was driven by recovery in mining (diamond production), garment industry, service sectors and transfers from SACU. As a result, the current account balance registered a substantial surplus, while the gross international reserves increased to 6 months of imports. Real GDP is projected at about 5 % in 2007 and could average nearly 5.5 % in the following years. Table 1 provides a summary of the key economic and financial indicators.

Monetary Policy Framework - The Central Bank of Lesotho (CBL) has little leeway in the conduct of monetary policy because the country is closely linked to the South African monetary policy under the Common Monetary Area (CMA) agreement. The primary objective of monetary policy is to achieve price stability through a fixed exchange rate system. The framework does not target inflation per se, but is to a great extent aligned with developments in South Africa. The intermediate targets of monetary policy are therefore not applicable but they intend to introduce them in the near future. The monetary policy instruments used include the open market operations, Repos, Lombard Window Facility, the reserve requirements and discount facilities with underlying instruments being the 91-day Treasury bills, and Cash reserve ratio at 3% of domestic liabilities.

Inflationary Rate Policy - In the fiscal year 2006/2007 there was a gradual rise in the inflation fuelled, by increase in food and international oil prices and depreciation of the Loti/ZAR against the major currencies. Inflation as measured by the All Index rose to 6 % towards the end of 2006 from 3% registered in 2005. To curb the threat of inflation, a tight monetary policy stance was pursued in line with other CMA member central banks. The fixed parity between the Loti and ZAR has helped Lesotho in containing inflation given that South Africa is a moderate inflation country that supplies more than 77% of Lesotho's imports. Consequently, Lesotho has managed to meet the single-digit inflation target set under the SADC macroeconomic convergence targets.

Interest Rate Policy - During FY 2006 the money market rates in Lesotho generally followed an upward trend reflecting policy responses to inflationary pressures. The average prime rate increased by 200 basis points from 11.50% registered at the end of 2005 to 13.50% in 2006. To minimise the risk of flow of funds from Lesotho to South Africa, the CBL decided to keep domestic interest rates at almost the same level as those obtainable in South Africa but with a small risk premium. The Lesotho's 91-day Treasury bill discount rate and South Africa's discount rate were at 6.765 and 8.260 % respectively during 2006.

Foreign Exchange Regime - Lesotho has acceded to the obligations of Article VIII, Section 2, 3 and 4 of the IMF Articles of Agreement on exchange arrangements and exchange restrictions on payments and transfers for current international transactions. The Lesotho Loti is pegged at par to the South African Rand, which is also a legal tender in the country. The central bank administers exchange control provisions in accordance with the Bilateral Monetary Agreement between Lesotho and South Africa as well as the Multilateral Monetary Agreement among the CMA member countries. The Central Bank of Lesotho has therefore little flexibility in the management of the exchange rate.

1.2 Overview of the National Payment System

General Legal Aspects - The Central Bank of Lesotho Act, 2000, the Banking Finance Institutions Act, 1976 and the Financial Services Act are the major legislations governing the operations of the Lesotho National Payment System.

Table 1: Selected Economic and Financial Indicators

	2001	2002	2003	2004	2005	2006
Population (M)	2.19	2.2	2.28	2.33	2.36	1.93
Nominal GDP (Maloti Million)	6 475.2	7 242.9	7 862.0	8 513.1	9 065.2	1 011.9
Real GDP growth rate %	1.77	2.84	2.7	4.2	2.9	7.2
Cash Reserve Ratio %	3.0	3.0	3.0	3.0	3.0	3.0
91day Tresury Bill Rate	10.99	12.99	9.83	7.86	6.95	6.76
Overall inflation (%)	1.7	11.01	7.48	5.02	3.46	6.05
Exchange Rate Loti/US$	8.619	10.416	7.362	6.326	6.371	6.780

Source: Central Bank of Lesotho

A draft National Payments System Act was finalised in April 2006 and has since been passed on to the relevant authorities and structures in Government for enactment. The objective of the proposed law is to provide a sound legal foundation for the country's National Payment System operations.

Institutional Framework - The providers of payment systems in Lesotho comprise the central bank, three (3) dominant South African commercial banks and non-bank financial institutions. Non-bank institutions include mainly the Lesotho Post bank, registered money lenders, development banks, savings and credit cooperatives, and unlicensed deposit-taking entities.

Major Payment Instruments and Media - The most common and predominantly used instrument of effecting payments in the economy is cash with the Lesotho Loti as the legal tender although the ZAR is freely used alongside it. The non-cash payment instruments account for the bulk of the value of monetary transactions. These instruments include cheques, payment cards and the Electronic Funds Transfers through SWIFT technology.

The main payment media or streams include the clearing and settlement circuits for both cheques and EFTs. The main one is the domestic currency cheque clearing system through the non-automated Maseru Clearing and Settlement House (MCSH) domiciled within the CBL. The large value transfers are managed through the RTGS system - named the Lesotho Wire (LSW), which was introduced during August 2007.

The Role of Central Bank of Lesotho - The major focus of the Central Bank modernisation agenda is to improve the payment system in Lesotho with particular emphasis to reducing settlement cycle to same day settlement. The Bank also intends to meet international standards in terms of providing secure means of making payments. CBL plays the traditional role of currency issuance and hence is responsible for issuing Maloti notes and coins to settle legal payments within the country. The central bank, under its own statutes - Section 6(h), is charged with responsibility to promote the efficient operations of the payments system. It is in this legal context that the central bank gets involved in the payment system operations. The Bank is involved in the following ways:

i) As the owner and operator of the RTGS system(the Lesotho Wire);
ii) Facilitating inter-bank exchange and settlement arrangements for large value payments;
iii) Providing the ultimate settlement agency role to the Maseru Clearing House;
iv) Evolving payment system oversight functionality as an autonomous function. However the Bank has formal/legal payment system oversight functionality role provided under the legal provisions of the Central Bank Act. It enforces compliance through the NPS Division as the overseer and ensures compliance with the Core Principles as an operator and a participant in the payment system. It has not yet introduced an NPS statute that may empower it to fully formally regulate, oversee and designate payment systems under an independent law (NPS ACT) to facilitate explicit oversight functionality as international best practice requires. However, CBL has been instrumental in its role of coordination and management of all activities encompassing the NPS reform agenda; and,
v) Enforcing clearinghouse rules.

1.3 Role of Other Private and Public Sector Bodies

Lesotho National Payment Council - The Council is the highest payment system modernisation organ comprising the CBL governor, the chief executive officers of commercial banks, telecommunications and energy industries, and the principal secretary for the Ministry of Finance and Planning. The Council plays both advisory and management roles and to assist the central bank in the development of plans and payment system implementation reforms in line with the set NPS Vision of 2015. One of its roles is also to ensure that the payment system providers have a forum in which to express concerns about the payment system reform process.

The Lesotho National Payment System Modernisation Project Committee -The Committee was launched in 1999, to review the current payment system, analyse the current and future payment needs and requirements of all population and the economy and to upgrade and improve systems that are currently in operation. The head of the CBL NPS Division coordinates the project. The Lesotho National Payments System Committee is supported by sub-committees of experts relevant to the payment system. The sub-committees are for Audit, Legal, Public Relations, Risk Management, and Information Technology and Infrastructure. These subcommittees are intended to assist the steering committee in the payment system reform process.

Lesotho Bankers Association - The responsibility of the association is to act as an interface between the member banks and other stakeholders, especially the Central Bank. It provides forum for the exchange of information on the smooth operation of the banking industry's clearing and settlement arrangements. CBL chairs the clearing banks monthly meetings at which issues of common interest are handled.

Employment Bureau of Africa (TEBA) - It is the organisation which makes payments on behalf of migrant mine workers.

Maseru Clearing and Settlement House (MCSH) - The objective of MSCH is to facilitate and provide clearing house services to member banks at one central clearinghouse in Maseru. The clearinghouse is domiciled within CBL. It is jointly owned by the CBL and the Lesotho Bankers Association but independently operated by the CBL, which also enforces the Maseru clearing house and settlement rules. Membership is drawn from all licensed commercial banks with settlement accounts at CBL. The MCSH provides facilities for the clearing of cheques and EFTs (Debits and Credits). It also issues and reviews the clearinghouse rules and ensures adherence. There is cheque capping at the value of M.100, 000.00. The clearing cycle is on a T+3 basis with 2 sessions daily.

2.0 Inter-bank Foreign Exchange Market

2.1 Evolutions and Development of the Market

The financial system is not fully liberalised but nearly all current account transactions transfers are permitted. There no controls to payments to other CMA countries except reporting for statistical purposes. Exchange controls are maintained for payments to the rest of the world. The central bank transactions are automatically allowed while all other transactions within the IFEM need central bank's approval.

2.2 Nature of the Market

Rules Governing the Operations of the Market -The rules governing the operations of the market are derived from legal statutes and guidelines of the Central Bank of Lesotho. CBL has been delegated powers by the Ministry of Finance to appoint Authorised Dealers in foreign exchange and set up the limits within which the dealers may operate. The enforcement of Exchange Control regulations enables CBL to monitor the movements of foreign currency in and out of the country.

Major Market Players - The major market players are the Central Bank of Lesotho, the three commercial banks and their offshore correspondent banks and local customers. The major account holders at the banks are individuals, corporate customers, NGOs international organisations etc.

2.3 Market Operations

Lesotho is a signatory to the CMA Agreement, which means there is an unrestricted flow of funds between Lesotho and other three CMA countries. The four countries form a single exchange control territory. Each country, however, administers exchange controls within its borders for transfers to the rest of the world. Hence, Lesotho classifies residents into those of CMA (residents) and those of the rest of the world (non-residents).

The banks, which are the authorised dealers, are allowed to open foreign currency accounts for their customers under the exchange control guidelines. The CBL administers exchange control provisions in accordance with the Bilateral Monetary Agreement between Lesotho and South Africa as well as the Multilateral Monetary Agreement among the CMA member countries. The Central Bank formulates and executes exchange rate policy; the CBL issues guidelines for the purpose of regulating the purchase, sale, holding or transfer of foreign exchange. The Bank continues to implement Cross-border Foreign Exchange Transactions Reporting Systems introduced during 2005. The system is to enhance the reporting mechanisms and communications between the Bank and commercial banks for both inward and outward foreign exchange transactions. CBL mostly deals with the banks in ZAR while the other major currencies are the USD, Euro, and GBP.

Role of Central Bank and Intervention Mechanism - The interventions of CBL in the market are aimed at funding its own forex accounts and sometimes to offload excess holdings of forex. With existing exchange controls, the role CBL is limited to issuing operational guidelines and regulations complemented with active surveillance through periodical returns.

Market Risks and Mitigation - To mitigate against market risk, the exchange rate is fixed at par with the South Africa Rand.

3.0 The Local Foreign Currency Cheque Clearing System

Developmental Perspective - There is no open architecture for LFCCC arrangement. All locally issued foreign currency cheques are cleared on bilateral arrangements between banks and settlements are through the traditional collection abroad through correspondent relations.

The Major Players - The major players in the market include the commercial banks and their customers.

Rules Governing the System - The rules are subject in all respects to the international trade laws and practices as pertains to the negotiable instruments and promissory notes.

Role of the Central Bank in the LFCCC - The CBL has no role in these arrangements. The Bank does not play the usual customary role of settlement agency in the LCCC arrangement as banks manually exchange the effects bilaterally and then settle through their related correspondent banks offshore.

The Traditional LFCCH Operations - These instruments are drawn in USD, GBP, Euro, and ZAR and issued locally but the prevalent instrument is the ZAR.

The Management of Settlement Risk and 'Finality of Settlement' Arrangement -There is no provision for finality of settlement and irrevocability of settlement with regard to LFCCC.

Management of Operational and other Risks - The other operational risks like systems failure, frauds etc are managed through due diligences processes of the participating banks in the bilateral arrangements and the prudent practices e.g. KYC. Implications on Monetary and Financial System Stability - The IFEM operations pose no serious threat to financial system stability and conduct of monetary policy, as they are insignificant in terms of value and retail in nature. In addition, the strict controls and monitoring by CBL preclude any significant disturbance to monetary policy and financial stability.

Applications and Compliance with Best Practices for Payments - The traditional LFCCC arrangements do not meet most of the BIS Core principles from legal perspective, accessibility, and the management of failure to settle rule. The system is susceptible to both credit and liquidity risks and operational risk as settlement is not done using the central bank money as net debit obligation banks are the ones to ensure that they fund their own offshore correspondent clearing and settlement accounts.

4.0 Intra-day Loan Facility and Foreign Currency Transactions

The Nature of Operations and Policies - The LFCCC settlement arrangements are on manual bilateral system. The net deficit positions are settled offshore using correspondent banking arrangements. Hence, there is no linkage between the RTGS driven intra-day loan facility with the foreign currency transactions.

Role of RTGS in the Traditional LFCCC Arrangement - The Lesotho RTGS system has no role to play in the traditional LFCCC system operations as all LFCCC cheques settlement is done through the respective banks' offshore correspondent relations.

5.0 Role of the Central Bank in the Development and Operation of the Traditional LFCCC System

The Central Bank of Lesotho, under its own statutes has an implied oversight role over the national payment system including overseeing the operations of any model of LFCCC arrangement. However, the CBL has not played any role in the operations or development of an open LFCCC arrangement in Lesotho.

6.0 Dollarisation in the Domestic Economy

Lesotho may be categorised as a bi-monetary and semi-officially dollarised economy as the ZAR is permitted to operate as legal tender alongside the Loti. However, most transactions including payments for utilities are denominated in the Loti. The main factor that has given rise to dollarisation in the Lesotho economy is its membership to the Common Monetary Area especially the prerequisite for a fixed exchange rate regime. This agreement allows for the compensation of Rand circulating in the countries of Lesotho, Namibia and Swaziland. The factors that influenced the linking of the Loti to the ZAR include the following;

- i) Lesotho's economy was highly open with tradable goods accounting for a large proportion of the country's gross domestic product;
- ii) Approximately 77% of Lesotho's imports in tradable goods are from South Africa;
- iii) Most of Lesotho's financial institutions were offshoots of South African companies and there is a free flow of capital between the two countries;
- iv) South African companies were the major investors in Lesotho;
- v) The ZAR was a freely convertible and an internationally traded currency;
- vi) South Africa was deemed to have good and sound macroeconomic policies resulting in low inflation; and,
- vii) Lesotho's membership of SACU.

The positive impact of dollarisation in the Lesotho economy is deemed to be the country's financial and macroeconomic stability. The country has benefited from prudent economic management in South Africa resulting in low inflation and interest rates, and increased investments. Due to currency parity, trade between South Africa and Lesotho takes place without the uncertainty and costs that would arise from variations in the exchange rate. The main disadvantage of the arrangement is loss of ability to carry out independent monetary policy. The fact that the ZAR circulates side by side with the Loti makes it difficult to accurately measure money supply. Therefore money supply manipulation in Lesotho is effectively a tool outside the scope of the central bank. The fixed exchange rate also makes it difficult for the economy to respond to shocks, which may undermine competitiveness of the economy.

To mitigate against the effects of dollarisation on monetary policy efficacy, the CBL has decided to keep domestic interest rates at the same level as those obtainable in South Africa. This also minimises the risk of outflow of funds from Lesotho to South Africa.

7 .0 Lessons Learnt

Lesotho is one country where dollarisation has been viewed positively due to positive impacts in stabilising the country's exchange rate and external fundamentals. The underlying factors for these advantages are linkage to a large and stable economy, the trade and investment flows. The case of Lesotho confirms the fact that dollarisation in the economy could also be influenced by the international /regional trading patterns where a country in the trading pact is comparatively disadvantaged by the terms of trade-being a net importer of goods and services.

4.0 MALAWI

1.0 Introduction

1.1 Overview of the Country

Structure of the Economy and Economic Trends -Based on the old series of the national accounts, real GDP grew by 8.5% in 2006 compared to 2.2% recorded in 2005. The robust growth was largely attributed to recovery in the agricultural sector, which grew by 11.9% from a contraction of 8.5% in 2005. All other sectors are expected to benefit from the positive growth in the agriculture. The economy was also benefit from the cancellation of debt by multilateral and bilateral creditors. The economy was also expected to perform well in 2007 building on the growth achieved in 2006. Inflation averaged 8.6% during the first half of 2007 compared to an average of 16.3% for a similar period in 2006. All categories in the consumer price index registered substantial inflation declines. Inflation was expected to average 9.0% in 2007. This was premised on stability in food prices and the Kwacha exchange rate and easing of international oil prices. Table 1 provides a summary of the key economic and financial indicators for the country.

Monetary Policy Framework - The primary objective of monetary policy is to maintain price stability and competitive exchange rate. The intermediate target of monetary policy is M2. Foreign currency deposits of residents are included in this intermediate monetary target. The main instruments of monetary policy are cash reserve ratio, OMO, Bank rate, and sales and purchases of forex. Monetary policy is expected to remain tight to safeguard the declining rate of inflation and to counter the expected increase in donor financing. Monetary policy will continue to be anchored on the reserve money target. In this regard, a combination of OMO and forex operations will be used to influence the liquidity.

Foreign Exchange Regime - The exchange regime is on a managed floatation policy. The Kwacha has been relatively stable, trading at K140.66 per dollar as at the end of June 2007 from K139.47 as at end-January, 2007. The stability within the forex regime has been due to the implementation of the HIPC debt relief, MDRI and cancellation of debt by Paris Club creditors in 2006. The Real Effective Exchange Rate (REER), a measure of the country's competitiveness, depicted a depreciating trend during 2006. This outcome was attributed to declining inflation differential in favour of the country and the stable nominal effective exchange rate.

1.2 Overview of the National Payment System

General Legal Aspects - Laws governing payments system in Malawi are Reserve Bank of Malawi Act, Banking Act, Bills of Exchange Act and Bank Supervision Act.

Institutional Framework - Commercial banks, discount houses and non-bank financial institutions are dominant within the financial system with the RBM at the apex. There are also 2 discount houses. The capital market is dominated by the activities within the Malawi Stock Exchange.

Major Payment Instruments and Media - The most commonly used payments instruments is cash. Other instruments include cheques, credit cards, debit cards and EFTs. The payment media include the cheque clearing and settlement system through the clearinghouse which is owned by the Bankers Association of Malawi (BAM) and domiciled outside the RBM. The electronic clearinghouse clearing cycle for domestic currency cheques is T+1. Settlement is done over the RTGS at 16.10 hrs daily. The RTGS has been in place since March 2002 and offers intra-day facility collateralised by the treasury bills. The bankers association and the Central Bank enforce

Table 1: Selected Economic and Financial Indicators

	2001	2002	2003	2004	2005	2006
Population (Million)	10.4	11.2	11.5	11.9	12.3	12.8
Nominal GDP BN MKW	123,9265.9	148,856.0	171,917.8	207,175.2	245,920.7	298,170.3
Real GDP growth rate	-4.1	2.1	3.9	5.1	2.2	8.4
Cash reserve ratio (?)	0.30	0.30	0.30	0,275	0.275	0.200
91day treasury bill rate %	42.1	41.75	39.27	28.58	24.40	19.27
Overall inflation (%)	27.4	16.1	9.5	11.4	15.4	14.0
Exchange Rate MKW/US$	72.19	76.685	97.44	108.95	118.45	136.01

Source: Reserve Bank of Malawi

the clearinghouse rules. There is no cheque capping provision. Membership is confined to the commercial banks and the RBM and the sessions are on a continuous basis.

The Role of the Reserve Bank of Malawi - The role of the Reserve Bank of Malawi is as overseer of the payment system, settlement and credit service provider to the system. It is also a participant in the System. The RBM has no formal legislation over the payments system. However, the Bank implements Reserve Bank of Malawi oversight policy. It conducts self-assessment of own payment systems in accordance with BIS core principles.

Role of Other Private and Public Sector Bodies - The other related payments system bodies include the Electronic Cheque Clearing House Management Committee which meets quarterly and reports to the National Payments Council, which is the highest NPS organ in the country. The other bodies include the Bankers Association of Malawi and Malawi Switch Centre (MSC), which is managing the cheque clearinghouse on behalf of the industry. There is also the Malawi Switch (MALSWITCH), on which the clearing and settlements arrangements for payment cards including the smart card technology are operated. The RTGS system provides for large value inter-bank exchanges. There are also international money transfers services including those provided by Western Union and MoneyGram.

2.0 Inter-bank Foreign Exchange Market

Nature and Operations of the Market - All legal payments and receipts in foreign currency are allowed. Current account transactions are fully liberalized while some capital account transactions are not allowed. Controls on inward investments are maintained to regulate wholesale importation of capital which may end up siphoning foreign exchange from the country. Interest rates on foreign exchange savings deposits are market determined and on basis of LIBOR + margin. The major operational currencies are the US Dollar, Sterling Pound, Euro and ZAR.

Rules Governing the Operations of the Market - The rules governing the operations of the IFE market are the Exchange Control Act, Guidelines from the Central Bank, Commercial banks' own KYC and the Code of conduct for dealers set by the commercial banks' Dealers Association

IFEM Operations - Banks and other institutions are allowed to operate foreign currency denominated accounts by offering current and savings deposit accounts. One has to demonstrate inflow of foreign exchange earnings to be allowed to open a forex account. Transfers from local to forex accounts are not allowed. The major market customers are individuals, government departments, and corporate sector including the international bodies, NGOs and foreign missions. Table 2 shows the significance of forex deposits compared to local currency deposits and the depth of the IFE market in Malawi. Commercial banks also book loans in foreign currencies but the figures are insignificant.

The Role of Central Bank and Intervention Mechanism - RBM intervenes in the market through the sales and purchases of forex to smoothen the market operations. It also intervenes to fund its own accounts, apart from influencing the exchange rates. It also uses the IFEM to offload excess holdings of forex. Finally, RBM monitors the market through mandatory returns and on-site surveillance.

3.0 The Local Foreign Currency Cheque Clearing System (LFCCCS)

Historical Developmental Perspective - There is no open architecture for LFCCC arrangement in Malawi. They use the usual traditional methods including bilateral arrangements between banks and club arrangements open only to some banks and collections abroad.

The Major Players - The major players are the club members and their corporate customers and correspondent banks offshore.

Table 2: The Depth of Forex Market in Malawi (Millions of Kwacha)

	2001	2002	2003	2004	2005	2006
Total deposits of banking system	19,989.5	24,988.0	33,805.9	41,617.6	51,633.6	53,542.9
Total foreign currency deposits of banks	3,149.4	4,504.6	5,362.4	7,119.6	6,474.5	9,909.1
Total local currency deposits of banks	16,840.0	20,483.4	28,443.5	34,498.0	45,209.1	43,633.8
Total loans and advances of banking system	15,920.7	28,195.6	35,760.6	43,926.8	53,050.8	56,221.7
Total foreign currency loans and advances of banks	**	**	**	**	**	**
Total local currency loans and advances of banks	15,920.7	28,195.6	35,760.6	43,926.8	53,050.8	56,221.7

Source: Reserve Bank of Malawi, ** - negligible

4.0 Intra-day Loan Facility and Foreign Currency Transactions

The nature of Operations and Policies - The intra-day loan facility within the RBM's RTGS system is solely in Kwacha and only supports inter-bank market operations liquidity and credit needs in the local currency.

5.0 Role of the Central Bank in the Development and Operationalisation of the LFCCC System

The Central Bank Oversight Role - RBM has no oversight role over the operations of the LFCCC Club arrangement and has not endeavoured to promote its operations to make it more competitive and in line with the international best practices in this regard.

6.0 Dollarisation in the Domestic Economy

Dollarisation in the Domestic Economy - In terms of dollarisation parlance, Malawi is characterised as an unofficially dollarised economy. Under this regime, Malawian residents are legally allowed to hold their financial wealth in foreign currency alongside domestic currency including foreign currency deposit accounts within the local banking system. However foreign currency is not legal tender. Consequently, most transactions including payments for utilities are denominated and settled in the Malawian Kwacha. Nonetheless, a few high value transactions like real estate leases and imports of vehicles, equipment and machinery are invoiced and paid in foreign currency.

Malawi has incomplete data on residents' holdings of their financial wealth in foreign currency. Consequently, the extent of the country's unofficial dollarisation is approximated by the share of foreign currency deposits in GDP (GDP dollarisation), broad money (money supply dollarisation), total deposit liabilities (deposit liabilities dollarisation), and total (assets dollarisation). The trends in these commonly used indicators are presented in Table 3. As shown in Table 3 deposit liability dollarisation steadily decreased from about 4 per cent in 2002 to less than 2 per cent in 2006. The decline in the dollarisation of the Malawian economy may be attributed to improved performance of the economy and increased confidence in the local currency.

Table 3: Dollarisation Penetration in the Malawian Economy (%)

Parameters	2001	2002	2003	2004	2005	2006
Forex Deposits/Total Deposit Liabilities	-	4.04	4.37	3.43	1.42	1.40
Forex Lending/Total Loan Assets	-	1.45	0.21	0.04	0.25	0.02
Forex Deposits/M3	-	3.28	3.6	2.7	1.1	1.0
Forex Deposits/GDP	-	0.42	2.2	0.38	0.15	0.12
Imports to GDP	-	0.02	0.12	0.03	0.03	0.03
Exports to GDP	-	0.02	0.07	0.02	0.02	0.01
Total Trade To GDP	-	0.03	0.19	0.04	0.04	0.04

Source: Reserve Bank of Malawi

Malawi has not undertaken a study to ascertain the potential negative (destabilising) effect of dollarisation on the conduct of monetary policy and/or its positive (stabilizing) effect on the local banking system. However the RBM has already undertaken measures to mitigate against potential monetary and systemic risks of dollarisation. First, the potential negative effects of dollarisation on conduct of monetary policy have been mitigated through targeting the broad money aggregate (M3) and use of the same for the computation of the cash ratio requirement. The RBM requires commercial banks to submit their Monthly Bank Survey (BSM) returns in local currency. Secondly, the RBM strictly enforces its foreign exchange rules, guidelines and regulations aimed at reducing foreign exchange risk exposure of the banking system. The RBM require every bank or financial institution to manage its foreign exchange exposures within the framework of a comprehensive risk management plan, setting out its policies, procedures and other safeguards necessary to prudently manage and control foreign exchange risk.

5.0 MOZAMBIQUE

1.0 Introduction

1.1 Overview of the Economy

Structure of the Economy and Economic Trends - The country is endowed with vast natural wealth comprising aluminium, titanium, coal, natural gas, tantalite, graphite, iron ore forestry and water resources. The main sectors of the economy are agriculture which contributes 26.2% to GDP while industry and services sectors account for 34.8% and 39.0% respectively. Although agriculture contributes about a quarter of GDP, it provides livelihood to over 80% of the population. Agricultural production is mainly for subsistence. Only about one-third of the farmers sell any surpluses to the market. The main cash crops are cotton, tobacco, groundnuts and cashew. Other cash crops are sugarcane, tea, coconut, sisal, sesame, sunflower and tropical fruits such as mangoes and litchi.

Since the end of civil war in 1992, Mozambique has recorded one of the highest sustained economic growth rates in Africa, achieving an average annual GDP growth rate of 8 percent between 1996 and 2006. As a result, the poverty headcount index fell by 15 percentage points between 1997 and 2003, bringing almost 3 million people out of extreme poverty. Inflation has also been reduced from over 60% in the early 1990s to about 7.3%. Fiscal reforms, including the introduction of a value-added tax and reform of the customs service, have improved the government's revenue collection abilities. In spite of these gains, Mozambique remains dependent upon foreign aid for much of its annual budget. Foreign financing of the budget stands at about 90%. This is even after the country benefited from debt cancellation under the Highly Indebted Poor Country (HIPC) initiative and the Multilateral Debt Relief Initiative (MDRI). Resources released as a result of the debt relief are being allocated to anti-poverty programs contained in the Plan of Action for Reduction of Absolute Poverty (PARPA II). Debt relief from the World Bank to Mozambique between 1999 and 2007 under HIPC and MDRI amounts to US$2.8 billion (US$0.9 billion from HIPC and US$1.9 billion from MRDI).

The performance of Mozambique's exports has been strong, growing at about 22 percent annually (in US dollar terms) between 1996 and 2003, mainly due to exports from natural gas and aluminium. Aluminium, electricity and gas account for nearly 80% of exports. This expansion is substantially faster than that of world exports of about 6 percent. As a result, Mozambique is one of the few countries in Africa whose share in world exports has risen. However, the traditional agricultural export base is still weak and poorly diversified having grown at only 2.3 percent during the same period. Despite the increased export earnings a substantial trade imbalance persists.

During the 1990s, Mozambique became an attractive location for foreign investment particularly from South Africa, which became Mozambique's biggest trade partner, accounting for 40 percent of Mozambique's imports and 20 percent of its exports. South African investment represents 35 percent of foreign direct investment (FDI) inflows to Mozambique. Table 1, provides in a summary form the main economic and financial indicators.

Monetary Policy Framework - The conduct of monetary policy in Mozambique has evolved from a regime of administrative setting of credit limits and net domestic assets for the banking system that operated before December 1999 to the current regime of indirect instruments of monetary policy. The broad objective of the Monetary Policy Strategy of Banco de Mozambique (BOM) is to assist the government in the attainment of its economic objectives as elaborated in PARPA II. Its primary objective however is maintenance of price stability by controlling inflation to a single digit. The current inflation target is 6%. To achieve this objective, BOM has since 2006 adopted a monetary targeting framework with broad money aggregate (M3) as its intermediate target and the reserve money aggregate as its operational variable. In the conduct of monetary policy, BOM uses Open Market Operations, Rediscount Facilities, and Cash reserves. In the recent period, BOM has faced the challenge of currency appreciation occasioned by large inflows of foreign aid and inflationary pressures resulting from government spending fuelled by the aid money. To counter these threats, BOM has increasingly intervened through Inter-bank Foreign Exchange Market to mop up excess liquidity.

Foreign Exchange Regime - Mozambique has a managed floating exchange rate regime whereby demand and supply factors influence the levels of the exchange rate. Commercial banks may buy and sell foreign exchange to individual customers on a fully negotiable basis. The Bank of Mozambique introduced a foreign exchange auction system in January 2005. Auctions are held

Table 1: Selected Economic and Financial Indicators

	2001	2002	2003	2004	2005	2006
Population (Million)	18. 07	18.43	18.79	19.13	19.59	20.04
Nominal GDP (MZN Bn)	76.54	98.88	113.90	133.32	157.35	1 93.32
GDP Real Growth Rate (%)	13.1	8.2	7.9	7.5	6.2	8.5
Nominal GDP per Capita (MZN)	4,236	5,255	6,061	6,969	8,032	9,646
91day treasury bill rate %						
Overall inflation (%)	21.9	9.1	13.8	9.1	11.2	9.4
Exchange Rate MZN/$	23.0	23.5	23.78	22.58	24.2	-

Source: IMF World Economic Outlook September 2007 Database.

bi-weekly. The Markets Department of BOM has a market intelligence unit which monitors the exchange rate movements in order to intervene when necessary. Mozambique still avails itself of the transitional arrangements under Article XIV of the Fund Articles of Agreement, but has eliminated all Article XIV restrictions. It maintains, however, restrictions on the making of payments and transfers for some current international transactions subject to Fund approval.

1.2 Overview of the Payment System

The payment system in Mozambique is undergoing rapid change in response to global developments and transformation from a centrally planned economy into a market-oriented one. A number of projects are on-going to modernise the payment systems. These projects include: introduction of an RTGS in 2008 to facilitate prompt and final settlement; and introduction of an ILF to facilitate management of credit and liquidity settlement.

General Legal Aspects - The legal framework establishing the payment system in Mozambique is fragmented. It comprises the Organic Law of the Banco de Mozambique (Law 1/92 of 3 January 1992) and provisions in form of circulars referred to as “Governors Notices”. These provisions govern the overall operations of the central bank and financial credit institutions. So far, 8 such provisions have been made. The legal framework for payments systems in Mozambique will be strengthened substantially when the National Payments law passed by Parliament in October 2007 receives Presidential assent and becomes operational in 2008. This law provides for the infrastructure development by the Bank in conjunction with Mozambique Bankers Association. It includes the provisions for an RTGS and possible intra-day facilities for the payment system. The other significant laws that influence payment systems are the Cheque Act and the Uniform Law on Bonds.

Institutional Framework - The main institutions that provide payment services include commercial banks, credit cooperatives, leasing companies, financial corporations and forex bureaus. Some of the banks offer microfinance services to low income individuals with no access to the traditional banking system. The financial system in Mozambique currently, comprises the Bank of Mozambique at the apex, thirteen (13) commercial banks, two (2) leasing companies, six (6) credit cooperatives and twenty three (23) financial corporations. Out of the existing commercial banks, three deal with micro-finance business and offer services to low income individuals who have no access to the traditional banking system. BOM also manages a data base of loans and advances provided by financial institutions. The data maintained by BOM is made available online to institutions for credit reference as necessary.

The banking sector is dominated by four commercial banks holding 87.9% of the asset base, 84.8% of the credit, 91.4% of the deposits and 75.7% of the capital base. Statistics3 indicate a clear concentration of the resources of the banking system in these banks leading to oligopolistic tendencies in the setting of prices for financial products and services. The credit cooperatives are basically small with holdings of 1.97% in assets, 0.5% in deposits, 1.1% in credit and 3.8% of the capital base. The geographical distribution is also poor with most institutions having their branches in the capital city, Maputo. Out of 231 bank branches in 2006, 105 were located in Maputo city. In addition, only 28 out of 128 districts in the country had a functioning branch of a bank.

Major Payment Instruments and Media - Banking institutions offer both cash and non-cash instruments. Cash is the most widely used payment instrument with the Metical (MZN) as the legal tender. Other currencies that are readily used for payments include GBP, USD and ZAR. Non-cash payment instruments include cheques, EFT, direct debits and credits, debit cards and credit cards which can be used at the point of sale and ATM services mainly in the major towns. Among the non-cash payments instruments the cheque is the preferred instrument. Other payment instruments are still evolving. Cheques, credit transfers, international credit cards, and traveller's cheques make international payments.

The main payment media are the clearing and settlement circuits for both cheques and payment cards. The Clearing House located at and owned by BOM is used for the settlement of inter-bank transfers involving, local domestic currency cheques, locally issued foreign currency cheques, credit transfers and treasury bills. The other significant media for payment is the international and local payment cards riding on the ATM and POS terminals.

Role of the Central Bank - Under the Organic Law of Banco de Mozambique, the central bank is charged with the responsibility of supplying currency to the public in form of notes and coins. The central bank is also responsible for regulation and supervision of the financial institutions and conduct of monetary policy. One of the principal functions of BOM is being banker to the government. In that capacity, BOM is the main receiving and paying agent for the government of Mozambique. BOM is also banker to other financial institutions that provide payments services the reason for which they maintain accounts with it to facilitate payment settlement and conduct of monetary policy. This forms the basis on which BOM operates the clearing house and is steering the formalization of the national payments system. The role of BOM in payment services will expand and become more defined when the National Payments law becomes effective.

3 Herfindahl-Hirschman Index for 2006 stood at loans and advances 0.262, deposits 0.256 and assets 0.240. According to US Department of Justice, a HHI greater than 0.180 reflects a highly concentrated industry.

Role of other Private and Public Sector Bodies - The clearinghouse is owned and run by the central bank. The involvement of other participants is minimal. An Association of Mozambican Banks (AMB) that is the industry association exists. However the association is in formative stage and does not play a very active role. A loose technical arrangement exists currently although there are plans for the association to be more actively involved in policy and planning for the industry when the payments law is operational.

2.0 The Inter-bank Foreign Exchange Market

2.1 *Evolution and development of the Market*

The emergence of IFEM may be traced to January 1996 when the Exchange Law governing foreign transactions was enacted. Since 1997 three categories of foreign currency accounts have been allowed: i) individuals and corporate bodies who are resident subject to the terms and conditions defined by the Bank of Mozambique; ii) individuals and corporate bodies who are residents may also hold forex accounts abroad and; iii) individuals and corporate non-residents may hold forex accounts in financial institutions who are authorised forex dealers. Banks are permitted to open both deposit and loan accounts in foreign currency

2.2 *Nature and Operations of the Market*

Rules Governing the Operations of the Market -The foreign exchange operations are governed by the Exchange Law No. 2/96 of 4th January, 1996. The law establishes the basic legal and regulatory framework under which the interests of the State are protected. It governs the forex operations carried out by resident and non resident individuals and corporate bodies on monetary assets held within Mozambique and abroad and the rights thereof. Foreign currency is defined as notes and coins constituting legal tender in the country of issuance and any other form of remittance expressed in currency or units of account in clearing and other international payments. Generally, export and import of currency is permitted subject to free limits set by BOM. However, the following operations are subject to registration in accordance with regulations issued by BOM:

- i) Gold, silver, platinum and other precious metals in form of coins, bars, ingots or any processed form;
- ii) Foreign currency;
- iii) The opening and transaction of accounts by non residents;
- iv) The opening and transaction of accounts by residents either in foreign currency or units of accounts used in clearing;
- v) Transactions in bills of exchange, notes, cheques, credit cards and transactions invoiced and payable in foreign currency between residents and non residents;
- vi) Granting of credit through bills of exchange, discounting of bills payable in domestic currency by non residents whether as payer, payee, guarantor or endorsee or issuer;
- vii) Acquisition or alienation of a coupon of a foreign credit instruments;
- viii) Operations between residents and non residents expressed in domestic currency or units of accounts that may involve partial payment of commodity, current invisibles or capital transactions; and,
- ix) Import, export or re-export of precious metals in coin, bar, ingots or any unprocessed form; domestic or foreign currency notes and coins and other means of external payments; and domestic or foreign bills of exchange, stocks or bonds and public debt instruments.

The Bank fixes amounts that are not subject to registration and exchange control approval. The current limit for individuals is USD 5,000.00. Amounts in excess of this level require express authority. The transactions allowed within the limit include:

- i) Travel abroad;
- ii) Study abroad;
- iii) Expenses related to fairs and other promotional events;
- iv) Contributions to international organisations;
- v) Subscriptions to magazines, newspapers and other publications; and,
- vi) Acquisition of written and other materials for scientific and artistic work.

Major Market Players - The major players are commercial banks and their corporate customers and forex bureaus. BOM is also an active player in the market as part of its conduct of monetary and exchange rate policy.

Market Operations - There is an active IFEM in Mozambique. BOM and other authorised forex dealers engage in active forex trading. Firm quotes of USD 100,000 must be honoured by all dealers. Trading is online and must include a two way quote for a bid and offer rate. The banks bid and offer rate are regulated and may not exceed a margin of 10%. Participation by the BOM includes but is not limited to availing liquidity to the market and engages the market through an auction and direct sales. The range of currencies traded is very wide - currently 34.

Account opening procedures follow normal KYC including anti-money laundering procedures. Currencies approved for operation of FCAs include USD, GBP, Euro and ZAR. The minimum balance to operate an account is set at USD 200. The funding of the accounts is limited to deposits of notes and coins, cheques, or travellers cheques; bank account transfers; and deposits of other means of payments accepted by the banking system. Transfers abroad or to nonresidents are subject to exchange control regulations. All receipts in excess of USD 10,000 must be reported to the Bank. Non Resident may hold forex accounts which may be funded in the same way as those of the residents. However, local currency accounts for non residents individuals and corporate must be funded through Forex conversions; service and technical assistance contract fees approved by technical institutions; and other sources approved by the Bank of Mozambique upon specific application by the interested party.

Table 2 shows that demand deposits comprise the main form of FCA followed by time deposits. In the first six months of 2007, however the share of foreign currency demand deposits has fallen by 3.3 percentage points from 72 to 68.7%, while that of time deposits has risen by nearly a similar amount from 27.8 to 30.8% perhaps reflecting stability of prices and exchange rate.

Table 2: Composition of Foreign Currency Deposits

Deposit Type	Dec 06		Apr 07		May 07		Jun 07	
	Value	%	Value	%	Value	%	Value	%
Demand 1	3,444	72.0	114,871	71.97	14,895	69.82	14,722	68.70
Notice	125	0.66	126	0.60	113	0.52	114	0.53
Time	5,239	27.85	5,663	27.41	6,215	29.13	6,60	30.77
Total	18,808	100.00	20.660	100.00	21,233	100.00	21,448	100.00

Source: Bank of Mozambique

Foreign currency loans are also allowed subject to approval by the Bank. To qualify, the proposal must contain a justification of the economic and social benefits and how the repayment will be financed. Loans requiring government guarantee are not allowed. Payment of principal and interest must be approved by the Bank. Commercial banks offering loans in forex must report the same to the Bank. Loans in foreign currency are much more attractive because they carry an interest rate of between 10% - 12% while those in local currency carry a rate of about 22%. The rates are dictated by market forces of supply and demand.

However, it should be noted that on the forex loans, an element of control exists through the requirement that financial institutions should make provisions of up to 50% for foreign currency loans which may influence the interest rates charged on such loans.

The Role of the Central Bank and Intervention Mechanism - According to its statutes, BOM is required to provide credit facilities to the banks under specific requirements in order to facilitate payment settlement. It may also be noted that Mozambique being HIPC, receives a lot of foreign aid through public and private channels.

As a result, BOM is frequently obliged to intervene through issuance of short term domestic debt or direct sales of forex to sterilise any effects that the inflows from the donors and other multilateral agencies may have on forex market.

The mopping up of excess liquidity through sterilisation and sale of forex may have helped to keep exchange rate stable in view of the thin nature of the market due to the size of the economy. When selling or buying forex, the Bank uses the auction process and uses the highest market rate of that particular day in the inter-bank market with a margin of 2%.

In performing its role of supervising and regulating the IFEM, BOM has set a forex exposure limit for commercial banks at 10% of their statutory capital requirement. The Bank monitors compliance with regulations governing IFEM through the returns on all forex dealings submitted to its Supervision Department. These returns include:

- i) Daily returns on receipts and payments
- ii) Weekly returns on receipts and payments
- iii) Quarterly returns on receipts and payments
- iv) Monthly returns on forex receipts and payments according to the residential status

3.0 Local Foreign Currency Cheque Clearing Arrangements

Historical Perspective - Prior to 1992, there were only three major commercial banks in Mozambique. In 1992, bank of Mozambique was transformed into a central bank and ushered in a period of rapid transformation and growth of the financial sector. In 1996, Mozambique liberalised its forex market with enactment of the foreign exchange law. However it was not until 1997 that commercial banks were permitted to operate foreign currency accounts for both residents and non-residents subject to the Exchange Control Law.

Nature The Major Players - The major players are the commercial banks and their customers. Rules Governing the System: The rules governing the operation of LFCCC are not well defined. There is a loose technical arrangement for settlement between participating banks mainly for the purpose of reducing the clearing period. The involvement of BOM in LFCCC is minimal mainly provision of space.

Role of the Central Bank - According to the Organic Law of Banco de Mozambique, BOM is responsible for providing the inter-bank settlement service for cheques and other settlement instruments. In fulfilment of this role BOM oversees the clearing and settlement arrangements of both local and foreign cheques.

The Clearing and Settlement Steps - Clearing of cheques is conducted through the Automated Clearing House. The role of the ACH is to facilitate settlement payment between participating institutions. The rules of ACH demand that exchange and clearing be completed twice in a day. The ACH receives electronic files and uses the netting off system in the settlement arrangement. Physical items are exchanged the following clearing day. Banks have clearing limits with the central bank which are collateralized by treasury bills. This arrangement only applies to the clearing of local currency items. In the case of LFCCs clearing is done manually. Settlement is on a gross basis. The clearing cycle takes seven days (T+7). This provides banks with ample time to transfer funds for settlement to their accounts. Unpaid items are always returned fairly quickly usually on the following clearing day. The BOM holds accounts in USD, GBP, Euro and ZAR for settlement purposes.

Management of Settlement Risk - The cheques law requires that all cheques issued must be paid up to MZN 250 or equivalent. If a drawer issues a cheque for which there are no supporting funds, a report is sent to the credit reference data base maintained by BOM and notice is issued for the customer to remedy the situation within 10days. If the customer fails to honour the requirement, or commits the offence a second time, he is blacklisted and cannot transact in cheques again. As far as the overall system is concerned BOM is obliged by its statutes to provide accommodation to banks against specific financial instruments as collateral. However this accommodation does not cover LFCCs clearing.

Management of Operational and Other Risks - The LFCCC system is in its formative stages. It has yet to formulate and design procedures to protect it against risks such as system failure, fraud etc. However, credit risk on forex loans has largely been mitigated by requirements imposed by BOM on financial institutions to make provisions of up to 50% on the forex loans in their books.

Implications on Monetary and Financial System Stability -The large inflow of forex from various private and public donors poses serious threat to monetary and exchange rate stability if not well managed because of low absorptive capacity of the economy. The BOM recognises this potential threat and has consequently left out FCDs in its definition of money so that it can use inter-bank forex operations as a tool for monetary policy and exchange rate management.

Application and Compliance with Best Practices - The BIS core principals provide for a legal framework with rules and procedures that are clearly articulated and well understood by all participants. They also provide for proper management of credit risk, timely and completion of settlement, finality of the settlement, security, practicability, and governance. The BOM provides an ACH which is a secure system and is practical. The settlement is on a net basis which clearly covers the credit risk in banks. The provision of rediscount facilities by the BOM provides for liquidity risk since financial institutions are able to access funds to cover any shortfalls in their accounts. However the promptness and timely completion of the settlement is hindered by the absence of an RTGS. While BOM has made progress in setting up a secure system of settlement for the local currency cheque clearing through the ACH, the LFCCC system side is weak and needs a lot of development to comply with international best practices.

4.0 Intra-day Loan Facility and RTGS

The Nature of Operations and Policies - At present there is no intra-day loan facility for locally issued foreign currency cheques.

Role of RTGS and Intra - day Liquid Facility -Presently there is no RTGS. However this is under development. The recently enacted payments law is expected to be operational in 2008 to provide a framework for establishment of intra-day facility. Operational modalities are still on the drawing board and may include forex cheque clearing arrangements.

Linkage with Foreign Currency Transactions - In absence of an ILF and RTGS, there is no linkage with foreign currency transactions.

5.0 The Role of the Central Bank in the Development and Operation of LFCCC System

The Central Bank Oversight Role - The BOM has a formal oversight role over the national payment systems embedded in its statutes. Its specific roles on LFCCC will become more explicit when the National Payments law becomes operational.

Central Bank Development Role in FCCC Arrangement -As observed above the BOM is playing a major role in the development of a clearing system that would cater for both local currency and foreign currency clearing system. Among the projects in the pipeline are the introduction of RTGS and intra-day facilities.

6.0 Dollarisation of the Domestic Economy

Dollarisation Issue in the Domestic Economy - Dollarisation has been and still is a major issue in Mozambique. In terms of classification, Mozambique may be categorised as 'unofficially dollarised'. That notwithstanding, foreign currency is readily accepted for payment alongside the domestic currency. According to a survey carried out by the IMF (Country Report No. 07/258) deposit dollarisation stood at 57% in 2002. Table 3 shows that since IMF survey in 2002, the level of deposit dollarisation has reduced slightly to about 49% by June 2007.

Table 3: Indicators of Dollarisation in Mozambique

Indicators	Dec 06	Apr 07	May 07	Jun 07
Total Banking System Deposits	46,431	48,430	48,922	48,900
Forex deposits	18,808	20,660	21,233	21,438
Forex/Total Deposits (%)	40	43	43	49
Total Claims on the Economy	27,398	27,552	28,220	28,246
Claims in Forex on Economy	8,757	8,826	8,918	8,944
Forex Claims/Total Claims (%)	32	32	32	32

Source: Bank of Mozambique

A number of factors are responsible for the high level of dollarisation. These include: The country is still suffering from the trauma of social and economic instability in which high inflation and forex shortage was prevalent; There are a large number of foreign NGOs and some mega projects engaged in the economic and social rehabilitation of the country after the civil war; Economic integration in the country is still a challenge due to distances involved and poor communications systems. In this connection, some parts of the country are dependent on the neighbouring countries for supplies of basic commodities and production inputs; and borrowing in foreign currency denominated loans is about 10 percentage points cheaper than in local currency.

Although no specific study has yet been undertaken to find out the impact of dollarisation in Mozambique, officials at BOM are keenly aware of its existence, though not overly worried about it. Their view is probably supported by realities in the market: there is no parallel market for forex; and even the level of arbitrage is less than 2%. Despite this calmness, there are significant concerns about the level of dollarisation. First the level of exposure for both banks and citizens is very high in the event of a major movement in exchange rate. A major appreciation of Metical could wipe off the wealth of many residents while depreciation would make it difficult for borrowers to service their foreign currency denominated debts. The other impact of dollarisation is its influence on choice of instruments for monetary policy management. BOM therefore has chosen interventions in IFEM as its main instrument for sterilising the liquidity injected by donor money. Mozambique receives over 50% of its budget resources from external donors.

Mitigation Measures - In order to address the problems posed by dollarisation BOM instituted
the following measures:

i) The minimum deposit to open an FCA is set at USD 200. This ensures that not everyone can do it except those with high incomes and most likely receive earnings in forex.
ii) Transfer of local currency funds into FCAs is not permitted.
iii) Banks foreign currency exposure is limited to 20% of core capital and 10% to a single currency
iv) To discourage contracting of loans denominated in foreign currencies the Bank issued guidelines requiring commercial banks to make provisions of up to 50% of the loan if it is to a non-exporter. This resulted in decline in foreign currency loans from over 75% previously to the current levels of 32%.
v) The government of Mozambique is also making efforts to raise level of domestic revenue in local currency for budget financing.

7.0 Lessons Learnt

The main lesson from Mozambique is that a few commercial banks are capable of organising themselves into an open architecture LFCCC arrangement if supported by a central bank. BOM is not directly involved in the LFCCC arrangement, but it has provided a forum and accommodation on which the local commercial banks have organised themselves into an open architecture LFCCC system. It is worth noting, however, that the main financial institutions in Mozambique are off-shoots of banks from South Africa. The other major lesson from Mozambique is that a high level of dollarisation need not threaten monetary and financial stability provided the appropriate choice and mix of intervention instruments is applied. 4 The IMF Country Report No 7/258 was not specifically directed at finding out the impact of dollarisation.

6.0 NAMIBIA

1.0 Introduction

1.1 Overview of the Country

Structure of the Economy and Economic Trends - Real GDP growth was estimated to have declined to 4.1% in 2006 from 4.8% in 2005. The economy is projected to grow at around 4.8% in 2007, driven by increased output in agriculture, fishing, construction and tourism sectors. In the last six years, Namibia had managed to bring down inflation down to a single digit. Recently, however, inflation pressures have began to mount fuelled by rise in fuel and food prices. In 2006, average inflation rose to 5.1% from 2.3% in 2005. In 2007, average inflation was expected to rise further to 6.0%. Table 1 provides a summary of the key economic and financial indicators for the country.

Table 1: Selected Economic and Financial Indicators

	2001	2002	2003	2004	2005	2006
Population (mn)	1.864	1.911	1.957	2.0	1.957	1.992
Nominal GDP (N$)	27,686	32,908	33,842	36,496	39,711	46,971
Real GDP growth rate	2.4	6.7	3.5	6.6	4.8	4.1
Cash reserve ratio (?)	1,0	1,0	1,0	1,0	1,0	1,0
91day treasury bill rate	9.13	11.93	7.35	7.49	6.9	8.36
Overall inflation (%)	9.2	11.4	7.2	4.2	2.3	5.1
Exchange Rate/US$	8.60	10.52	7.52	6.45	6.41	6.89

Source: Central Bank of Namibia

Monetary Policy Framework - The policy objective is to maintain a fixed exchange rate arrangement with the intermediate monetary policy targets being MI, M2 and M3, with the inclusion of foreign currency holdings by residents. Main monetary policy management instruments are cash reserve ratio, OMO and the Bank Rate. Interest rates are freely determined by the market forces of demand and supply. The low-interest rate that prevailed during 2005 continued during the first half of 2006, before the Bank rate was increased by 200 basis points during the second half of the year.

Foreign Exchange Regime - The exchange rate regime is fixed peg. The Namibian Dollar (NAD) is pegged one to one to the South African Rand (ZAR). The NAD depreciated against global trading currencies like the US Dollar, Pound Sterling and the Euro during the 2006, due to the strengthening of these currencies against the South African Rand.

1.2 Overview of the Payment System

General Legal Aspects - Laws governing payments system operations in Namibia are the Payment System Management Act, 2003 (Act No. 18 of 2003), Financial Intelligence Act of 2006 and the Bank of Namibia Act, 1997 (Act No. 15 of 1997).

Institutional Framework - Apart from commercial banks other financial intermediaries that provide payment services in Namibia include the Post Bank - Namibia Post Limited. There are four banking institutions (Depository Institutions) in Namibia with a branch and agency network of 142 with total assets amounting N$ 33,397 million.

Major Payment Instruments and Media - The main instruments used for payments are cash, cards, cheques and electronic funds transfer. Table 2 shows the value of transactions among the commonly used payments instruments.

Table 2: Payment System Instruments in Namibia in 2006 (in billion NAD)

Cash	Cheques Cards	Credit Cards	Debit	EFT	Others	Total
N$0.763	N$50	N/A	N/A	N$40	N$220	N$311

Source: Central Bank of Namibia

The payment settlement media include the cheque clearing system through the automated clearinghouse (ACH), which is owned by the banking institutions. The ACH has one session daily. Namclear Pty Limited, a legal entity established under the Companies Act by banking institutions runs the clearinghouse. There are rules governing the clearing of payments in the clearing house. The industry association enforces the clearinghouse rules. The clearing cycle is T + 7 days. There is 'cheque capping' arrangement equivalent to US$770, 000 but from 2008 it will be US$8,000. Namibian Inter-bank Settlement System (NISS) was implemented on June 10, 2003.

The Role of Central Bank - The roles of the Bank of Namibia (BON) are system development, provider of the settlement services, implementation of system's laws and regulations and related policies and the oversight role. Apart from these roles, the Central Bank encourages payment systems participants to develop more efficient ways of making payments. The BON has a formal legislation role through the Payment System Management Act, 2003 (Act No. 18 of 2003)

The BON has designated SIPS through its oversight functionality. Measures taken to manage the payment system risks include: Provision of intra-day and overnight credit facilities; back-up facilities for payment systems; Implementation of laws, regulations and policies (for example National Payment System Oversight Framework); and continuous settlement of transactions throughout the day through the RTGS system. There is also a 7-day repurchase facility. The BON has ensured that the system is compliant with the Core Principles. There are arrangements in place to avoid settlement risks at the payment-clearing house. For example, cheques are currently capped at US$770,000. Also credit is made accessible to payment system participants upon presentation of eligible securities that include Government Bond, Treasury bill and Central Bank bill, and failure to settle arrangements. The BON also takes the responsibility of ensuring that settlement goes through if a payment system participant fails in a given concurrent batch.

Role of Other Private and Public Sector Bodies - The industry association - the Payment Association of Namibia (PAN assists the BON in managing specific aspects of the National Payment System while the Namibia Financial Institutions Supervisory Authority (NAMFISA) regulates non-bank financial institutions including the securities market. The Payment System Management Board promotes the payment system reforms including involvement and keeping abreast with the international developments in the payment system arena.

2.0 Inter-bank Foreign Exchange Market

Nature and Operations of the Market - All legal payments and receipts in foreign currency are allowed; there are virtually no controls over current account transactions. Approval is not required with respect to investments into Namibia. However, prior approval is needed for the payment of amortization of loans or depreciation of direct investments.

Banks are allowed to operate foreign currency denominated accounts, which include current, savings and fixed deposit accounts. Categories of the accounts include Customer Foreign Currency (CFC) accounts for importers and exporters as sub-account in the name of client in the bank's nostro account; non-resident accounts on behalf of non-resident clients in order to distinguish between normal clearing accounts and foreign exchange trading accounts. The aim of this requirement is to isolate these transactions for monitoring purposes and it does not affect the transferability of funds. Commercial banks are also allowed to book loans in foreign currency. LIBOR is the interest rate benchmark for fixing interest rates for deposits and loans and is influenced by the maturity periods and amounts, supply and demand for dollars based on daily quotations by Reuters, inter-bank rates and discount rates. Main deposit currencies are the USD, GBP, EURO and ZAR. One has to demonstrate inflow of foreign exchange earnings to be allowed to open a forex accounts and one is allowed to move funds from the local currency accounts to forex accounts and vice versa. Table 3 shows that level of the market penetration by the forex operations is fairly small.

Rules Governing the Operations of the Market - Rules and regulations governing the operations of inter-bank foreign exchange market are the Exchange Control Act via the Currency and Exchanges Act, 1933 (Act 9 of 1933),

Rules Governing the Operations of the Market - Rules and regulations governing the operations of inter-bank foreign exchange market are the Exchange Control Act via the Currency and Exchanges Act, 1933 (Act 9 of 1933), Guidelines from the BON, Exchange Control Rulings and the commercial banks own KYC and Code of conduct for dealers.

Major Market Players - Main market players are the private corporations, individuals, Government enterprises and the international bodies, NGOS and Foreign Missions.

Role of Central Bank and Intervention Mechanism - The BON intervention is limited to sales and purchases of forex to stabilise the market. The BON also carries on-site surveillance and off site through weekly and quarterly mandatory returns.

3.0 The Local Foreign Currency Cheque Clearing System

There is no open architecture for the clearing and settlement of locally issued cheques. Cheques are exchanged bilaterally through a club arrangement for the exclusive membership while non-members device their own clearing and settlement systems.

4.0 Dollarisation in the Domestic Economy

Namibia may be categorised as a semi-officially dollarised economy. In Namibia, the ZAR serves as the 'other legal

Table3: Depth of Forex Operations within the IFEM (NAD)

	2001	2002	2003	2004	2005	2006
Total deposits of banking system	10,525,149	13,518,359	15,058,718	17,422,835	21,074,46 4	26,406,160
Total local currency deposits of banking system	634,910	844,663	793,691	425,765	303,978	758,561
Total forex deposits of banking system	9,890,239	12,673,696	14,265,027	16,817,070	20,770,486	25,647,599
Total loans and advances of banking system	11,817,036	15,513,691	16,910,303	19,363,493	22,014,512	25,193,192
Total foreign currency loans and advances of banks	705,464	768,312	504,705	376,192	143,330	245,883
Total local currency loans and advances of banks	11,111,572	14,745,379	16,405,598	18,987,301	21,871,182	24,947,309

Source: Central Bank of Namibia

tender'. However while the ZAR has legal tender status, it does not dominate bank deposits as shown in Table 3 and 4. The ZAR plays a secondary role to NAD in payment of wages, taxes and every day expenses such as grocery and utility bills. Under the dollarisation regime, Namibia has retained an independent central bank which has corresponding latitude to conduct its monetary policy. The primary factors that have given rise to dollarisation of the economy are historical ties with South Africa and its membership, to SACU and the Common Monetary Area (CMA). Dollarisation has had positive impact on the Namibian economy in many ways: Firstly, Namibia is compensated for the use of the Rand (via Seigniorage); secondly, the CMA arrangement ensures exchange risks are kept to a minimum and financial stability is promoted; thirdly, by being aligned to South Africa which is the main trading and investment partner the country has benefited from the low inflation and prudent management of the South African economy. The only negative aspect cited, was liquidity management.

The BON's policy stance on dollarisation is that it is committed to the continuous repatriation of currencies. The BON has not taken any measures to mitigate against the adverse impacts of dollarisation, as the Rand is legal tender in Namibia

7 .0 Lessons Learnt

Namibia is one of countries in the study that is semi-officially dollarised. It is also one country where dollarisation has been viewed positively due to its advantages in stabilising the country's exchange rate and external fundamentals.

Table4: Indicators of dollarisation in the Namibian Economy

Parameters	2001	2002	2003	2004	2005	2006*
Forex Deposits/Total Deposit Liabilities (%)	2.92	9.42	7.68	5.88	1.50	2.68
Forex Lending/Total Loan Assets (%)	2.91	0.10	0.12	0.23	0.17	0.16
Forex Deposits/M3 (%)	3.05	10.63	8.56	6.73	1.7	2.99
Forex Deposits/GDP (%)	1.15	4.28	3.71	2.95	0.82	n.a
Imports/Exports (%)	119.36	136.79	115.55	112.84	96.42	94.22

Source: Central Bank of Namibia, * Provisional, n.a - not available

7.0 RWANDA

1.0 Introduction

1.1 Overview of the Country

Structure of the Economy and Economic Trends - Rwanda is one of the most densely populated countries in Africa with a population density of 337 persons per sq. km. Agriculture and rural development are the mainstay of economy and key sources of growth, export earnings, employment and poverty reduction in the medium term. Although the sector contributes about 35.6% to GDP compared to 44.6% for services sector, it accounts for nearly 90% of employment. Agriculture is mainly at subsistence level, with limited participation in the market economy. In any given year, about 30% - 50% of the rural population may not produce a marketable surplus. The other significant sectors are manufacturing and construction and public works which respectively account for 6.4% and 9.8% to GDP.

The economy of Rwanda has demonstrated considerable resilience after the genocide of 1994 which wiped out nearly one-third of its human capital. During the period 2001 - 2006, GDP growth rate averaged 6.7% and in some over 10% making one of the fastest growing countries in Eastern and Central Africa. Rwanda has since 1997 been able to control inflation to below 10% except in 2004 when it reached 12%. The high rate of growth and recovery was fuelled by extensive donor financing and public works reconstruction. Despite this colourful performance, Rwanda's economy remains very fragile: Firstly being an agricultural country, the vagaries of weather impact significantly on its economic performance; Secondly, it is very susceptible to external shocks. These include international prices of its export commodities - coffee and tea. Being a landlocked country, Rwanda is highly affected by socio-political events in the countries on its trade routes such as the recent political turmoil in Kenya. In addition, Rwanda depends as much as 60% for its budgetary financing on donors. Rwanda is a recipient of enhanced aid under the HPIC and MDRI. Since 2005 the country has been receiving about US $500 million per annum in budget support. Table 1, below provides a summary of the key economic indicators.

Monetary Policy Framework - The objectives of monetary policy are price stability. BNR uses broad money (M2) as its intermediate target. To achieve the monetary targets, BNR uses a combination of Open Market Operations and foreign exchange sales. Foreign exchange sales are actively used to support monetary policy since the market lacks adequate domestic debt assets and to avoid crowding out of private sector. This has however resulted in appreciation of RWF. To overcome the shortage domestic script and improve liquidity management the authorities plan to introduce longer-dated securities. The main challenges of monetary policy arise from foreign aid absorption and the resultant liquidity management.

Foreign Exchange Regime - The objectives of the current exchange rate policy is to preserve the value of the Rwanda Franc (RWF) in a market determined way. Until 6 March, 1995 the RWF was pegged to the SDR when Rwanda switched to market-determined exchange rate system. On December 1998, Rwanda acceded to the obligations of IMF Article VIII to maintain a system of no restrictions on payments and transfers for current international transactions. In February, 2001, a system of weekly foreign exchange auction system was put in place imposing a limit of +/- RWF 5 margin by which the exchange rate could vary from the previous day sale of foreign exchange to banks. This led to reclassification of exchange rate regime to the conventional fixed peg in the IMF's September 2006 Quarterly Report on Exchange Arrangements. In June, 2007 the auction system was abandoned in favour of a free floating system under which the BNR sells foreign exchange to banks on demand at the average accounting rate for that day. The auction system was abandoned because it was hampered by a lack of effective competition.

1.2 Overview Of The National Payment System

General Legal Aspects - Laws governing payments system in Rwanda are Central Bank Law No. 11 of 1997 as amended in October 2007, the Banking Law No. 8 of 1999 and Clearing House Rules and Regulations.

Institutional Framework - The financial structure in Rwanda is in early stages of development. It comprises the central

Table 1: Selected Economic and Financial Indicators

	2001	2002	2003	2004	2005	2006
Population	7,312,756	7,398,074	7,810,056	7,954,0	8,440,820	8,648,248
Nominal GDP (in billion of RWF)	741.9	781.5	955.2	1,137.9	1,331.6	1,631.6
Real GDP growth rate 1995	9.7	11	0.3	5.3	7.2	6.5
Cash Reserve Ratio	0.26	0.2	0.18	0.19	0.20	0.25
91day Tresury Bill Rate			10.81	12.51	8.86	9.6
Overall inflation (%)	3.4	2.0	7.5	12	9.1	8.9
Exchange Rate/US$	443.07	475.32	537.90	577.48	557.81	551.76

bank (BNR), 6 commercial banks, several forex bureaux, Savings and Credit Organisations, the National Post Office and over 100 micro finance institutions all of which offer payments services in Rwanda.

Major Payment Instruments and Media -The most commonly used payment instruments are cash, cheques and EFT. Cash transactions account for nearly 50%, cheques - 20% and EFT 16.7%. Large payments are usually effected through EFT and credit transfers. Other non-cash instrument such as credit and debit cards are at an early stage of acceptance.

The main payment media is the cheque clearing and settlement system which is operated through the clearinghouse. It is owned and supervised by NBR. It is also domiciled within NBR. Membership to the clearing house is open to NBR, all commercial banks, and the big micro-finance institution. The clearing house is semi-automated. It processes, cheques, credit and debit transfers and debit cards orders because there is a shared ATM and POS network. The clearing cycle for local cheques is T+2. The clearing house convenes twice daily - at 10.00 hrs and at 15.00 hrs. Rwanda does not currently have an RTGS although there are plans to introduce it soon. There are no arrangements for intra-day loan facility. Each member is expected to ensure that their accounts have sufficient funds to cover their debit balances. If a member does not have enough funds to settle, the clearing house supervisor suspends the effects of the clearing until the account in question has sufficient funds. If by 2:30 p.m. of the same day, the funds are still insufficient, an exceptional closing session is held and the clearing includes all the members except the defaulting member. In this case, the items presented to the latter and those presented by it shall be returned. The Role of Banque' National du Rwanda -The role of BNR is to oversee the payment system, settlement and credit service provider to the system. It is also a participant in the system. The BNR does not have a specific legislation over the payments system. A national payment strategy to pave the way for specific payments legislation is under preparation and is expected to be ready by September 2008. However the BNR under its own statute is empowered to oversee the payments system.

Role of Other Private and Public Sector Bodies - The other significant payments system bodies include SIMTEL which provides the infrastructure for ATM and POS networks. Another body is the National Post Office which provides a network for local money transfers. There are also other bodies that provide international money transfers e.g. the Western Union, MoneyGram etc.

2.0 Inter-bank Foreign Exchange Market

Nature and Operations of the Market - All legal current account transactions are fully liberalized. Controls are maintained on the capital account, although there is general admission of inward investments. Controls are maintained essentially for management of foreign exchange reserves and monetary policy.

Rules Governing the Operations of the Market - The rules governing the operations of the inter-bank foreign exchange market are the Exchange Control Act and guidelines from the BNR.

IFEM Operations - Banks and other institutions are allowed to operate foreign currency denominated accounts. The permitted accounts are current, savings and fixed deposits. One does not need to demonstrate inflow of foreign exchange earnings to be allowed to open a forex account. Transfers from local to forex accounts are not allowed. The major market players are BNR, government departments, private corporations and international bodies, including NGOs and foreign missions. A few private individuals also hold forex accounts. The major operational currencies are the US Dollar and the Euro. Interest rates are determined by the market forces usually LIBOR+ margin. Banks are also allowed to book loans and advances in forex for exporters only. Table 2 shows that the level of forex deposits in Rwanda's banking system exceeds 25% while forex loans and advances are not significant.

The Role of Central Bank and Intervention Mechanism - BNR participates in the market through sales and purchases of forex to smoothen the market operations but more importantly to influence commercial banks reserves in the

Table 2: Forex Deposits and Loans in Rwanda Banking System (RWF Billions)

	2001	2002	2003	2004	2005	2006
Total deposits of banking system	104.88	116.26	133.43	148.38	170.10	231.33
Total foreign currency deposits of banks	28.04	29.36	42.10	51.25	43.67	59.18
Total local currency deposits of banks	76.84	86.9	91.33	97.13	126.43	172.15
Total loans and advances of banking system	78.75	87.85	96.17	102.23	125.24	155.57
Total foreign currency loans and advances of banks	0.02	0.10	0.02	0.42	0.05	0.55
Total local currency loans and advances of banks	78.73	87.75	96.15	101.81	125.19	155.02

Source: National Bank of Rwanda

conduct of monetary policy. It also intervenes to fund its own accounts and to offload excess holdings of forex. To monitor the market, BNR undertakes onsite surveillance

3.0 The Local Foreign Currency Cheque Clearing System (LFCCCS)

Historical Developmental Perspective - Rwanda does not have an open architecture for clearing and settlement of locally issued forex cheques. Banks use bilateral arrangements or collections abroad to settle.

The Major Players - The major players are the banks and their corporate customers and correspondent banks offshore.

Rules Governing the System Operation - Not Applicable in Rwanda.

The Role of the Central Bank in FCCC - Not applicable in Rwanda.

4.0 Intra-day Loan Facility and Foreign Currency Transactions

Not Applicable in Rwanda.

5.0 Role of the Central Bank in the Development and Operationalisation of the LFCCC System

The Central Bank Oversight Role - BNR has no oversight role over the operations of the FCCC arrangement. It has also not endeavoured to promote its operations to make it more competitive and in line with the international best practices in this regard.

6.0 Dollarisation in the Domestic Economy

Rwanda may be categorised as unofficially dollarised country. The major foreign currencies are readily acceptable in most outlets for procurement goods and services even where prices are quoted in RWF. Residents of Rwanda are permitted to hold their financial assets in foreign currency. However foreign currency is not legal tender and most transactions including payments for utilities are settled in RWF. Nonetheless, a few high value transactions like real estate leases and imports of vehicles, equipment and machinery are invoiced and settled in foreign currency. Information on foreign currency denominated assets of Rwandese people is scanty. However based on commonly used proxies for dollarisation as shown in Table 3, it is apparent that dollarisation is an issue and significant in Rwanda.

Rwanda has not undertaken any specific study to ascertain the potential negative (destabilising) effect of dollarisation on the conduct of monetary policy and/or its positive (stabilizing) effect on the local banking system. However both the IMF and the Rwandese authorities are keenly aware of the complications on monetary policy that the large inflows of foreign aid that Rwanda receives for budget support causes. One complication from the large proportion of foreign currency deposits in the domestic banking system that was cited was inability to accurately determine money multiplier. As a result monetary targets were often off the mark. As a mitigation measure BNR actively uses IFEM to siphon liquidity from the market in order to attain its reserve money targets. For this reason, in its definition of broad money aggregate (M2), BNR excludes forex holdings. Secondly, BNR strictly enforces its foreign exchange rules, guidelines and regulations aimed at reducing foreign exchange risk exposure of the banking system.

Table 3: Dollarisation Penetration in the Rwanda Economy

Parameters	2001	2002	2003	2004	2005	2006
Forex Deposits/Total Deposit Liabilities (%)	27	25	32	35	26	26
Forex Lending/Total Loan Assets (%)	0.02	0.11	0.03	4.09	0.03	0.36
Forex Deposits/M2 (%)	21	20	25	27	20	21
Forex Deposits/GDP (%)	4	4	4	5	3	4
Imports/Exports (%)	289	349	309	257	261	268

Source: National Bank of Rwanda

8.0 SWAZILAND

1.0 Introduction

1.1 Overview of the Country

Structure of the Economy and Economic Trends - Swaziland is a member of the Common Monetary Area (CMA) including South Africa, Namibia and Lesotho. It is a highly open economy. South Africa is the main trading partner accounting for about 80 per cent of imports. The growth of the economy improved from 2.3% in 2005 to about 2.8% in 2006 but not enough to cover the growth of population estimated at 2.9%, implying a slight deterioration in the per capita income. The improvement in economic performance in 2006 reflects a strong growth rate in foreign direct investment inflows, a strong performance of the manufacturing sector and a slight recovery in agricultural productivity, particularly on individual tenure farms. Table 1 provides a summary of the key economic and financial indicators.

Monetary Policy Framework - The primary objective of monetary policy is to achieve price stability. The framework does not target inflation per se, but is to a great extent aligned with developments in South Africa because of the country’s membership to the CMA. South Africa, however, targets an inflation rate currently at 3 to 6 %. The intermediate targets of monetary policy are therefore not applicable. The monetary policy instruments used include the Open Market Operations, reserve requirements and discount facilities with underlying instruments being the central bank bills and 91-day Treasury bills, and Cash reserves at 2.5% of domestic liabilities. In the fiscal year 2006/2007 there was a gradual rise in the inflation fuelled, by increase international oil prices and depreciation of the Lilangeni/Rand against the major currencies. Inflation as measured by the All Index rose to 5.3% in 2006, from 4.8% registered in 2005. To curb the threat of inflation, a tight monetary policy stance was pursued in line with other CMA member central banks.

Interest Rate Policy - Interest rates are closely linked and aligned with those obtainable in South Africa. To minimise the flow of funds from Swaziland to South Africa, the central bank has decided to keep domestic interest rates at the same level as those obtainable in South Africa. Currently, both Swaziland’s discount rate and South Africa’s Repo rate are at par at 11%.

Foreign Exchange Regime - Swaziland has a fixed exchange rate regime pegged to the Rand at E1 = ZAR1. The Central Bank of Swaziland has therefore little flexibility in the management of the exchange rate. However, the Bank periodically intervenes in the market to fund its own accounts and to offload excess holdings of forex. The target is to maintain at least forex reserves equivalent to three months of imports cover in proportions of 75% in Rand and 25% in other reserve currencies. The fixed parity with ZAR has helped Swaziland in containing inflation given that South Africa is a moderate inflation country that supplies more than 80% of Swaziland's imports.

1.2 Overview of the National Payment System

General Legal Aspects - The Central Bank of Swaziland Order amended during 2004 and the Financial Institutions Act of 2005 are the major legislation governing the operations of the Swaziland National Payment System. There is a draft National Clearing and Settlements System (NCSS) Bill of 2005 in place waiting parliamentary promulgation. The objective of the proposed law is to provide appropriate legal foundation for the country’s National Payment System. The enabling legislation for capital markets development, the Securities Bill, and the Financial Services Regulatory Authority Bill which will introduce a consolidated regulator for non-bank financial institutions, are still outstanding.

Institutional Framework - The providers of payment systems in Swaziland comprise the central bank, four (4) commercial banks and non-bank financial institutions. Non-bank institutions include mainly a one building society, 56 savings and credit cooperatives, a development and savings bank and national post office.

Major Payment Instruments and Media - The most common and predominantly used instrument of effecting payments in the economy is cash with the Swaziland Emalangeni as the legal tender although the ZAR is freely used alongside. Non-cash payment instruments account for the bulk of the value of monetary transactions. These instruments include cheques and the Electronic Funds Transfers through SWIFT technology. Some banks have introduced mini ATMs.

The main payment media or streams include the clearing and settlement circuits for both cheques and EFTs. The

Table 1: Selected Economic and Financial Indicators

	2001	2002	2003	2004	2005	2006
Population (Mn)	1.023	1.030	1.033	1.035	1.034	1.033
Nominal GDP (E mn)	11,334.3	12,518.9	13,774.6	15,353.4	16,616. 6	18,854.1
Real GDP growth rate	1.0%	1.9%	3.8%	2.5%	2.2%	2.8%
Cash reserve ratio	4%	3%	2.5%	2.5%	2.5%	2.5%
91day Tresury Bill Rate	6.3%	10.5%	7.5%	7.6%	6.9%	8.5%
Overall inflation (%)	07.5	11.7	7.4	3.4	4.8	5.3
Exchange Rate E/US$	8.5751	10.452	7.5586	6.4476	6.335	6.770

Source: Central Bank of Swaziland

main one is the domestic currency cheques clearing system through the Payment Clearing House. The clearing hose is privately owned and independently managed by the Swaziland Electronic Clearing House (SAECH) Board. The large value transfers are effected through the RTGS system called the Swaziland Inter-bank Payment and Settlement System (SWIPSS). There is no open architecture for locally issued foreign currency cheques.

The Role of Bank of Swaziland - The central bank, under its own statutes, is to be the overseer of the Swaziland NPS. It is in this legal context that the central bank gets involved in the payment system. The Bank is involved in the following ways: as the owner and operator of the SWIPSS to facilitate inter-bank exchange and settlement arrangements; providing the ultimate settlement agency role to the SAECH. Payment system oversight functionality is yet to evolve as an autonomous function. However the Bank has formal/legal payment system oversight functionality role provided under the legal provisions of the Central Bank Act. It enforces observance and compliance as an overseer and fully observes the Core Principles as an operator and a participant in the payment system. The Bank also enforces clearinghouse rules. It has not yet introduced an NPS statute that may empower it to formally regulate, oversee and designate payment systems under an independent law to facilitate explicit oversight functionality for the Bank as international best practice requires. However, CBS has been instrumental in its role of coordination and management of all activities encompassing the NPS reforms.

1.3 Role of Other Private and Public Sector Bodies

National Payment System Committee - This is the most important consultative committee where the various payment, clearing and settlement system stakeholders can discuss current situation, plans and developments on payment system issues. The NPSC plays both advisory and management roles and to assist the central bank in the development of plans and payment system implementation reforms. One of its roles is also to ensure that the payment system providers have a forum in which to express concerns about the payment system reform process.

The Central Bank Payment System Committee (CBPSC) - The committee considers payment system issues and make decisions on how best to progress payment systems reforms. Its duties include assigning the execution of tasks related to payment systems to be performed by any suitable person or the various working parties and to supervise their work.

The Central Bank Payment System Project Office/Unit - This unit is the secretariat of the payment systems project at the CBS. Its role and responsibility is to coordinate NPS work between CBS and the financial industry and also to ensure that the banks are informed of all developments related to NPS issues.

Bankers Association of Swaziland (BAS) - The responsibility of the association is to act as an interface between the member banks and other stakeholders, especially the Central Bank. It provides forum for the exchanges of information on the smooth operation of the banking industry.

Swaziland Automated Electronic Clearing House Limited - The objective of SAECH is to facilitate and provide Automated Electronic Clearing House services to member banks at one central clearinghouse in Swaziland. The recognised governing body known as the Bankers Committee consists of the Governor as the ex-officio chairman and the managing directors of the participating banks. The SAECH is a limited company, independently by the SAECH board with the CBS as the regulator and overseer but not the operator. The clearinghouse is domiciled outside the Bank at the Standard Bank Limited premises. The membership is drawn from the all registered and licensed commercial banks with settlement accounts at the Bank. The Board, in conjunction with the CBS, manage the “failure to settle” which takes the form of pledges of collateral security of Treasury Bills to guarantee timely settlement.

The SAECH provides facilities for the clearing of eligible items namely the cheques and EFTs. It also issues and reviews the clearinghouse rules and ensures adherence. To mitigate against the failure to settle at the SAECH, there is a collateral pool with the treasury bills placed at the CBS the underlying instrument contributed by member banks according to their highest multilateral settlement obligation (debit) in the period of the last three months subject to monthly reviews. The Bank also introduced in January 2008, cheque capping at the value of E1.0 million equivalents to USD 138,351. The clearing cycle is on a T+3 basis with 2 sessions daily.

The Swaziland Stock Exchange - For the capital market operations, there is Swaziland Stock Exchange (SSX). The number of listed companies was 6 in 2006. The market is characterised by tight supply and demand conditions with only two listed government stocks and two listed corporate bonds. The SSX is a member of the Committee of SADC Stock Exchanges (COSSE) some of whose objectives are to harmonise exchange rules, regulations and integration of operations of member exchanges.

2.0 Inter-bank Foreign Exchange Market

2.1 Evolutions and Development of the Market

The financial system is not liberalised. Only central bank transactions are automatically allowed while all other transactions within the IFEM need central bank’s approval.

2.2 Nature and Operations of the Market

Rules Governing the Operations of the Market -The rules governing the operations of the market are derived from legal statutes and guidelines of the Central Bank of Swaziland.. The major statute is the Exchange Control Act. To mitigate against the incidences of money laundering, commercial banks apply their own “Know Your Customer (KYC) guidelines. The CBS has been empowered

Customer (KYC) guidelines. The CBS has been empowered by the Ministry of Finance to appoint Authorised Dealers in foreign exchange and set up the limits within which the dealers may operate. The enforcement of Exchange Control regulations is delegated to the CBS in order to administer the movements of foreign currency in and out of the country. These regulations enable the CBS to issue Exchange Control Rulings, which dictate foreign exchange limits and conditions to Authorised Dealers. In other words, the Rulings interpret the Exchange Control Regulations.

Major Market Players -The major market players are the Central Bank of Swaziland, the four commercial banks as the authorised dealers and their offshore correspondent banks and local customers. The major account holders at the banks are individuals, corporate customers, NGOs international organisations etc.

Market Operations - Swaziland is a signatory to the CMA Agreement which means there is an unfettered flow of funds between Swaziland, Lesotho, Namibia and the Republic of South Africa. The four countries form a single exchange control territory. Each, however, administers exchange controls within its boarders for transfers with the rest of the world. Hence, Swaziland classifies residents into those of CMA (residents) and those of the rest of the world (nonresidents). Residents are further classified as temporary or permanent residents.

The types of accounts operated include the Blocked Accounts, Non-resident Account, Resident Accounts, Foreign Currency Investment /Deposit Accounts and Foreign Currency Account. A Blocked Account is an account in Swaziland to which exchange control restrictions are being applied. Such balances may be used for investments in Government Bonds, Building Society Shares or such investments as may be approved by the CBS. Non-Residents Accounts are maintained in the CMA on behalf of non-residents. Funds in these accounts may be used for payments to residents and non-residents of the CMA for any purpose and may be used to purchase foreign currency. They may only be funded with proceeds of sales to an authorised dealer, payments from other non-residents accounts and payments, which are not inconsistent with the authority delegated to banks. Resident Accounts are the accounts of residents of Swaziland, whether permanent or temporary. Private Individuals (natural persons) resident in Swaziland and who are taxpayers of good standing and over the age of 18 years are allowed to deposit and hold the equivalent of E750, 000 in foreign currency with authorised dealers or actually invest abroad an equivalent of E750, 000 in securities etc.

Permanent residents and temporary residents of Swaziland and Non-residents of the CMA may open foreign currency accounts with an Authorised Dealer in Swaziland, subject to such account being funded with foreign currency emanating from sources outside the CMA and any foreign currency accrual being retained in the account for a period not exceeding 90 days from the date such an accrual was first credited to the Foreign Currency Account. At the end of 90 days period any unutilised foreign currency accruals must be immediately offered for sale to an Authorised Dealer and converted to local currency. Permanent Residents of Swaziland are not permitted to maintain bank accounts outside the CMA except where special permission has been granted by the Central Bank. Foreign exchange receipts are required to be declared and offered for sale on an authorised dealer in Swaziland and may not be credited to accounts without special prior approval from the CBS. However, authorised dealers have been delegated powers to approve most transactions. The major currencies are the USA Dollar, Euro, Pound Sterling and South African Rand. Banks do not book loans and advances in foreign currency

Role of Central Bank and Intervention Mechanism - The interventions of CBS in the market are aimed at funding its own forex accounts and sometimes to offload excess holdings of forex. With existing exchange controls, the role CBS is limited to issuing operational guidelines and regulations complemented with active surveillance through daily, weekly monthly and quarterly returns.

Market Risks and Mitigation - To mitigate against market risk, the exchange rate is fixed at par with the South Africa Rand and periodic sales and purchases in the IFEM. Banks submit forex returns on a daily, weekly, monthly and quarterly basis. There is also a requirement for submitting returns three times a day-morning, mid-day and evening.

3.0 The Local Foreign Currency Cheque Clearing System

Developmental Perspective - There is no open architecture for LFCCC arrangement. All locally issued foreign currency cheques are cleared on bilateral arrangements between banks. Settlements are through the traditional collection abroad through correspondent relations. The ZAR denominated cheques are cleared within 14 days.

The Major Players - The major players in the market include the commercial banks and their customers, Club member banks and their customers and lastly their local commercial banks' offshore relationships which fund the member banks' net debit (negative net settlement) positions as and when they occur.

Rules Governing the System - The banks transact on trust and limits based on the respective banks ratings. They design the rules governing the operations of these modes of LFCCC arrangement. The bilateral rules establish the terms and conditions for the clearing and settlement of the payment instruments and payment instructions in foreign currencies by the participants. The rules are also subject in all respects to the international trade laws and practices as pertains to the negotiable instruments and promissory notes.

Role of the Central Bank in LFCCC - The CBS has no role in these arrangements. The Bank does not play the usual customary role of settlement agency in the LCCC arrangement as banks manually exchange the effects bilaterally and then settle through their related correspondent banks offshore.

The Clearing and Settlement Steps - These instruments are drawn in USD, GBP, Euro, and ZAR and issued locally. The clearing process follows the steps indicated below:

Step 1: A customer presents the locally issued cheque to his or her bankers at his cost.
Step 2: The receiving bank then presents the cheque to the paying banks locally (if they are members of the club) and subsequent payment for the customer for the value or sends the cheque for collection offshore.
Step 3: If the drawer's cheque has value then the presenting bankers customer will get value after 2 to 3weeks depending the currency and the participating banks. The Rand denominated cheques have a cycle of T+14, compared to T+3 for local cheques. The cycle for other currencies may take longer than T+14.

The Management of Settlement Risk and "Finality of Settlement" Arrangement -There is no provision for finality of settlement and irrevocability of settlement with regard to LFCCC.

Management of Operational and other Risks -The other operational risks like systems failure, frauds etc are managed through due diligences processes of the participating banks in the bilateral arrangements and the prudent practices e.g. KYC.

Implications on Monetary and Financial System Stability - The IFEM operations pose no serious financial system stability and monetary policy implications and challenges, as they are insignificant in terms of value and retail in nature. In addition, the strict controls and monitoring by CBS preclude any significant disturbance to monetary policy and financial stability.

Applications and Compliance with Best Practices for Payments - The LFCCC arrangements do not meet most of the BIS Core principles from legal basis, accessibility, and the management of failure to settle rule. The systems are susceptible to both credit and liquidity risks and operational risk as settlement is not done using the central bank money as net debit obligation banks are the ones to ensure that they fund their own offshore correspondent clearing and settlement accounts.

4.0 Intra-day Loan Facility and Foreign Currency Transactions

The nature of Operations and Policies - The LFCCC settlement arrangements are on manual bilateral netting system. The net deficit positions are settled offshore using correspondent banking arrangements. Hence, there is no linkage between the RTGS driven intra-day loan facility with the foreign currency transactions.

Role of RTGS in LFCCC Arrangement - The Swaziland RTGS-SWIPSS has no role to play in the SAECH operations as all the models of LFCCC cheques settlement is done through the respective banks' offshore correspondent relations.

5.0 Role of the Central Bank in the Development and Operation of the LFCCC System

The Central Bank of Swaziland, under its own statutes has an implied oversight role over the national payment system including overseeing the operations of any model of LFCCC arrangement. However, the CBS has not played any role in the operations or development of the LFCCC arrangements. The current LFCCC arrangements have been wholly at the initiative of the commercial banks themselves.

6.0 Dollarisation in the Domestic Economy

Swaziland may be categorised as a bi-monetary and semi-officially dollarised economy as the ZAR is permitted to operate as legal tender alongside the Swazi Lilangeni. Under the regime, the ZAR is legal tender but most transactions including payments for utilities are denominated in the Lilangeni. As shown in Table 3 Swazi residents are allowed to hold their financial wealth in foreign currency especially the ZAR. Residents are only permitted to operate forex current accounts within the local banking system.

The main factor that has given rise to dollarisation in the Swazi economy is its membership to the Common Monetary Area with both bilateral and multilateral agreements especially the prerequisite for a fixed exchange rate regime. This agreement allows for the compensation of Rand circulating in the countries of Lesotho, Namibia and Swaziland. The factors that influenced the linking of the Lilangeni to the ZAR include the following:

i) Swaziland's economy was highly open with tradable goods accounting for large proportion of the country's gross domestic product;
ii) Approximately 80% of Swaziland's imports in tradable goods are from South Africa;
iii) Most of Swaziland's financial institutions were offshoots of South African companies and there is a free flow of capital between the two countries;
iv) South African companies were the major investors in Swaziland;
v) The ZAR was a freely convertible and an internationally traded currency;
vi) South Africa was deemed to have good and sound macroeconomic policies resulting in low inflation; and,
vii) Swaziland's membership of SACU.

The positive impact of dollarisation in the Swazi economy is deemed to be the country's financial and macroeconomic stability. The country has benefited from prudent economic management in South Africa resulting in low inflation and interest rates, and increased investments. Due to currency parity, trade between South Africa and Swaziland takes place without the uncertainty and costs that would arise from variations in the exchange rate. The main disadvantage of the arrangement is loss of ability to carry out independent monetary policy. The fact that the ZAR circulates side by side with the Lilangeni makes it difficult to accurately measure money supply. Therefore money supply manipulation in Swaziland is effectively a tool outside the scope of the central bank. The fixed exchange rate also makes it difficult for the economy to respond to shocks which may undermine competitiveness of the economy.

The Central Bank's policy stance on dollarisation and the whole economic arrangements within the CMA is positive. The CBS considers the financial and economic stability that percolates from the linkage with ZAR a price worth paying for loss of monetary independence.

There was inadequate information on Swazi residents' holdings of their financial wealth in foreign currency. Consequently, the extent of the country's dollarisation was approximated by the share of foreign currency deposits in GDP (GDP dollarisation), broad money M2 (money supply dollarisation), and total deposit liabilities (deposit liabilities dollarisation), the trends of which are shown in Table 3. Deposit liability dollarisation averaged about 1.54 per cent over the last six years, peaking at 2.10 per cent in 2005. These figures however do not mean much in bimonetary arrangement. To mitigate against the effects of dollarisation on monetary policy efficacy, the CBS has decided to keep domestic interest rates at the same level as those obtainable in South Africa. This also minimises the risk of outflow of funds from Swaziland to South Africa.

7 .0 Lessons Learnt

Swaziland is one country where dollarisation has been viewed positively due to positive impacts in stabilising the country's exchange rate and external fundamentals. The underlying factors for these advantages are linkage to a large and stable economy, the trade and investment flows. The case of Swaziland confirms the fact that dollarisation in the economy could also be influenced by the international /regional trading patterns where a country in the trading pact is comparatively disadvantaged by the terms of trade-being a net importer of goods and services.

Table 3: Indicators of Dollarisation Penetration in the Swazi Domestic Economy

Parameters	Dec 2002	Dec 2003	Dec 2004	Dec 2005	Dec 2006	Dec 2007
Forex Deposits/Total Deposit Liabilities (%)	1.85	1.39	1.24	2.10	1.16	1.48
Forex Lending/Total Loan Assets (%)	NA	NA	NA	NA	NA	NA
Forex Deposits/M2 (%)	1.68	1.25	1.11	1.02	1.07	1.40
Forex Deposits/GDP (%)	0.35	0.27	0.24	0.41	0.22	0.37
Imports/Exports (%)	105.56	100.94	102.99	104.74	103.12	101.09

Source: Central Bank of Swaziland, NA - Not Applicable

9.0 TANZANIA

1.0 Introduction

1.1 Overview of the Country

Structure of the Economy and Economic Trends -The structure of the Tanzanian economy reveals that agriculture is still the lynchpin of the economy. The sector employs about 85% of the population's workforce and it accounts for over 50% of the GDP at factor cost and 75 % of foreign exchange earnings. Recent years have witnessed noticeable increase in the shares of industrial production and mining. Industrial sector employment accounts for 18% of total wage. The GDP contribution of the manufacturing sector averages about 10%. The Tanzanian economy is richly endowed with vast natural resources including gold, diamonds, gemstones and industrial minerals. The mining sector is now an important foreign exchange earner for the country. This follows an increase in increase in private sector involvement in mining activity and improved market for minerals as a result of an enabling mining policy instituted by the Government, The services sector accounts for about 13% of the country's GDP and employs about 25% of the labour force. Again, owing to its rich endowment of natural resource, Tanzania has vibrant tourism sector. The tourism sector accounts for about 16% of the country's GDP. The country has a large external sector, with total trade (exports plus imports) accounting for over 40 per cent of the GDP. Finally, Tanzania continues to enjoy a good overall macroeconomic performance. Real GDP growth of the Tanzanian economy averaged about 7.2 per cent in the past five years to 2006. Given the estimated population growth rate of 2.9 per cent, real per capita income increased at an average rate of 3.4 per cent, depicting an improvement in the living standard. Real GDP growth slowed to 6.7 per cent in 2006 from 7.4 per cent in 2005.

Monetary Policy Framework - the monetary policy stance aims at achieving and maintaining low and stable inflation, stable interest rates and a competitive exchange rate. The Bank of Tanzania targets an inflation rate of less than 5.0 per cent in the medium term consistent inflation rates of Tanzania's major trading partners. Within this monetary framework, reserve money is the operational target while inflation is targeted indirectly via extended money supply (M3). The BOT in conduct of its monetary policy uses Open market operations (OMO, Foreign Exchange Market Operations (FEMO), Cash ratio requirement (CRR) and Rediscount facilities.

Interest Rate Policy - Interest rates are market determined, with interest rates obtainable in the Treasury bill market being the benchmark.

Foreign Exchange Rate Regime - Tanzania has a free-floating exchange rate policy since 1994. However, the BOT periodically intervenes in the market with the objective of promoting orderly and smooth foreign exchange market operations.

1.2 Overview of the National Payment System

General Legal Aspects - The Bank of Tanzania Act, 2006, the Banking and Financial Institutions Act of 2006, and the Foreign Exchange Act are the major legislations governing the operations of the Tanzanian National Payment System (NPS). The Draft NPS Bill is already with the Law Reform Commission for review. A number of laws have a bearing on payment instruments and institutions in Tanzania and these include the Bills of Exchange Ordinance, Cap 215, the Cheques Act, 1969, and the Companies Ordinance, Cap 212. To promote public confidence in the banking system, a legal mechanism for receiverships, liquidation of the assets of and paying off the liabilities of problem banks and financial institutions has been bestowed upon the Bank of Tanzania which has the powers of and management of insolvency and liquidation of banks and institutions under the Banking and Financial Institutions Act.

Table 1: A Summary of Key Economic and Financial Indicators.

Year	2001	2002	2003	2004	2005	2006
Population (million)	33	34	34	35	36	38
GDP (Bn TZS)	9,752	10,424	11,240	12,068	12,881	15,183*
Real GDP growth (%)	6.0	7.2	6.9	7.8	7.4	6.7
Income per Capita US$	277	290	305	319	333	343
Reserve Money (Bn TZS)	553	612	813	1,028	1,348	1,680,
Overall Inflation (%)	5.3	4.6	3.6	4.4	4.1	7.1
Statutory reserve requirements (%)	10	10	10	10	10	10
Gross offical reserves (US$)	-	1,067.8	1,533.9	1,787.0	1,807.9	2,171.1
Gross official reserves (months of next year imports)	-	5.8	7.8	8,8	5,7	5,1
Exchange Rate TZS/US$	876.4	966.6	1038.6	1089.2	1128.8	1251.9

Source: Bank of Tanzania, *BCS Estimate

Institutional Framework - The major financial intermediaries that provide payment services are commercial banks and non-bank financial institutions. Currently, the banking system comprises 35 banks (with network of 270 branches) and 5 regional community banks, 3 specialised NBFIs, which include the Tanzanian Investment Bank, 2 regional financial institutions, 150 bureaux de change and Tanzania Postal Bank. Five big banks represented about 66 per cent of the total banking sector assets. The market share of the NBFIs in the total banking sector is about 3 per cent while that of community banks is less than 1 per cent. Majority of the bureaux in Tanzania mainland are based in Dar es Salaam (81) and Arusha (30), reflecting geographic distribution of tourism.

Major Payment Instruments and Media - The most common and predominantly used instrument is cash with the Tanzania Shilling as the legal tender. Non- cash payments instruments account for the bulk of the value of monetary transactions. Non-cash payment instruments include cheques and a range of varied electronic payment instruments, including credit and debit cards, direct credits and debits and the Electronic Funds Transfers using SWIFT technology.

The major payments media are Cheque and Electronic Funds Transfer (EFT) System with two automated clearinghouses and three manual clearing systems; three inter-bank retail card systems (TNNSS, TANPAY and UMOJA); Mobile Payment Services; the Tanzanian Inter-bank Settlement System (TISS)-the RTGS system; The TISS participants include banks and financial institutions, Tanzania Revenue Authority, with the Ministry of Finance yet to connect to the RTGS system.

The other streams include the Electronic Fund Transfer (EFT) System, which facilitates credit clearing of bulk transfers integrated payments system, which became operational during June 2004 and the capital market securities exchange where thee Dar-es-Salaam Stock Exchange (DSE), on December 22, 2006, implemented an integrated solution to their Central Depository System (CDS) and the Automated Trading System (ATS) facilitating the clearing and settlement systems for the Tanzanian capital markets.

The Role of Central Bank -The Central Bank's role in Tanzania is, by its own statutes, to regulate, monitor, and supervise the payment, clearing and settlement system including all products and services thereof and conduct oversight functions on the payment, clearing and settlement systems in any bank, financial institution or infrastructure service provider or company. The same statutes also allow the BOT to participate in any such payment, clearing and settlement systems; establish and operate any system for payment, clearing or settlement purposes; and perform the functions assigned by or under any other written law for the regulation of payment, clearing and settlement systems. On basis of this legal context BOT is involved in the Tanzanian's National Payment System in the following ways:

i) As a service provider for inter-bank transfers for large value settlements through its Real Time Gross Settlement System (RTGS) called the Tanzania Inter-bank Settlement and Settlement System (TISS);
ii) As the supervisor and settlement service provider for the cheque clearing system;
iii) Maintains and supports users of Bank of Tanzania Electronic clearing House (BOTECH) at the Dar es Salaam Clearing House which also facilitates inter-bank Electronic Fund Transfer (EFT) for transfer of high volume but low value transactions; and,
iv) Owns and operates the Tanzanian Net Settlement Services (TNSS) which facilitates settlement of Visa card domestic transactions etc.

BOT is one of the few MEFMI members Bank that has evolved autonomous payment system oversight functionality. The oversight operations include monitoring risks, evaluating performance and efficiency in the existing systems as well systems being developed. However the Central Bank plays a partial formal payment system oversight role as an NPS Act is yet to be promulgated to give it full oversight functionality over the country's payment system.

Role of other Private and Public Sector Bodies - Other entities that play a role in the Tanzania payments system include those that provide payment services, setting national payment systems (NPS) policies, standards, establishing rules and regulations, and providing payment system infrastructure services. These include the National Payment System Advisory Council (NAC), Tanzania Bankers Association (TBA,) Bankers Electronic Clearing House Committee, Bankers Electronic Clearing House, Tanzania SWIFT User Group and the Capital Market and Securities Authority (CMSA) that regulates capital and securities market in Tanzania. The main capital market operation is found within the Dar es Salaam stock Exchange.

2.0 Inter-bank Foreign Exchange Market

2.1 Evolutions and Development of the Market

Bank of Tanzania gradually eased foreign exchange controls after the enactment of the Foreign Exchange Act of 1992, by allowing the establishment of foreign exchange bureaux in April 1992, introducing foreign exchange auctions in July 1993, and creating the Inter-bank Foreign Exchange Market (IFEM) in June 1994. The Tanzanian IFEM was then liberalised to allow the banks to maintain foreign currency denominated accounts. Banks started issuing their customers with current account cheques that were cleared offshore through the commercial banks' appointed settlement agent.

2.2 Nature and Operations of the Market

Rules Governing the Operations of the Market - The Foreign Exchange Act and the BOT regulations, rules, directives and guidelines in this regard direct the operations within the IFEM, especially Circular No. 5 as amended in June 2000. The Circular stipulates the mandatory and appropriate exposure limits, appropriate returns, placements and sales/purchases balances etc. The policy objectives of the Circular include to minimize exchange risk, to facilitate forex based lending by banks and financial institutions, allow banks and financial institutions to play an active role development of forex markets and instruments in the economy and to improve the conduct of monetary policy.

Commercial banks must observe exposure limit of 20% of their core capital. Offshore placements or deposit are limited to 60% of total foreign placements and deposits with a foreign related or any other correspondent organisation with minimum long-term international rating of A and above. The percentage of placements reduces with the level of rating while the aggregate placement in non-OECD member countries is restricted to a maximum 20%. International rating agencies recognised by the Bank include IBCA, Standard and Poors and Moody's.

Every bank and financial institution is required to submit weekly and monthly returns on its foreign exchange purchases, sales, open positions and average balances while the Central Bank may also perform surprise checks of the institutionsí accounting records.

Major Market Players - The major players are the commercial bank and their corporate customers, and the offshore correspondent banks, the forex bureaus and BOT. The Bankís roles in IFEM operations is limited to the selling or buying of foreign exchange and in so doing to mop-up excess liquidity and or provide liquidity to the economy accordingly. The other role is the daily surveillance functionality.

Market Operations - The foreign exchange market in Tanzania is composed of the wholesale and retail markets. The IFEM is the wholesale market, which plays an important role in the determination of the country's official exchange rate and the provision of funds for the accumulation of international reserves. There is an active IFEM operations; the trade and exchange system is completely free of restrictions on making payments and transfers for current account transactions. The capital account is only partially open.

The types of accounts are current, fixed and call deposit accounts. Major currencies are the US Dollar, Euro and Sterling Pound however the US Dollar is the main currency of operations. There is an active dollar market fuelled by the clearing of cheques and the large forex bureaus operations. Bureaus maintain accounts at the commercial banks. Any customer can open a foreign currency account. Banks book forex denominated loans for their customers. The proportion of forex loans to total loan portfolio is about 31% while total forex deposits to total liability portfolio is about 35%. Local foreign currency loans to total advances portfolio oscillates around 40%.

The operations within the IFEM are influenced to a large extent by the regulatory and supervisory authority. Foreign exchange based lending by banks and financial institutions is subject to the single borrower exposure limit of 25 per cent, overall net position not to exceed 20% of core capital, prior approval to establish correspondent relationship, size of foreign exchange placements in foreign related or any correspondent organization being limited to the rating of the counterparty (i.e. maximum 60 per cent for rating A and above, maximum 40 per cent for rating B and above and maximum 20 per cent for non-rated). LIBOR is the interest rate benchmark for fixing interest rates for deposits and loans and is influenced by the maturity periods and amounts, supply and demand for dollars based on daily quotations by Reuters, inter-bank rates and discount rates.

2.3 *Role of Central Bank and Intervention Mechanism*

Tanzania adopted a free-floating exchange rate policy since 1994 with limited interventions to align exchange rate movements with economic fundamentals. In addition, the Bank conducts foreign exchange operations in a manner that would facilitate the achievement of the Government objective of attaining official foreign reserve target of not less than six months of imports of goods and services. However, the Bank of Tanzania periodically intervenes in the market with the objective of promoting orderly foreign exchange market where excessive volatility in the exchange rates are minimized through a gradual sale or purchase of appropriate amounts foreign exchange and also when the demand exceeds supply in the IFEM. In this regard, the Central Bank closely monitors spreads and rates of depreciations/appreciation of the exchange, intervening as appropriate to smooth any exchange volatilities.

The Central Bank also actively participates in the Inter-bank Foreign Exchange Market (IFEM) under its sterilization strategy to mop excess liquidity generated by government expenditure and also support the forex liquidity demand of the private sector especially in scenarios where demand exceeds supply of foreign exchange.

The BOT relies mainly on Open Market Operations (OMO) that is complemented by foreign exchange operations. BOT is one of the few MEFMI member banks with both horizontal and vertical Repo operations within the forex market. The sterilization and intervention strategy of the Central Bank has largely been successful in achieving overall exchange rate stability and hence the low depth of dollarisation defined as the banking system forex deposits to M3, being maintained at 30.5% during FY2005/2006. To militate against the effects of IFEM operations on monetary policy stance, the cash ratio is computed on the basis of total deposit liabilities (broad money). The cash ratio has remained at 10.0 per cent per cent for the past 10 years.

2.4 *Market Risks and Mitigation*

The major risks posed by the IFEM operations are mainly the settlements and market or systemic risks. The risks are contained through stringent, prudential regulations and surveillance instruments put in place by the monetary authorities. For every category of risk, BOT provides mitigating risk measures. The forex exposure limit is 25%. Offshore placements are determined by bank-to-bank offshore ratings. The market risks are also limited by Central Bank's regulations on placements and exposure limit of 25% of the banks' capital including the AML directives. Banks have mandatory Risk Management Departments with various committees e.g. the operational committees, Asset and Liability Committees to monitor forex operations and trading including the requisite limits on daily OTC withdrawals and Screen Analysis Transfer Systems' operations etc.

3.0 The Local Foreign Currency Cheque Clearing System

Historical Perspective - For along time since independence in 1962 there was only one commercial bank in Tanzania and hence there was no need to introduce an open architecture for clearing local foreign currency cheques. The cheques that were issued were presented for clearances/collections offshore. The foreign currency cheques clearing house was established in 1993 at the initiative of the Standard Chartered Bank (T) to clear only the USD instruments. The founder members and major players were the National Bank of Commerce (NBC), Cooperative and Rural Development Bank, Standard Chartered Bank (T), Meridian Biao Bank and the Bank of Tanzania. Prior to this arrangement banks had designated the Standard Chartered Bank (T) as the settlement agent for a fee. The banks decided to have the open architecture arrangement because they felt that the appointed settlement bank was overcharging them and also was a fellow competitor in the market. Hence, the BOT agreed to facilitate the LFCCC arrangement by operating funded US Dollar settlement accounts at the Bank. The new development was a relief to the industry since the previous collection method was costly and the clearing cycle reduced to T+7 from more than T+14 in the earlier arrangement.

The Major Players and Roles - According to the Clearing House Rules, participants or market players are the Central Bank and all the registered commercial banks that are eligible members of the clearing arrangement. Their roles include abiding to the rules and regulations of the clearing house with respect to times and applicable instruments; to submit and collect from one point all USD instruments issued by domestic banks for clearing in order to speed finality of settlement and lastly to maintain adequate balances before the next clearing house session. The BOT roles include supervising the clearinghouse, participating in the clearinghouse on its own account and settlement of the clearinghouse effects.

Rules Governing the System - The clearinghouse rules and the Cheques Act govern the operations of the clearing arrangement.

The Role of the Central Bank - The role of the Central Bank is limited to the extent of its membership, supervisory and facilitation of the clearinghouse operations and its settlement agency role of ensuring that the respective members fund their net overdrawn accounts before the closure of the business day so as to contain settlement risk. The other role is ensuring that there is in existence sound operative LFCCC rules and the general and customary monitoring functionality.

The Main Features of the FCCC System Operations - The BOT is the settlement agent and all banks maintain funded US$ accounts at the central bank. The clearing cycle is on T+0 locally and T+7 countrywide. SWIFT technology is a prerequisite for confirming the requisite funding of the Central Bank offshore settlement account in New York. Participating member banks do not have to maintain mandatory interest free settlement accounts at the Bank, as is the case in some MEFMI member countries.

The LFCCC system is presently manual with physical presentation of cheques to the clearinghouse. Settlement is on a net settled basis using SWIFT technology through Citibank-New York that is the BOT settlement agent. There is no overnight facility in forex at the Bank except for the local cheque clearing circuit. The Tanzania Bankers Association (TBA) and its membership are at an advanced stage of the automation of the system, and are presently on the pilot testing stage. It is expected to go live in January 2008. The TISS has a multi-currency settlement functionality and interface with the clearinghouse operations and is ready to accommodate the LFCCC settlement when the TBA finalizes the automation pilot for the LFCCC process. This is slated for full implementation by both BOT and TBA by June 2008 where presentation of cheques to the BOTECH will be via the BOTECH electronic file.

Due to the time zone, BOT has to view the Citibank site using the "View Facility" to confirm clearing positions in the morning at 11.00am. BOT has not been pressing for automation of the FCCC system as the volumes have not been significant but with the recent increase in volumes within the IFEM, the automation strategy is in progress.

The key steps in the LFCCC system is:

i) Member banks meet at the BOTECH at the scheduled time;
ii) Check settlement balances of participating banks;
iii) Participating members exchange clearing effects-inwards/outwards;
iv) Settlement summary is produced;
v) Net debit members arrange funding to avoid overdrawn position at the Bank-same day net settlements;
vi) Return unpaid effects within 3days for local cheque clearing and T+7>14 for upcountry cheques; and,
vii) Commercial bank customer gets value.

The Management of Settlement Risk and "Failure to Settle" Risk Mechanism - There is no "failure to settle" mechanism within the TBA LFCCC arrangement. Value is given only when the participating bank's account is sited positively. In case of a persistent liquidity stress of a member bank the recourse may be on Statutory Minimum Reserves. However there are heavy penalties for members that abrogate the clearinghouse rules on the maintenance of overnight credit balances in their settlement accounts as there is no standby arrangements; an emergency facility to provide liquidity for the US$ clearing in case of need is not present. However to ensure banks monitor and maintain adequate liquidity, penalty is charged to any member of the clearing house who does not abide with the rules especially on maintaining overnight overdrawn accounts.

Management of Operational and other Risks - There exist the pre-requisite technologies - technical infrastructures that have been adopted to manage operational and other risks. There are systems that assist in production of reports and these include the scanners, the CBS, and the BOTECH. CBS-the main accounting engine facilitates the production of various position reports that include account balances and the BOTECH- the electronic clearing system that merges the opening balances position with the settlement position to get the net settlement.

The scanners-the scanning of all instruments that are submitted for clearing minimizes the risk of processing forged instruments or subsequent disputes on the paid instruments reduce incidences of operational risks and fraud. Other risks such as operational aspects of doing business are handled in the general framework of the corporate risk management and prudential internal control best practices.

Implications on Monetary and Financial System Stability -The liberalisation of the forex regime has direct implications on monetary policy and financial markets stability through increased flows of foreign currency within the domestic economy. This has been further exacerbated by high level of the budget support (at about 40%) from foreign sources. These fundamentals have had a bearing on both IFEM and the LFCCC operations in terms of enhanced scale of operations and the level of dollarisation. This has necessitated the constant intervention by the BOT to streamline the IFEM exchange rate fluctuations in on order to maintain the required monetary aggregates. To mitigate against the effects of IFEM operations on monetary policy efficacy, the cash ratio is computed on the basis of total deposit liabilities. The cash ratio has remained at 10.0 per cent per cent for the past 10 years. In terms of financial stability, it has resulted in BOT employing stringent compliance monitoring strategies. However in the real sense of the scale of operations of the LFCCC, it has insignificant impact on the monetary policy efficacy and financial stability.

Applications and Compliance with Best Practices for Payments - The LFCCC system is short in meeting most of the Core Principles as it is exposed to credit, liquidity and operational risks. This is wholly due to its manual clearing nature of its operations and the modus operandi of its settlement arrangement. However the bankers association and its clearing house clearing technical committee are alive to these challenges and are at an advanced stage of automating the clearing and settlement systems through the Central Bank by January 2008.

4.0 Intra-day Loan Facility and Foreign Currency Transactions

The Nature of Operations and Policies - There is an interest free intra-day facility within the Tanzanian inter-bank exchange and settlement system at the BOT for liquidity optimisation process through the RTGS. TISS offers intra-day facility, which is collateralised by REPO using treasury bills as the underlying instrument. However, this arrangement is strictly for local currency operations and there is no limitations amount wise as the requisite amount is based on the pledged collateral's face value discounted at the BOT hair cut- a margin of safety- policy of 10%. The ILF must be repaid at the end of the day.

Role of RTGS in LFCCC Arrangement - Presently the LFCCC system in Tanzania is manually operated and hence the TISS-the RTGS system plays no role in the settlement arrangement. However, the TBA is at an advanced stage of automating the LFCCC system and linking the domestic settlement leg to the RTGS system at a multi currency multilateral netting level. The advantage they have is that TISS has already had inbuilt multi currency settlement functionality; BOT is just waiting for the association to submit the proposed "modus operandi" for the proposed arrangements.

Linkage with Foreign Currency Transactions - Currently, there is no relationship or linkage between the intra-day liquidity facility and the operations of the LFCCC system.

5.0. Role of the Central Bank in the Development and Operations of the LFCC System

The two major market players or organs in the development of the system are the commercial banks and the industry association-the Tanzanian Bankers Association. The role of BOT is presently limited to that of the traditional central banking role of the provision of clearing and settlement facilities. However in Tanzania the BOT legally owns the clearing house-the BOTECH where it has developed the house to the international best standards and practices in terms of the technological aspects.

The Central Bank Oversight Role - The BOT has a partial formal oversight role over the Tanzanian NPS and are constantly keeping direct surveillances over the operations of the shilling clearing and settlement arrangements due to its sole legal ownership of the Clearing. The BOT is yet to develop a direct involvement by designating the LFCCC system as a systemically important payment system under its oversight functionality. The Central Bank only facilitates the LFCC clearing operations and will later provide the automated settlement arrangement as and when the system's draft operational rules are finalised by the TBA.

The BOT Developmental Role in the FCCC Arrangement- The BOT has an interest in the development of the LFCCC arrangement and is waiting for the TBA to develop the open architecture for the clearing and settlement system's rules for their review as to their degree of compliance with the BIS Core Principles. BOT is also ready to facilitate the TISS for ultimate multi- currency cheque settlement system on a real time scenario. The BOT role is to be limited to reviewing the TBA rules in this regard and provision of the electronic clearing and settlement technological infrastructures over the RTGS once the industry finalises the development of the requisite Electronic Clearing House rules.

6.0 Dollarisation of the Domestic Economy

Dollarisation in the Domestic Economy - In the official dollarisation parlance, Tanzania economy is defined as an unofficially dollarised economy. Under the unofficial dollarisation regime, as is the case with Tanzania since 1994, residents are legally allowed to hold their financial wealth in foreign currency alongside domestic currency including in foreign currency deposit accounts within the local banking system; while the foreign currency is not legal tender. In Tanzania most transactions including payments for utilities are denominated in the Shilling. However, a few high value transactions like real estate leases and imports of vehicles, equipment and machinery are invoiced and paid in foreign currency.

The issue of dollarisation became a concern some years ago when the local currency was on the depreciating trend and the suppliers of goods and services took the advantage to invoice in foreign currencies especially the US dollar for such services like school fees, hotel accommodations etc. However with the subsequent strengthening of the shilling, dollarisation is not a public issue any more. Presently other factors such as increased supply of dollars in the market arising from, among others, the 40% budget support from donors and improvements in tourism has reduced the dollarisation impact. Instead the increased flow of dollars has influenced the monetary policy strategies and applications e.g. the foreign exchange intervention policy as a complementary OMO stabilisation tool to address exchange rate volatility in the domestic forex market.

There was incomplete data on Tanzanian residents' holdings of their financial wealth in foreign currency. Consequently, the extent of the country's unofficial dollarisation is approximated by the share of foreign currency deposits in GDP (GDP dollarisation), broad money (money supply dollarisation), total deposit liabilities (deposit liabilities dollarisation), and total (assets dollarisation) the trends of which are shown in Table 2 below. Deposit liability dollarisation steadily grew over the last five years, peaking at 42.0 per cent in 2006 and averaging about 36 per cent during the last five years. Levels of 40 - 45 per cent deposit liability dollarisation were reported in some of the individual commercial banks interviewed.

No study had been undertaken to ascertain the potential negative effect of dollarisation on the conduct of monetary policy and/or its positive effect on the local banking system. However, the BOT has already undertaken measures to mitigate against potential monetary and systemic risks of dollarisation. First, the BOT mitigates the negative effects of dollarisation in its conduct of monetary policy through targeting the broad money aggregate (M3) and use of the same for the computation of the cash ratio requirement. The BOT hence requires commercial banks to submit their Monthly Bank Survey (BSM) returns in local currency. Secondly, the BOT strictly enforces its foreign exchange rules, guidelines and regulations aimed at reducing foreign exchange risk exposure of the banking system. Finally, the BOT require every bank or financial institution to manage its foreign exchange exposures within the framework of a comprehensive risk management plan, setting out its policies, procedures and other safeguards necessary to prudently manage and control to foreign exchange risk.

Table 2: Indicators of Dollarisation Penetration in the Tanzanian Domestic Economy

Parameters	2001	2002	2003	2004	2005	2006
Forex Deposits/Total Deposit Liabilities (%)	-	34.8	36.4	36.5	36.4	42.0
Forex Lending/Total Loan Assets (%)	-	28.1	28.3	30.3	33.7	33.0
Forex Deposits/M3	-	26.4	27.9	28.0	28.6	33.4
Forex Deposits/GDP	-	5.2	5.5	5.7	7.1	9.0
Imports to GDP	-	19.8	22.8	27.0	29.7	36.1
Exports to GDP	-	17.6	18.6	20.3	20.8	22.7
Total Trade to GDP	-	37.4	41. 4	47.3	50.6	58.8

Source: Bank of Tanzania

7.0 Lessons Learnt

One of the lessons from the Tanzania case is that high level of capital inflows for government budget support from foreign donors has implications and influence on the monetary policy implementation efficacy and strategies to be deployed by the monetary authorities. However the challenges can be overcome or diffused through the use of forex exposure limits and ensuring that all returns for monetary policy purposes uses the local currency as the accounting unit. The other lesson is that a manual LFCCC system exposes the system to many payment system risks especially operational and liquidity risks.

10.0 UGANDA

1.0 Introduction

1.1 Overview of the Economy

Economic Structure and Economic Trends - Ugandan economy is dominated by the services (45.4 per cent) and agricultural (35.6 per cent) sectors, together accounting for about 81 per cent of the GDP; the manufacturing sector accounts for about 12 per cent. The country has a large external sector, with total trade accounting for over 40 per cent of the GDP. Since 2001, Uganda has maintained a real GDP growth rate of about 5.0%. In 2005/06 real GDP grew by 5.4 per cent in compared to 6.7 per cent in 2004/2005. The economic downturn was attributed to prolonged drought and reduction of hydroelectric generation. Real GDP is projected to grow by 7.0 per cent during 2006/2007. The annual underlying inflation was 4.7 per cent during 2004/2005. It rose to 5.2 per cent during 2005/06, which was slightly higher than its target of 5.0 per cent. The upsurge in overall and underlying inflation is attributed to the rise in international oil prices and shortage of hydroelectric power. Table 1 provides a summary of the key economic and financial indicators.

Interest Rate Policy - Domestic interest rates are market determined and have remained largely stable over the last two financial years. The stability in interest rates is mainly attributed to the continued use of Treasury bills and long-term government bonds and improved liquidity management framework.

Foreign Exchange Regime - The BOU maintains a free-float exchange rate policy regime with occasional intervention to smooth out volatility in the exchange rates. The exchange rate depreciated by 7.0 per cent during 2005/06, driven in part by weak performance of the external current account.

1.2 Overview of the National Payment System

General Legal Aspects - The Bank of Uganda Act, and the Financial Institutions Act No 2 of 2004, the Micro Finance Deposit Taking institutions Act, Foreign Exchange Act 2004 and the Foreign Exchange (Forex Bureaus and Money Remitters) Regulations of 2006 govern the operations within the national payment system (NPS) of Uganda. The National Payments System Bill (NPS Bill 2007) has been drafted and forwarded to the Ugandan Parliament for legislation. A number of laws have a bearing on payment instruments and institutions in Uganda and these include the Bills of Exchange Act- CAP 76, the Money Lenders' Act CAP 264, and the Cheques Act that govern how cheques are drawn, accepted and paid; and the Companies Act-CAP 85.

There is also an Act of Parliament governing the Central Depository System operations for government securities called the Public Finance Accountability Act under which the Minister Finance has approved the Delivery Versus Payment operations for government papers using the Uganda National Inter-bank Settlement System (UNIS) - the Uganda RTGS System. The CDS Bill to facilitate DVP for the equity debt instruments operations and ultimate future settlements within the Uganda Stock Exchange using the UNISS is already with the Uganda Parliament for promulgation accordingly.

To promote public confidence in the banking system, the BOU has set up a legal framework receivership and liquidation of the assets through a Deposit Protection Fund under the Financial Institutions Act No.2 of 26th March, 2004.

Institutional Framework - Major institutions that provide payment services in Uganda are commercial banks, credit institutions, and micro-finance deposit - taking institutions, Post office Savings Bank, Building Societies, and forex bureaus. The banking sector comprises of 28 institutions, 15 of which are commercial banks, 5 credit institutions, 3 development banks, 4 micro finance deposit taking institutions, and one building society. Forex bureaus number 82.There are also 14 money remittance institutions.

Major Payment Instruments and Media - The most common and predominantly used instrument is cash with the Uganda Shilling as the legal tender. Non-cash instruments account for the bulk of the value of monetary transactions. Non-cash payment instrument include cheques and a range of varied electronic payment instruments, including credit and debit cards, direct credits and debits and the Electronic

Table 1: Selected Economic and Financial Indicators

	2001	2002	2003	2004	2005	2006
Population (mn)				24.4		26.8
Nominal GDP (Ush bn)	9,974.24	10,239.6	11,770.8	13,189.7	15,175.8	17,233.8
GDP growth rate (%)	5.00	6.56	4.72	5.49	6.69	5.44
Exchange rate (Ushs/S)	1,767.6	1,797.2	2,002.8	1,788.8	1,740.3	1,862.3
Overall inflation (%)	4.50	-2.00	5.70	5.15	7.97	6.63
91-day Tresury Bill Rate	5.98	5.26	18.51	6.39	9.08	7.07
Base money (Ushs bn)	559.61	661.64	696.13	867.09	928.33	1,087.8
External reserves (months of of imports)	6.38	6.77	6.94	7.22	6.22	5.91

Source: Bank of Uganda

Funds Transfers through the SWIFT technology. Cheques are the most common and predominantly non-cash payment instrument by volume of transactions. There has been a general trend of cheques being replaced at the retail level by credit and debit cards as all banks now issue cards to their customers to access their services through the ATMs. Since July 2007 cheques are capped at Ushs20 million and augmented with the recent introduction, during September2006, of the Straight Through Processing of cheques using the EFT system, the cheques passing through the clearinghouse have been reduced drastically.

The main payment media or streams include the clearing and settlement circuits. The main ones include the cheque clearing system through the Electronic Clearing House for the local currency denominated instruments only. The other related retail media is the Inter-bank National Switch that facilitates the ATM and POS terminals operations. The other is the settlement media for the large value transfer system through the RTGS system called UNISS-the Uganda Inter-bank Settlement System.

The Role of Bank of Uganda - The Central Banks role in Uganda is, by its own statutes, to be the clearinghouse for cheques and other financial instruments for financial institutions and be the banker of to the financial institutions. It is in this legal context that the Central Bank of Uganda gets involved in the Ugandan National Payment System in the following ways: as a service provider for inter-bank transfers for large value settlements through Uganda National Inter-bank Settlement System UNISS- its Real Time Gross Settlement System (RTGS), ownership and service provider for the Electronic Clearing House operations etc. Payment system oversight role is yet to evolve as an autonomous function due to lack of an appropriate legal framework within the BOU statutes and the NPS Act. However the Central Bank plays a partial formal payment system oversight role through moral suasion and customary practices under the legal provisions of such laws like the Central Bank Act, Financial Institutions Act, and the Micro Finance Deposit Taking Institutions Act.

Role of other Private and Public Sector Bodies - The other sector bodies with interest in payment systems include the following: the Uganda Bankers Association (UBA) which is the industry association of member commercial banks that promotes and safeguards the common interest of its membership especially with issues to do with the regulator and the government. The other related body is the Electronic Clearing House Committee that directs the operations of the clearing house that is owned and operated by the BOU.

The other bodies that play a role in the Uganda payments system include the National Payments System Council (NPSC) which is the highest policy making organ on matters pertaining to the reforms and modernisation of Uganda's NPS; the Uganda SWIFT User Group which is simply a club for users of SWIFT in the country and which includes the BOU. Lastly for the capital market securities segment, there is the Uganda Securities Exchange (USE) as the regulator of the industry while, the Stockbrokers Association through its membership, oversee the operations of the Uganda Stock exchange that is yet to develop a Central Depository System (CDS) for quoted securities. The Uganda Stock Exchange (USE) has installed the software and hardware for its CDS and the proposed operationalisation process will commence once the Uganda's CDS Act and the Uganda Parliament passes the pertinent amendments to the Uganda Companies Act.

2.0 Inter-bank Foreign Exchange Market

2.1 Evolutions and Development of the Market

With the liberalisation of the current account foreign exchange regime during 1993 and the capital accounts in 1997, BOU allowed Uganda residents whose payments (receipts and remittances) were then in foreign currency to open foreign currency accounts to facilitate current account payments. Their introduction created the need for the inter bank transfers between foreign currency account holders; and this was the advent of the inter-bank forex market. Since then, Uganda has liberalised both her current and capital accounts and there is unrestricted flow of funds in and out of the country augmented with a free-floating exchange rate regime.

2.2 Nature and Operations of the IFEM

Banks open forex accounts for their residents and non-residents customers who have evidence of official sources of foreign currencies. The applicable currencies in operations are the Euro, Sterling Pound and the US Dollar however the dominant currency is the US Dollar. Banks maintain both current and term (fixed) deposit accounts. These deposits are placed offshore through correspondent relations or parent companies in case of foreign owned banks. There are no savings accounts. Account opening rules are liberal as every one in need of such account is allowed. However, KYC and other AML rules are in place. Major customers are those dealing in the international trade, NGOs etc; about 80% -90% are corporate account holders compared with retail at around 10-20%.

Banks provide loans in foreign currency with the LIBOR as the interest rate benchmark. Foreign exchange based lending by banks and financial institutions are subject to the single borrower exposure limit of 25 per cent. In most of the branches of foreign banks, the ratio of forex deposit liabilities is at the ratio of 50 to 50 while forex loans to total loan portfolio is the ratio of 25:75 respectively. Forex exposure limit is set at 20% of core capital. Prior approval is required to establish correspondent relationship, while size of foreign exchange placements in any correspondent organization is limited to the rating of the counterparty with maximum 60 per cent for rating A and above, maximum 40 per cent for rating B and above and maximum 20 per cent for non-rated. Banks are required to make regular submission of reports on foreign exchange transactions besides on-site monitoring of compliance to these regulations. Banks make 3 periodical forex returns on a daily, weekly and monthly basis. There is also a

-morning, mid-day and evening. The entire mandatory monetary policy requirement returns to the Central Bank, e.g. the reserve and liquidity ratio, are converted to Uganda shilling at BOU stipulated exchange rates.

There are no limits on movements of funds so long as it does not infringe on capital adequacy requirements. The operations of the IFEM are guided by Anti- money Laundering (AML) regulations issued by the BOU. Banks also have their own 'Know Your Customer' (KYC) policies and practices which are very high in their agenda especially when opening the forex denominated accounts for their customers. A number of banks including the BOU use SWIFT to transfer funds across the borders. The use of SWIFT has considerably reduced the settlement, liquidity, and credit risks associated with cross border transactions.

Role of Central Bank and Intervention Mechanism - There is a robust IFE market, where Bank of Uganda's selective interventions are intended to prevent excessive appreciation or depreciation of the exchange rate for monetary policy purposes. The BOU actively monitors spreads and rates of depreciations/appreciation of the exchange rates thrice daily and intervenes as appropriate to smooth exchange rate movements. The BOU also actively participates in the IFEM under the sterilization strategy to mop excess liquidity generated by government expenditure. The sterilization and intervention strategy of the BOU has largely been successful in achieving overall exchange rate stability.

There is an active horizontal Repo market (Repo agreements transactions among banks themselves) to facilitate inter-bank lending transactions by the commercial banks in foreign currencies and the vertical Repo market (Repo transactions between commercial banks and the Central Bank as the lender of last resort) for short-term liquidity management in foreign currency. To mitigate against the effects of monetary policy, the cash ratio is computed on the basis of total deposit liabilities (broad money). The current level of the cash ratio is 9.5 per cent.

Market Risks and Mitigation - The major risk is the market and exchange risks; however the risk has been contained through central bank's prudent monetary and financial system stabilization policies. The BOU has also put in place a 25% capital based exposure limit on the banks' forex operations as a cushion against risks. All banks have a mandatory risk management department, which, through the Board review and put in place prudent forex risk management policies including the requisite limits. They also have in place Forex and Internal Risk Control Tool Kits and have designated AML Compliance Officers in conjunction with BOU AML guidelines.

3.0 The Local Foreign Currency Cheque Clearing

Historical Perspective-Players and Role in the Development - There is no open LFCCC system in the Uganda inter-bank exchange and all locally issued foreign cheques are sent for collection offshore on clearing cycle of more than 14 days. A self-regulating local currency clearing "Club" comprising of 4 member banks, under an all exclusive informal "gentleman's" agreement, has been in existence since 1998 when BOU authorised commercial banks to open foreign currency accounts with chequebook facilities during August 1993. Prior to the establishment of the Club arrangement, all banks settlement of foreign currency transactions was by means of direct correspondent relationships with the funds transferred using SWIFT and telegraphic transfers. Local foreign currency cheques when issued had to be cleared through direct presentation to the drawer bank which in turn either issued draft or remitted by TT as settlement for each individual cheque item.

The above clearing methodology proved to be time consuming, inefficient and very costly to banks especially those that were handling large volumes of foreign currency cheques. It is in this context that, during 1998, Standard Chartered bank initiated the club system - a private foreign currency cheque clearing arrangement where the 4 member banks has since been exchanging the clearing effects locally and only settle abroad on a net basis. However during 1999, there were discussions at the Bank to introduce a LFCCC system, but there were fears that the development may affect the economy as it could lead to dollarisation in the domestic economy. Two years ago UBA were in talks with the Bank for possible introduction of an open LFCCC system, but BOU still held the same views on dollarisation and hence the Club clearing and settlement arrangements by some of the large foreign bank branches remains in place.

The Major System Players - The major players are the 4 member banks, their corporate customers, the clearing member banks' correspondent relations, which maintain the foreign currency settlements accounts and lastly the SWIFT User Group that facilitates a secure transmission of payment instructions. The Club members are Citibank, Barclays Bank of Uganda Ltd, Stanbic and Standard Chartered Bank Ltd.

Rules Governing the System - The rules governing the operations of the club arrangement are contractual based as all banks sign a silent gentleman's agreement signed by the participating banks' CEOs. Central Bank has not issued any guidelines for the LFCCC Club operations, as the BOU does not formally recognise the club clearing arrangement. However, the BOU statutes through its Part VI Section 37 allows the Bank to provide facilities for clearing financial instruments on her own terms and make regulations prescribing the procedures and other provisions for participations in the clearing house, and for the clearing of cheques and other credit instruments in collaboration with the Uganda Bankers Association (UBA). However the BOU officials are of the opinion that their statutes do not allow them to maintain foreign currency domestically which should be one the mandatory requirements for eligible institutions to operate an open system for LFCCC Club arrangement.

The Role of the Central Bank - BOU has absolutely no role to play in the Club-based LFCCC arrangement although it is aware of its existence. However the BOU's NPS Vision and Strategic framework states that an open and structured

LFCCC system will be introduced once the number and activity of foreign currency denominated accounts increases, coupled with the need to reduce foreign exchange outflows arising. The clearing financial institutions will have to agree with their settlement agent on how to treat the credit balances on their settlement accounts.

The Operations of the Club Arrangement - The Local Currency Cheque Clearing System- a gentleman's agreement- has since 1998 been in place to clear and settle Euro, Sterling and US Dollar denominated cheques drawn on banks in Uganda. The system has since significantly reduced the time needed to clear local currency cheques for its members from more than 14 days to a 5day clearing cycle with value date being the 7th day. Unpaid cheques are returned immediately. The participating banks meet thrice a week on Mondays, Wednesdays and Fridays to exchange the clearing effects. Transfers are done electronically using SWIFT.

The Management of Settlement Risk and "Finality" Settlement Mechanism -There is no "failure to settle" mechanism within the system.

Management of Operational and other Risks - Banks have designated Risk Officers and various committees to manage these risks. The general operational risks are taken care of through a due diligence process on application based on the bank's rating and level of reputational risk as the system operate under a gentleman's agreement. The other operational risks are also managed by the mandatory requirement of the SWIFT membership, as EFTs and SWIFT is used for settlement funds transfers.

Implications on Monetary and Financial System Stability -The way the Central Bank is handling the IFEM operations, the incidences of the LFCC Club system compromising monetary policy efficacy and financial stability is remote. Any other possible impact is limited by the fact that the scale of the operations within the club arrangement is insignificant compared to the whole IFEM operations and local cheque clearing system.

Compliance with Best Practices for Payments - The Ugandan LFCC Club arrangement does not meet most of the BIS Core Principles. For example one major requirement is that settlement must be in central bank money but the banking laws do not allow the Central Bank to maintain forex accounts at the Bank. The Central Bank does not have an appropriate legal framework. The BOU position on this matter may require rethinking as it is now globally accepted among the payments and financial systems overseers and regulators that forex operations especially the settlement circuit is a systemically important payment system after the experiences of the Herstatt Bank failure during 1974.

4.0 Intra-day Loan Facility and Foreign Currency Transactions

The Nature of Operations and Policies - During 2004 when the RTGS was formally launched and went live, the BOU begun to offer intra-day facility to the participants in the inter-bank exchange. Intra-day credits are granted in the form of a collaterised repurchase agreement and solely in local currency. Consequently, the intra-day facility is only available for the local currency cheque settlement and not for local foreign currency cheque settlement facilitation that in any case have its own offshore settlements arrangements.

Role of RTGS in LFCCC Arrangement - There is no role of the BOU in the club settlement arrangement as the latter by passes the BOU settlements' systems.

Linkage with Foreign Currency Transactions - In Uganda the ILF is mainly used to address short-term liquidity deficits within the RTGS in-order to avoid a gridlock within the system and not used for foreign currency transactions. As Uganda has liberalised its forex regime, banks needing foreign currency resort to the inter-bank foreign exchange or their reserves maintained with banks abroad, hence there is no linkage between the ILF and the foreign currency transactions.

5.0 Role of BOU in the Development of the LFCC System

BOU has not endeavoured to assist in the development of an open architecture for LFCCC arrangement even though they are aware of the existence of the LFCCC Club arrangement.

The Central Bank Oversight Role - The BIS Core principle as pertains to the responsibilities of the Central Bank in applying the Core Principles is categorical that Central Banks have a role of promoting payment systems developments. It is in this context that the BOU needs to play a key role in the transformation of the exclusive LFCCC Club of 5 banks to an open architecture for the clearing of LFCC through the Clearing House. This is because the current Club arrangement is uncompetitive, oligopolistic in nature and does not conform with the BIS Core Principles.

The BOU Developmental Role in LFCCC Arrangement - the BOU is not playing any role in promoting an open architecture for LFCCC system for fear of its impact on dollarisation and also in acting ultra vires to its statutes of maintaining foreign currency accounts at the Bank for the private sector.

6.0 Dollarisation in the Ugandan Domestic Economy

Dollarisation in the Domestic Economy -There is inadequate information on Ugandan residents' holdings of their financial wealth in foreign currency to enable ascertainment of the extent and depth of dollarisation within the economy. Consequently, the extent of the country's unofficial dollarisation is approximated by the share of foreign currency deposits to GDP (GDP dollarisation), broad money (money supply dollarisation), total private deposit liabilities (Deposit liabilities dollarisation), and total private assets (assets dollarisation) as indicated in Table 2. The average deposit dollarisation was about 25 per cent. The level of reported deposit liabilities dollarisation in the individual

Table 2: Indicators of Dollarisation Penetration in the Ugandan Domestic Economy (%)

Parameters	2001	2002	2003	2004	2005	2006
Forex Deposits/Total Deposit Liabilities	-	27	33	33	30	32
Forex Lending/Total Loan Assets	-	25	22	23	30	27
Forex Deposits/M3	-	21	24	24	21	22
Forex Deposits/GDP	-	4	5	5	4	5
Imports to GDP	-	29	29	30	31	35
Exports to GDP	-	13	14	15	16	14
Total Trade To GDP	-	42	43	45	47	49

Source; Bank of Uganda

commercial banks reviewed was even higher, ranging between 40 per cent and 50 per cent in the banks visited. Like in other MEFMI member countries reviewed, no study has been undertaken to ascertain the potential negative (destabilizing) effect of dollarisation on the conduct of monetary policy and/or its positive (stabilizing) effect on the domestic banking system.

However, that notwithstanding, the BOU already has undertaken measures to mitigate against potential monetary and systemic risks of dollarisation. First, the BOU risks in its conduct of monetary policy are mitigated through targeting the broad money aggregate (M3) and use of this for computation of the cash ratio, hence, the BOU requires commercial banks to submit their Bank Survey Monthly (BSM) reports in the Ugandan Shilling. Secondly, the BOU strictly enforces its foreign exchange rules, guidelines and regulations aimed to reduce foreign exchange risk exposure of the banking system. The BOU requires every bank or financial institution to manage its foreign exchange exposures within the framework of a comprehensive risk management plan, setting out its policies, procedures and other safeguards necessary to prudently manage and control to foreign exchange risk.

For now dollarisation is not an issue in Uganda but the potential is there due high and increased foreign capital inflows in the form of portfolio investments, donor funds and a high level of budget support from foreign sources estimated at about 40%. There is some element of invoicing in dollars but it is insignificant due to the strength of the Shilling.

Presently, the liberalisation of the forex market and absence of exchange controls augmented with sustained macro-economic stability has made many residents not have reason to hold dollars. However prior to 1997, before the liberalisation of the capital account, Uganda had a serious dollarisation problem where almost every transaction was tendered in foreign currency e.g. residential and office accommodation rents, school fees etc. It is likely that this is one of the reasons the BOU has not established an open architecture for the clearing of locally issued forex cheques. However, presently bank customers both residents and some non-residents account holders are disintermediating from the foreign currency portfolios.

7.0 LESSONS LEARNT

IFEM Market Operations - BOU has one of the most elaborate IFEM operations in the region with mandatory 3 returns in
a day - mornings, afternoons and evenings. The foreign banks have more comprehensive risk management policies and strategies than the local owned banks.

LFCC Arrangements - BOU's hands-off policy stance has stunted the development of LFCCC arrangement due to unconfirmed fear of dollarisation and pretext of legal incapacity. Most banks in Uganda, however, are yearning for an open architecture for clearing locally issued foreign currency cheques to limit operations costs as the cheques take up to 30 days to clear.

11.0 ZAMBIA

1.0 Introduction

1.1 Overview of the Country

Structure of the Economy and Economic Trends - Zambia is a highly open economy with total trade (imports and exports) accounting for about 40 per cent of GDP. The mining of copper continues to dominate the Zambian economy. In the past few years, the Zambian economy has performed relatively well, recording positive real GDP growth with inflation and interest rates declining. The growth has been broad-based, extending beyond the recovery of the mining sector and withstanding adverse shocks, such as drought and record increase in oil prices in 2006. At the end of December 2006, the annual overall inflation had fallen to 8.2 per cent from 15.9 per cent achieved in 2005 and was well below of the target of 10.0 per cent. The positive inflation performance during 2006 was the lowest level in 30 years. This positive development in inflation was due to continued implementation of prudent monetary and fiscal policies, coupled with increased food supply. Table 1 provides a summary of these and other key economic and financial indicators.

Monetary Policy Framework - the monetary policy aims at achieving and maintaining low and stable inflation (5.0 per cent), stable interest rates and a competitive exchange rate. The price stability objective of the BOZ is based on monetary targeting policy framework. The framework does not target inflation directly but the reserve money as the operational target. The applicable monetary policy instruments include the Open Market Operations, and Cash ratio requirements that are complemented with indirect instruments that include Foreign Exchange Market Operations (FEMO), the rediscount rate and moral suasion in the conduct of its monetary policy formulation and implementation.

Interest Rate Policy - Interest rates in Zambia are market determined, with interest rates obtainable in the Treasury bill as the benchmark market providing an anchor.

Foreign Exchange Regime - Zambia has a free-floating exchange rate policy since 1994. However, the BOZ periodically intervenes in the market with the objective of promoting orderly and smooth operations within the inter-bank foreign exchange market (IFEM).

1.2 Overview of the National Payment System

General Legal Aspects - The Bank of Zambia Act No 43 of 1996, the Banking and Financial Services (BFSA) Act as amended in 2000, and the National Payments System Act of 2007 are the major legislations governing the operations of the Zambian National Payment System. A number of other laws have a bearing on payment instruments and institutions in Zambia and these include the Bills of Exchange Act of 1883, the Cheques Act, Law of Contracts and the Companies Act.

To promote public confidence in the banking system, a legal mechanism for receiverships, liquidation of the assets of and paying off the liabilities of problem banks and financial institutions has been bestowed upon the Central Bank of Zambia which has the powers of and management of insolvency and liquidation of banks and institutions under the Banking and Financial Services Act.

Institutional Framework - There are various providers of payment systems in Zambia, who could, basically, be divided in two categories, namely, commercial banks and non-bank financial institutions. Non-bank institutions include Building Societies, Leasing companies, Savings and Credit banks, Development Finance Banks and Micro Finance institutions and forex bureaus.

The banking and non-banking financial sector comprise of 73 institutions, 13 of which are Commercial banks (with network of 181 branches and agencies and 152 ATMs), and 60 Non-banking institution which include 3 building societies, 35 Forex bureaux, 12 Leasing Companies, 1Savings and Credit Company, 1 Development Finance Institution, and 8 Micro Finance institutions (MFIs). Commercial banks

Table 1: Selected Economic and Financial Indicators

	2002	2003	2004	2005	2006
Population (mn)	9.1	9.1	10.1	12.0	12.0
Nominal GDP (K' bn)	na	20,481.0	25,814.0	32,648.6	38,586.5
Real GDP growth rate (%)	na		5.4	5.1	5.8
Nominal Income per Capita (K' 000)	na	2250.66	2555.84	2720.72	3215.17
Reserve Money (K' mn)	980,994.8	1,287,920.0	1,576,946.0	1,831,223.4	2,310,365.9
Cash Reserve Ratio	10	6	6	6	6
91day Tresury Bill Rate	32.0	18.2	16.3	15.1	8.7
Overall inflation (%)	26.7	17.2	17.5	15.9	8.2
Underlying inflation (%)	2.5	3.3	5.9	5.5	4.4
Exchange Rate Kwacha/US$		4,577.75	4,651.51	3,416.34	4,127.83

Source: Bank of Zambia, NA - Not available are categorised under Government, Local and subsidiaries of foreign banks. The capital markets institutions, on the other hand, comprise the Securities Commission, Lusaka Stock Exchange (LUSE) and 15 listed companies.

Major Payment Instruments and Media - The most common and predominantly used instrument of effecting payments in the economy is cash with the Zambian Kwacha as the legal tender. Non- cash payments instruments account for the bulk of the value of monetary transactions. Non-cash payment instruments include cheques and a range of varied electronic payment instruments, including credit and debit cards, direct credits and debits and the Electronic Funds Transfers through SWIFT technology. There has been a general trend of cheques being replaced at the retail level by credit and debit cards as all banks now issue cards to their customers to access their services through the ATMs. Cheques are truncated at the banks' headquarters on a T+1 cycle.

The main payment media or streams include the clearing and settlement circuits for both cheques and payment cards. The main ones include both the local foreign currency cheques and local currency issued cheques clearing systems through the Zambian Electronic Clearing House Limited (ZECHL) and for the other both local currency and foreign currency denominated clearing effects e.g. direct debits and credits. The other related retail media is the International and Local payment cards through the ATM and POS terminals. There is also the payment card switch settlement arrangement called the ZAMLINK that allows 4 banks to share their ATMs (i.e., ATM reciprocity) and ultimately settle through the RTGS system. The large value transfers are carried out through the RTGS system called the Zambian Inter-bank Payment and Settlement System (ZIPSS).

The Role of Bank of Zambia - The Central Bank role, under its own statutes, is to promote efficient payment mechanisms. It is in this legal context that the Bank of Zambia gets involved in the Zambian National Payment System in the following ways: as the owner of the Zambian Inter-bank Payment and Settlement System (ZIPSS) - the Real Time Gross Settlement System to facilitate inter-bank exchange and settlement arrangements; providing the ultimate settlement agency role to the Zambian Electronic Clearing House (ZECH), etc. Payment system oversight is yet to evolve as an autonomous function. However the Central Bank has full formal/legal payment system oversight functionality role provided under the legal provisions of the Central Bank Act and the recently enacted NPS Act of 2007 that empowers the Bank to regulate, oversee and designate payment systems under its statutes.

1.3 Role of Other Private and Public Sector Bodies

Bankers Association of Zambia (BAZ) - The industry set up a full time secretariat on August 01, 2007. Prior to this arrangement the industry had an annual rotational secretariat system within the respective industry member banks. The primary responsibility of the secretariat is to provide secretariat services to the Bankers Association's main committee comprising of the CEOs of member banks and the Bankers Association of Zambia Technical Committee (BAZTECH) comprising of technical teams drawn from member banks including the Bank of Zambia. The other responsibility is to act as an interface between the member banks and other stakeholders and also to produce a forum for the exchanges of information.

Zambia Electronic Clearing House Limited (ZECHL) - The ZECH, initiated by the Bank of Zambia, is a limited company owned by the individual member banks including the Bank of Zambia with the Deputy Governor as the chairman. The responsibilities of ZECH Limited are to provide accommodation for Foreign Currency Cheque Clearing House (FCCC), open and maintain Collateral Trust Account(s), ensure all members have deposited the required amount of collateral at all times and lastly to liquidate the defaulting members' collateral and apply the proceeds on pro-rata basis on instructions of the Chairman of BAZ.

There is the ZECH Committee, which is charged with overseeing the smooth operations of the cheques clearinghouses at both Lusaka and Kitwe branch. The ZECH provides facilities for the clearing of eligible items from various payment streams as decided by BAZ. It manages the FCCC, LCCC, direct debits and credit transfers and payment card (Switch) clearing arrangements. It also issues and reviews the clearinghouse rules and ensures adherence through the Executive Committee of BAZ; has the power to penalise defaulting member(s). To mitigate against the failure to settle at the ZECH, there is a collateral pool with the treasury bills placed at the BOZ by ZECH Limited as the underlying instrument contributed by member banks according to their highest multilateral settlement obligation (debit) in each eligible currency in the period of the last three months subject to quarterly reviews. In case of a failure of a member bank, ZECH has the power to request the Central Bank to rediscount the pledged treasury bills accordingly and pay the members on a pro rata basis.

Foreign Currency Clearing House (FCCH) - The Executive Committee of BAZ appoints the FCCH Committee from among member banks to be responsible for ensuring the FCCH operations are undertaken in conformity with the Foreign Currency Clearing Rules. The Committee is responsible for the efficient and proper management and operations of the FCCH. The Chairing member bank of BAZ appoints the FCCH Controller, an experienced banker with detailed knowledge of clearing and settlement processes, to oversee the operations of the Clearing House. The Controller is responsible for the discipline of the Clearing House in the event of any dispute arising between the representatives during the clearing session. Apart from the Committee, the Controller is answerable to BOZ and BAZ in some of its operations. The Committee meets once every quarter unless on a written request by a member with a stated objective.

2.0 Inter-bank Foreign Exchange Market

2.1 Evolutions and Development of the Market

The financial system was fully liberalised during 1993/1994 with the suspension of the Foreign Exchange Control Act, allowing for the opening of both current and capital accounts and the resultant operations of forex denominated accounts by the Zambian commercial banks. Since 2003, there has been active forex inter-bank market arising from the improvements in the economy and the increased inflows of donor and multilateral agencies support. The increased inflows have been a challenge to the monetary authorities that have to periodically intervene in the market to smoothen the fluctuations in the exchange rate volatility. A manual FCCH was established, as a result of the liberalisation process, to clear eligible debit instruments.

2.2 Nature and Operations of the Market

Rules Governing the Operations of the Market - The rules governing the operations of the market are derived from legal statutes and directives from the Bank of Zambia. The major statute is the Banking and Financial Services (Foreign Exchange Risk Management and Exposure) Regulations of 1996.The main provisions of the regulations include the stipulations for the forex management risk plan, risk management policies and exposure limits. Of the major requirements, is the maintenance by all banks and financial institutions of an overall foreign exchange exposure at the close of each business day to a maximum limit of 25% of its regulatory capital and ensuring that their intra-day overall forex exposure are maintained within their objectives as set out in their respective risk management policies. The other major requirement is the maintenance of forex risk position, to a maximum of 20% of the regulatory capital as at the close of each business day in any single currency.

The other regulation governing the inter bank foreign exchange market (IFEM) operations is the Bank of Zambia Anti-.money Laundering Directives of 2004 and the Prohibition and Prevention of Money Laundering Act of 2001 which to a large extent influence the operations of the market.

Major Market Players - The major market players are the Bank of Zambia, forex bureaus, commercial banks and their offshore correspondent banks and local customers. The major account holders at the banks are individuals, corporate customers and government departments through some of the donor projects.

Market Operations - Different banks have set varied minimum account opening rules ranging from US$ 500 to $2,000. One of the prerequisites for the opening of the foreign denominated accounts is the evidence of source of applicable forex funds. Banks mainly operate demand accounts, time and call deposits and no savings accounts with the majority being demand account holders. The major currencies are the USA Dollar, Euro, Pound Sterling and South African Rand. Different banks have different policies on the payment of interest on these accounts, however most banks pay interest on time deposits with the applicable interest rates being based on the LIBOR rate, other relevant rates in the market and the prevailing forces of demand and supply of currencies within the IFEM. The same interest principle is applicable to banks forex lending practices to their customers, however, no account holder is allowed to encash or deposit more than $5,000 in cash per day over the counter (OTC) as per the Bank of Zambia directives or a non-account holder to buy or sell more than US$1,000 in cash over the counter.

Bank of Zambia monitors the 25% overall exposure through mandatory returns by banks on a daily basis and weekly reporting while all forex dealings of the day must be reported to the Bank on the next business day and also on a weekly basis. There are limitations on offshore placements amounts and percentages depending on both the offshore correspondent banks' ratings and the concerned bank's BOZ rating. There are no domestic inter-bank forex placements. However, there are no dollar-to-dollar placements within the IFEM. Banks foreign currency lending is limited to 25% of the bank's regulatory capital to one entity. Trades are collateralised by treasury bills and bonds, which have stabilised the market.

BOZ has established a broad-based inter-bank foreign exchange trading system as the new mechanism for determining the Kwacha/Dollar exchange rate in Zambia. This implies that BOZ has ceased to auction foreign exchange to the market on behalf of major foreign exchange earners. Foreign exchange earners can now transact directly with any commercial bank of their choice. Other limitations to IFEM operations include the stipulations of AML Act of 2001 and AML Directives issued by the BOZ although the banks also have in place in-house Know Your Customer (KYC) policies and practices.

Role of Central Bank and Intervention Mechanism - Zambia adopted a free-floating exchange rate policy since 1994. This means that the Kwacha exchange rate against foreign currencies is determined daily by the demand and supply trading currencies in the market. However, the BOZ periodically intervenes in the market with the objective of promoting orderly foreign exchange market where excessive volatility in the exchange rates are minimized through a gradual sale or purchase of appropriate amounts foreign exchange.

With the liberation of the both current and capital accounts, the Bank of Zambia left the market to other market players and hence is not an active player in the IFEM except for issuing operational guidelines to the players and monetary policy intervention. There is no policy of targeting the exchange rate. The BOZ participates in the Inter-bank Foreign Exchange Market (IFEM) to sell or buy foreign exchange, to mop up excess liquidity or provide liquidity to the economy.

Market Risks and Mitigation - To mitigate against market or systemic risk, the BOZ require every bank or financial institution to manage its foreign exchange exposures within the framework of a comprehensive risk management plan, setting out its policies, procedures and other safeguards necessary to prudently manage and control foreign exchange and market risks. Banks provide loans in foreign currency with the LIBOR as the interest rate benchmark. Foreign exchange based lending by banks and financial institutions are subject to the single borrower exposure limit of 25 per cent. In most of the branches of foreign banks, the ratio of forex deposit liabilities is at the ratio of 50 to 50 while forex loans to total loan portfolio is the ratio of 25:75 respectively. Forex exposure limit is set at 20% of core capital. Prior approval is required to establish correspondent relationship, while size of foreign exchange placements in any correspondent organization is limited to the rating of the counterparty with maximum 60 per cent for rating A and above, maximum 40 per cent for rating B and above and maximum 20 per cent for non-rated. Banks are required to make regular submission of reports on foreign exchange transactions besides on-site monitoring of compliance to these regulations. Banks make 3 periodical forex returns on a daily, weekly and monthly basis. There is also a requirement for submitting returns three times a day-morning, mid-day and evening. The entire mandatory monetary policy requirement returns to the Central Bank, e.g. the reserve and liquidity ratio, are converted to Kwacha at BOZ stipulated exchange rates.

All banks have a mandatory Risk Management Departments with designated officers to set and manage corporate risk management objectives and plans. Apart from prudent matching of their positions as per their respective corporate plans, the banks must also adhere to the stringent daily and weekly exposure and placement limits as set by the monetary authorities. Apparently, international banks have very restrictive risk analysis mechanisms.

3.0 The Local Foreign Currency Cheque Clearing System

Historical Developmental Perspective - During 1994 when the foreign exchange market was fully liberalised and banks allowed offering foreign currency chequeing accounts, the foreign banks in Zambia initiated the Foreign Currency Cheque Clearing (FCCC) arrangement- a formal, competitive and open architecture for the clearing of the same cheques within the ZECH. Prior to the development of the FCCC system, banks used to take locally issued cheques for collection with their offshore correspondent relations.

The Major Players - The major players in the market include the member banks of ZECH including the Bank of Zambia which operates on its own account and as the overseer of the clearing circuit, forex bureaus, the corporate banks' customers and the local commercial banks' offshore relationships which fund the member banks' net debit (negative net settlement) positions as and when they occur.

Rules Governing the System - The rules governing the operations of FCCC system are the Foreign Currency Clearing House (FCCH) Rules within the ZECH rules signed by all participating members contracting them to obey by the same rules. The rules establish the terms and conditions for the clearing and settlement of payment instruments and payment instructions in foreign currencies by member banks of the FCCH. The rules are also subject in all respects to the Laws of Zambia, international laws and any applicable regulations published in the operating circulars of the Bank of Zambia.

The Role of the Central Bank in FCCH - The role of the Bank is like that of any other participating member of ZECH and FCCH and hence does not enjoy any special favours. The BOZ, as a member of the FCCH, may participate in the clearing services to the same extent as any other member bank provided that this does not derogate BOZ from any powers vested in it to supervise and regulate the financial and payments systems. These powers include the powers to supervise payment systems and clearinghouses under the Payment System Act of 2007. The Bank does not play the usual customary role of settlement agency in the FCCC arrangement as member banks manually settle bilaterally through related correspondent banks offshore.

The Clearing and Settlement Steps: The FCCH provide facilities for the clearing of eligible foreign currency items authorized by the BAZ drawn on banks in Zambia. These instruments are drawn in United States Dollars, UK Pound Sterling, South African Rand and Euro or any currency authorised by BAZ. The FCCC house within ZECH operates thrice a week; participants present their clearing effects every Monday, Wednesday and Fridays at 10.00-11.00 hours while unpaid are returned on the next business day, namely Tuesdays, Thursdays and next Wednesdays respectively. All banks are eligible to participate in the arrangement subject to admission and agency rules.

The clearinghouse is on a T+1 clearing cycle and is on a bilateral netting system with the net debit position bank funding the counterpart bank's correspondent bank offshore through SWIFT on same day basis. The interchanged eligible items (inward and outward) for each clearing session of the FCCH are netted to determine the settlement obligation on a bilateral basis. It is the responsibility of the FCCH Controller to keep a clearing statement of the settlement obligation for each bank arrived at the end of the clearing session. Every interchange of eligible items between banks through the FCCH is conditional, provisional and reversible until settled.

Each bank is required to arrange sufficient account balances at correspondent bank for the bilateral settlement obligations from the FCCH. The clearing effects are not settled through the RTGS- ZIPSS, as banks do not maintain forex denominated accounts at the Bank of Zambia. In Zambia the local issued cheques clearing system through ZECH, which are capped at ZKM 100 million (USD25, 000 or equivalent).

The Management of Settlement Risk and 'Finality of Settlement' Arrangement - Finality of settlement and irrevocability of settlement is guaranteed by the Collateral Pool at ZECH Limited that is based on the member bank's highest debit figure for 3 months; this takes into account both local and foreign currency cheques clearing arrangements apart from the 8% reserve ratio requirement for all banks operating in Zambia, and the

Repo based collateral arrangement within the RTGS intra-day facility.

Where there are insufficient balances in a bank's account to conclude settlement, the FCCH member inform the FCCH Controller who in turn informs the BAZ Chairman of the bank's failure to settle. The BAZ Chairman immediately discusses the matter with the bank's Chief Executive. Where settlement is not achievable the BAZ Chairman convenes an urgent meeting of the banks' chief executives to explore ways of helping out the defaulting banks in order to ensure the stability of the Zambian National Payment Systems. The meeting also discusses the possibility of suspending the defaulting bank from the FCCH. The BAZ Chairman invites a Bank of Zambia representative to attend the meeting. Where banks fail to assist the defaulting member, the meeting resolves to suspend the defaulting member from the FCCH and the BAZ Chairman proceeds to inform FCCH controller and BOZ and instructs ZHCL to liquidate the collateral of the defaulting member bank to meet settlement obligations on a pro rata basis.

Management of Operational and other Risks - The other operational risks like systems failure, frauds etc are managed through due diligences processes and the prudent governance policies and practices and employment of reliable and efficient technology like SWIFT. For local currency clearing, the statutory reserves can facilitate clearing shortfalls.

Implications on Monetary and Financial System Stability -The IFEM operations pose serious financial system stability and monetary policy implications and challenges if not well managed. However these challenges have been alleviated through comprehensive surveillance and oversight of the market by the Central Bank. The daily and weekly monitoring schemes are in place, which are further galvanised by the existence of Anti Money Laundering (AML) laws, directives and the Bank of Zambia Corporate governance guidelines. To mitigate against the effects of IFEM operations on monetary policy efficacy, the cash ratio (Core Liquid Assets Ratio) is computed on the basis of total deposit liabilities (broad money). The aggregation of both foreign and local denominated assets and liabilities in local currency for purposes of the reserve and liquidity ratios and other monetary aggregates assists in the enhancement of monetary policy efficacy.

On the financial stability premise, the existence of elaborate exposure limits based on the banks regulatory capital and augmented with restrictive offshore placement rules protects the system from market risk while failure to settle risk and irrevocability of payment within the FCCC circuit is guaranteed through the existence of the Collateral Pool and hence guards the financial system from the ripple effect- systemic risk- that could arise from a participant failure. This is further strengthened by the Central Bank's vetting approval requirements of the ratings of the local banks' selections of their correspondent relations and operational limitations and exposure requirements.

Applications and Compliance with Best Practices for Payments - The FCC clearing arrangements meet most of the BIS Core principles from legal basis, accessibility, to the management of failure to settle rule. However the system is susceptible to both credit and liquidity risks and operational risk as settlement is not done using the Central Bank money as net debit obligation bank is the one to ensure that it funds its own offshore correspondent clearing and settlement account. The other risks arise as a result of the manual bilateral netting arrangements. However systemic risk is taken care of by the existence of the collateral pool arrangement with ZECH Limited.

4.0 Intra-day Loan Facility and Foreign Currency Transactions

The nature of Operations and Policies - The FCCC settlement arrangement is bypassing the RTGS-ZIPSS as the clearing and settlement arrangement is a manual bilateral netting system and the net deficit position of which is settled offshore using correspondent banking arrangements. However there is an intra-day facility for local currency clearing where Repo facility with treasury bills class of 182 papers as the underlying instrument is applied.

Role of RTGS in LFCCC Arrangement - The Zambian RTGS-ZIPSS has no role to play in the ZECH operations as LFCC cheques settlement is done through the respective banksí offshore correspondent relations.

Linkage with Foreign Currency Transactions - There is no linkage between the RTGS operations with the foreign currency transactions.

5.0 Role of the Central Bank in the Development and Operation of the LFCCC System

The Central Bank Oversight Role - The Bank of Zambia has a formal oversight role over the national payment system including overseeing the operations of the FCCC arrangement within the ZECH.

The Central Bank Developmental Role in FCCC Arrangement - The development of the FCCC arrangement within the ZECH was initially the initiative of the foreign banks but the Bank must have later played a pivotal role as the ZECH is chaired by the Bank of Zambia, and the Bank is also involved in the management of the collateral pool as all the treasury bills pledged by participating banks are placed at the BOZ.

6.0 Dollarisation in the Domestic Economy

Dollarisation of the Domestic Economy - The Zambian economy mat be categorised as an unofficially dollarised economy. With liberalization of the foreign exchange market in 1994, Zambian residents are legally allowed to hold their financial wealth in foreign currency alongside domestic currency including in foreign currency deposit accounts within the local banking system. Under the regime, foreign currency is not legal tender and hence most transactions including payments for utilities are denominated in the Kwacha. It was claimed however that almost all the goods and services are priced in dollar terms and then translated to Kwacha; vendors first think in US dollar terms and then convert to Kwacha just as a pricing formality.

Dollarisation was an issue in the Zambian economy prior to the years 2002/2003 when the Zambian Kwacha suffered a crisis of confidence due to the poor economic performance and suspension of aid by the donor agencies including the IMF. The foreign currencies especially the US Dollar replaced the Kwacha as unofficial legal tender for trading; the US dollar became the major player in the Zambian national economy. Almost all the goods and services on the market were priced in dollar terms and then converted to Kwacha and some commodities were selling way beyond imaginable levels for an ordinary Zambian to afford especially the real estate market where traders, especially foreign investors, were quoting their goods and services in dollars.

Since 2003 dollarisation is no longer an issue in Zambia, and if anything, there is a growing tendency of foreign currency deposit account holders, including non residents to migrate to the Kwacha denominated accounts. The economy has improved due external sector developments with improvements in the overall balance of payments e.g. the favourable global prices of copper, substantial debt relief under the Heavily Indebted Poor Countries (HIPC) Initiative and the Multilateral Debt Relief Initiative (MDRI) and lastly the increased portfolio and foreign direct investment inflows occasioned by the improved macroeconomic management and stability.

The Bank of Zambia moral suasion policy stance on dollarisation since 2002/3 has been that the official and legal currency for tendering goods and services in Zambia is the Kwacha and no one should be restricted to deal in any other currency unless under defined contractual obligations.

There was inadequate information on Zambian residents' holdings of their financial wealth in foreign currency. Consequently, the extent of the country's unofficial dollarisation was approximated by the share of foreign currency deposits in GDP (GDP dollarisation), broad money (money supply dollarisation), total deposit liabilities (deposit liabilities dollarisation), and total (assets dollarisation) the trends of which are shown in Table 2 below. In terms of the deposit liabilities and assets of the local banking system, the Zambian economy can be characterized as moderate to a highly dollarised economy. Deposit liability dollarisation averaged about 40.0 per cent over the last five years, peaking at 44.0 per cent in 2004. Similar or even higher levels of deposit liability dollarisation were reported in some of the commercial banks interviewed, .ranging between 40 and 45 per cent.

Table 2: Indicators of Dollarisation Penetration in the Zambian Domestic Economy

Parameters	2002	2003	2004	2005	2006	Sept 2007
Forex Deposits/Total Deposit Liabilities	43.2	39.6	44.0	35.7	34.2	40.5
Forex Lending/Total Loan Assets	41.9	49.3	42.4	31.9	34.2	27.9
Forex Deposits/M3	-	36.63	42.07	34.10	32.21	37.43
Forex Deposits/GDP	8.79	7.91	9.38	6.1	6.92	7.77
Imports to GDP	42.17	37.94	38.59	35.09	35.55	41.41
Exports to GDP	28.75	26.53	34.60	33.10	45.48	43.56
Total Trade To GDP	70.91	64.46	73.19	68.19	81.03	84.97

Source: Bank of Zambia

To mitigate against the effects of dollarisation on monetary policy efficacy, the cash ratio (Core Liquid Asset Ratio) is computed on the basis of total deposit liabilities (broad money). For financial markets stability, the BOZ mitigates against possible dollarisation risk through stringent regulations and surveillance of the IFEM operations e.g. limitations on offshore placements and deposits, ratings, effective monitoring through daily returns to the Bank and lastly through the forex exposure limits.

7 .0 LESSONS LEARNT

The main lesson from the Zambian case is that an open architecture LFCCC arrangement can be organised outside the central bank and yet be efficient and compliant with best practices. The only weakness with the Zambian LFCCC arrangement is that settlement is effected through individual commercial banks offshore correspondent accounts.

12.0 ZIMBABWE

1.0 Introduction

1.1 Overview of the Country

Structure of the Economy and Economic Trends - Zimbabwe has an area of 390,580 sq km. and a population of about 12.3 million people. The key sectors of the economy are industry and mining, agriculture and services which respectively contributed 18%, 17% and 26% to GDP in 2004. Other sectors with significant contribution to GDP were transportation 9%, construction 7% and oil and oil products 8%. Although Zimbabwe is land-locked, it has vast natural wealth which includes arable land, minerals such as coal, gold, platinum, iron etc. The mighty Zambezi River also provides natural boundary with Zambia.

Despite its vast natural wealth, Zimbabwe is currently experiencing a variety of social and economic problems resulting from the collapse of commercial farming sector which has been the traditional source of exports and foreign exchange and employment. The domestic production problems have been exacerbated by sanctions imposed on the Government of Zimbabwe by Western Countries leading to dwindling of external financial inflows. As a result the balance of payments current account has turned from a surplus of US$ 322.6 million in 2001 to a deficit of US$538.1 million in 2005. Money supply (M3), fuelled by the rising budget deficit has also risen by over 3000% between January 2006 - July 2007 leading to a phenomenal inflation. The annual inflation rate is estimated to have risen from 112.1% in December 2001 to about 7,634.8% in July 2007. In an attempt to keep up with soaring inflation, the Zimbabwe Government has had to issue higher and higher currency notes to make ordinary cash transactions manageable. Meanwhile, the official exchange rate fell from approximately 1 (revalued) ZIM dollar = 1 USD in 2003 to ZIM dollar 160 per USD in 2006 and to ZIM dollar 30,000 per USD in 2007.

Resulting from these problems Zimbabwe has declined to a level where it is not able to provide adequately food, drugs, fuel, electricity, raw materials and capital equipment for industry. From 2000 to 2007, real production in the economy is estimated to have declined by 40.2%. The impact on the people has been an increase in poverty. Table 1 below provides a summary of selected key economic and financial indicators.

Monetary Policy Framework - The Reserve Bank Act CAP22:15, bestows on RBZ the responsibility to formulate and execute monetary policy. Monetary policy and it s conduct in Zimbabwe has undergone considerable changes since 1980s reflecting the transformation of the economy from a highly regulated one in the 1980s to a more liberalised system today. Presently, monetary policy is geared at containing monetary and credit expansion at levels that ensure economic activity takes place in a low inflationary environment.

Since the adoption of monetary targeting in 1991, RBZ today uses three principal instruments in the conduct of its monetary policy: reserve requirements expressed in form of cash reserve ratio CRR); open market operations (OMO), and standing facilities that are administered by the Central Bank. The current CRR is pegged on deposit liabilities of banking institutions at the rate of 45% for demand deposits and 35% for time deposits. The differential rates on CRR are clearly intended to encourage longer-term deposits. Standby Facilities on lender of last resort are offered to the banking institutions at the official bank rate that currently stands at 850%. In addition, banking institutions are allowed to discount bills of exchange and promissory notes payable in ZIM$. These include bills, notes, and other debt instruments issued by the state or by RBZ in ZIM $ or foreign currency. The RBZ may also discount obligations of statutory bodies.

Foreign Exchange Regime - In the last 10 years, Zimbabwe has experimented with various forms of foreign exchange rate management systems in response to its external liquidity situation. Prior to 2000, Zimbabwe used a managed float regime. During the period 2000 - 2003 a fixed rate system was adopted. This system was changed in 2004 to a method commonly referred to as the "Dutch Auction" whereby foreign currency is offered to banking institutions on a "bid and offer" basis for price discovery. In October 2005 an auction system was introduced up to January 2006. However in view of continued shortages of foreign exchange a fixed rate regime was re-introduced with the official exchange rate set at ZIM$ 30,000 per USD. As a result of the severe shortage of foreign exchange, the parallel market is very active.

1.2 Overview of the Payment System

Despite the economic and financial difficulties that Zimbabwe has been experiencing in the last 10 years or so, it has one of the most sophisticated payments systems in the region in terms of legal and institutional framework and infrastructure.

Table 1: Selected Economic and Financial Indicators

	2001	2002	2003	2004	2005	2006	2007
Population (Mn)	11.67	11.63	11.76	11.73	11.73	11.73	11.73
Real GDP Growth Rate (factor cost) %	-0.8	-6.4	-8.2	-4.2	-5.2	-1.6	-5.7
91day Tresury Bill Rate (Min-Max) %						8-325	8-320
Overall inflation (%)	112.1	198.9	598.7	132.7	585.8	1281.1	7634.8

Source: Reserve Bank of Zimbabwe, The World Bank

General Legal Aspects - The legal framework governing payments system in Zimbabwe is embedded in various Acts. Before November 2001, Zimbabwe did not have a specific legislation governing the national payment systems. Commercial law, was generally used to regulate payment systems in Zimbabwe. In this connection, RBZ drew its powers to influence the payment system, from other statutes mainly the Bills of Exchange Act, The Banking Act, and The Reserve Bank Act. This was because while the Reserve Bank Act empowered RBZ to organize and provide facilities for the collection and clearance of cheques and similar instruments, it did not make specific provision for the Bank to oversee the payment system. In recognition of this legal shortcoming the RBZ, in collaboration with Government and the banking industry, embarked on efforts to establish a specific legislation to supervise the payment system. These efforts culminated in the promulgation of the National Payment Systems Act in November 2001. The NPS Act empowers RBZ to: Establishing a payment and settlement system; Operate a settlement system; Recognise and monitor payment systems; and Guarantee the finality and irrevocability of payments or transfers within settlement systems

The Exchange Control Act provides for imposition and restrictions in relation to gold currency, securities, exchange transactions, payments and debts and the import, export, transfer and settlement of property. The other laws that have a bearing on payments in Zimbabwe include: Building Societies Act [Chapter 24:02] of 1965; Companies Act [Chapter 24:03] of 1952; Insolvency Act [Chapter 6:04] of 1975; and Post Office Savings Bank Act [Chapter 24:10] of 1965.

Institutional Framework - The major institutions that provide payment services include commercial banks, accepting houses, discount houses, finance houses, asset management companies, micro-finance institutions and Post Office Savings Bank. Forex bureaus used to operate but were all closed. There are currently 29 banking institutions that include 14 commercial banks, 5 merchant banks, 4 discount houses, 1 finance house and 4 building societies. In addition, Zimbabwe has 291 micro finance institutions, cooperative societies, a Post Office Savings Bank and ZIMPOST that all provide varying forms of financial services. In total all these institutions have a country network of 537 branches of which about 40% are in Harare city.

Major Payment Instruments and Media - Cash and non-cash instruments are used to carry out transactions in Zimbabwe. Cash is the most dominant form of payment with the Zimbabwe Dollar (ZIM $) being the legal tender. Other currencies mainly USD, GBP, ZAR and Pula are also used unofficially. Non-cash instruments include cheques, credit transfers, direct debits, and payment cards. Payment cards are in form of debit cards, credit cards, and prepaid cards used mainly for usage of cellular and telephone services. In the recent period, some network operators have introduced e-money transfers. The amounts involved are small, but have the potential to grow because of their simplicity and low cost. Among the non-cash payment instruments, the cheque has been the preferred form of payment especially when backed by a guarantee card issued by a bank. Cheques were also popular for large payments. However, as shown in Table 2, the predominance of cheques has been overtaken by electronic payment since the introduction of ZETSS in 2002. Use of credit cards is very low ñ less than 3%, but growing perhaps spurred by inconveniences of carrying large amounts of cash.

Table 2: Relative Importance of Non-Cash Payments Media

Non Cash Payments ZIM$ Billions							
Date	Total Payments	ZETSS	%	CHEQUES		CARDS	
		Value	%	Value	%	Value	%
Dec-05	164.1	131.3	80.0	31.3	19.1	1.5	0.9
Mar-06	352.0	277.1	78.7	70.0	19.9	4.9	1.4
Jun-06	672.7	549.2	81.6	115.8	17.2	7.7	1.1
Sep-06	2,006.1	1,720.0	85.7	263.7	13.1	22.4	1.1
Dec-06	3,093.0	2,644.0	85.5	369.0	11.9	80.0	2.6
Mar-07	13,234.0	11,193.0	84.6	1.643.0	12.4	398.0	3.0
Jun-07	105,917.0	97,433.0	92.0	6,285.0	5.9	2,199.0	2.1

Source: Reserve Bank of Zimbabwe

Due to the high level of inflation and shortages of basic commodities parallel markets and currency speculation emerged putting the payment system under a lot of stress as evidenced by large volume of currency in circulation outside the banking system and insatiable demand for cash. The government responded to this crisis by imposing price controls and carrying out a currency reform in a two-phased manner. The currency reform was intended to bring cost efficiency in payments by reducing cost of printing notes, relieving individuals and businesses the burden of carrying large amounts of cash for simple payments and to make electronic accounting and book-keeping manageable.

The first phase of the currency reform was implemented on 1st August 2006. The reform entailed knocking out three zeros from the existing currency. As an additional measure to stabilise cash demand, RBZ imposed limits on daily cash withdrawals and deposits. Withdrawal limits were set at ZIM$ 100,000 for individuals and ZIM$ 750,000 for corporate bodies. Regarding deposits RBZ directed banks and other institutions to accept freely up to ZIM$100 million for individuals and ZIM$ 5 billion for corporate bodies. Amounts above these deposit limits were to be exchanged for zero coupon bonds pending investigation and certification by RBZ and ZIMRA as to the genuineness of the funds.

The second phase of the currency reform started on 1st August 2007 when RBZ introduced a new generation bank notes with a new high denomination of ZIM$200,000. In December 2007, RBZ introduced yet again new higher denomination bearer notes of ZIM$ 500,000 and ZIM$ 750,000.

The Role of the Central Bank: The RBZ Act bestows on the Bank among other functions, the responsibility for ensuring the development, including operating an efficient and secure payments system. In fulfilment of this function, RBZ operates the inter-bank clearing house which is located in its own premises. RBZ through its National Payments Systems Division operates the ZETSS. The key functions of the NPS Division are:

i) To administer ZETSS and to ensure the final and irrevocable settlement of all transactions sent through the RTGS system. The Division also ensures that ZETSS participant calls and other payment systems related queries are logged and resolved in a timely fashion;
ii) To act as a supervisory agent in maintaining the financial and technical integrity of payment systems. This entails implementing principles and rules such as recognition criteria for payment systems; assessment and enforcement of rule compliance by system operators and participants; promoting and coordinating individual and collective payment systems initiatives; and ensuring the smooth and efficient functioning of payment systems by enforcing effective risk management mechanisms;
iii) To carrying out research and development activities on payment systems issues; origination and review of policies and guidelines within the existing legal framework; development of principles and rules for payment systems; establishing crisis management guidelines for technical or financial failures within payment systems; and keeping abreast with payment systems developments through research and liaison with other Central Banks, regional groupings and payment systems international bodies;
iv) In liaison with Stock Exchange to develop a framework for automation of systems in securities to facilitate the reduction of settlement cycles and attainment of delivery versus payments (DVP) in the settlement of securities; and,
v) To monitor the development of e-money and in particular such as the effect of electronic money on money in circulation; the risks posed by e-money schemes; regulatory issues on e-money transactions; and operational requirements of the e-money schemes.

RBZ is also responsible for ensuring harmonisation of payments systems in Zimbabwe with those in the SADC region and adherence with international best practices. In performance of these roles, RBZ therefore acts as the driver of the payment system in terms of development, implementation and transformation of the payments systems to conform to regional and global best practices.

1.3 Role of other Private and Public Sector Bodies

Bankers Association of Zimbabwe - members of the Association comprise the commercial banks and merchant banks. It provides a forum through which members can freely discuss issues of mutual interest and to articulate positions on matters that require engagement of the government or RBZ such as inter-bank payments initiatives. The association is involved in all developments involving the institutions and holds regular meetings with the RBZ to discuss issues affecting the banking industry.

Financial Traders Association of Zimbabwe - Members of the association are RBZ, commercial banks and merchant banks. The association meets monthly. Its focus is only on local and foreign settlement deals.

SWIFT User Group - The group comprises institutions that belong to the SWIFT network in Zimbabwe. The group deals with day-to-day utilisation of the network at national level and handles all communications with SWIFT as a group.

Ministry of Finance - Although RBZ has operational autonomy to initiate most actions that relate to monetary management and payment systems, the final authority is vested mainly with the Minister for Finance.

2.0 Inter-bank Foreign Exchange Markets (IFEM)

2.1 Evolution and Development of the Market

Zimbabwe partially liberalised its forex market in 1996. In that reform banking institutions were allowed to open and operate forex accounts but all payments are subject to exchange control regulations.

The Exchange Control Act (ECA) confers powers and imposes duties and restrictions to banks in relation to transactions in gold, currency, securities, foreign exchange transactions, payments and debts, exports and transfer and settlement of property. There is no inter-bank trading in forex.

2.2 Nature and Operations of the Market

Rules Governing the Operations of the Market - The operations of the forex market are governed by the ECA.

No person is allowed to trade in forex except under the provisions of the ECA. The Act allows banking institutions to open forex deposit accounts for individuals, corporates, NGOs, embassies and foreign missions operating in the country and also to lend in forex. Other requirements for operation of forex accounts include:

i. Deposits in excess of USD 2,000 must be declared and their sources disclosed;
ii. Restrictions also exist in use of international credit cards issued in Zimbabwe. Banks issuing the cards must make returns to RBZ on the usage that is subject to the exchange control limits;
iii. Forex must be declared in relation to export above USD 50,000;
iv. Payments for goods and services by foreign visitors must be made in forex;
v. Payment for medical, education, airfare and other services all require exchange control approval;
vi. Conversion of ZIM$ to forex is not allowed; and,
vii. Banks are required to surrender corporate retained forex funds for pooled management by RBZ.

Major Market Players - The major players are the commercial banks and their customers, and RBZ.

Market Operations - Conditions for operating forex accounts follow the normal KYC procedures including adherence with anti- money laundering principles. Forex accounts are operated in USD, GBP, EURO, ZAR, and the Botswana PULA. Minimum account opening balances differ between banks but range between USD 200 to USD 300. Only savings and time deposit accounts are operated. Banks pay interest on the funds held in the forex accounts based LIBOR.

Prior to 2nd October 2007 the forex accounts were categorised as follows:

Free Funds - This comprised forex balances held in individuals accounts, NGOs, embassies and foreign missions. These funds were not subject to sale to RBZ and could be utilised to make external payments subject to exchange control approval.

Corporate Funds - These funds belonged mainly to exporters and other corporates that generate forex earnings. They were allowed to retain 65% of their earnings for their own use subject to Exchange control approval and sell the remaining 35% to RBZ.

After 2nd October 2007 banking institutions are required to surrender to RBZ the 65% component that is retained for corporate bodies own use for management by RBZ in a pooled manner. RBZ pays interest on these funds at the rate of 12% per annum. This means that although banking institutions maintain forex denominated (mirror) accounts on behalf of their corporate customers, they do not hold any forex in their own name. It also means that although banks are allowed to offer loans in forex, they cannot do so since they hold no such funds. They can only lend in forex with funds sourced offshore. This has however proved difficult in view of the country risk since most banks offshore would place a high premium on the loans. The interbank forex market is therefore non-existent at least for the time being.

Banking institutions make periodic returns to the RBZ. These include:

i) Summary of daily receipts and payments;
ii) Summary of weekly receipts and payments;
iii) Returns on forex holdings;
iv) Monthly forex statistics;
v) Credit card receipts; and,
vi) Direct cash deposits,

Role of RBZ in IFEM - In view of the absence of an inter-bank forex market, exchange controls and a fixed exchange rate regime, the role of RBZ is basically to police compliance with the regulations and to approve forex allocations to various users.

Risk and Mitigation - Banking institutions experience minimal risks since all forex is surrendered to RBZ. However, it is worth noting that the interest liabilities that banks currently accrue on the corporate forex deposits mirror accounts at the rate of 12% is far above LIBOR even though RBZ has undertaken the risk. Investment of these funds should be at the same rate or higher; otherwise the interest liabilities could lead to monetary expansion that would complicate the conduct of monetary policy.

Local Foreign Cheque Clearing System - There is no local foreign currency cheques clearing since banking institutions do not operate current accounts. In this regard the clearing arrangements are undeveloped. However it is expected that these will be put in place when full liberalisation is achieved between 2008 and 2010. The RBZ is likely to lead the way in the development of the system as has been the case before.

Although Zimbabwe does not currently operate LFCCC systems, RBZ subscribes to the BIS Core Principles for Systemically Important Payment Systems (SIPS), as established by the Basle Committee on Payment and Settlement Systems. To this end, the NPS Division's efforts are directed at ensuring compliance with the Core Principles and fulfilling the four Central Bank responsibilities, which deal with the following:

i) Disclosure of objectives, role and major policies;
ii) Compliance of Central Bank systems with Core Principles;
iii) Oversight of non-Central Bank systems; and,
iv) Cooperation with other authorities

3.0 Intra-day Loan Facility and Foreign Currency Transactions

The nature of operations and policies - In the absence of a LFCCC system this issue is not applicable to Zimbabwe. However, RBZ provides an intra-day facility to ensure system liquidity for local currency clearing. The ILF provides for use of government securities as collateral with a 3% haircut.

The facility attracts an interest rate based on the Bank Rate which currently stands at 850% p.a. The bank rate is reviewed periodically and this year alone has seen 3 reviews in view of the current economic situation facing the country. The bank rate is based on inflationary trends and the thrust of monetary policy prevailing at the time of review.

The Role of RTGS - The Zimbabwe Electronic Payment and Settlement System (ZETSS) was introduced in November 2002 with a membership of 28 banking institutions. This is an electronic system with a direct interface and only caters for local currency clearing.

Linkage with Foreign Currency Transactions - As stated above there is no linkage between ILF and domestic foreign currency transaction.

4.0 Role of the Central Bank in the Development and Operationalisation of the LFCCC System

There is no IFEM and LFCCC system in Zimbabwe at present due to restrictive exchange controls. That notwithstanding, RBZ has a formal oversight role over the national payment systems including overseeing the operations of the Clearing House. RBZ has also been on the forefront in the development of payments infrastructure. It is therefore expected that when foreign transactions are liberalised, RBZ will take the lead in the development of the LFCCs clearing and settlement.

5.0 Dollarisation of the Domestic Economy

Dollarisation is a major issue in Zimbabwe. Although there are price controls on most commodities and also exchange control on forex transactions, the parallel markets thrive openly. Consequently prices of most goods and services are indexed to the US Dollar or other convertible currencies. RBZ encourages banks to open forex accounts for individuals and corporate customers. Table 3 shows a rising trend in resident holdings of FCD but not fast enough to keep up with domestic money supply. Consequently, the ratio of FCDs to total deposits of banking system has continued to decline.

Factors leading to Dollarisation: There are a number of factors that have led to dollarisation of the Zimbabwe economy. These factors include:

Hyper-inflation: The high level of inflation in the country has undermined the ZIM Dollar in its role as a store of wealth. Consequently, and although it is illegal, many people require payments for their goods and services such as meals, rents, legal fees etc in forex or have indexed their prices or rates to the parallel market foreign exchange for the ZIM Dollar. The hyper-inflation has also undermined the currency in performance of its role as accounting unit as many individuals and establishments find it difficult to handle the many digits needed to express even minor values. Customers are also inconvenienced in having to carry loads of currency notes to purchase a handful of items. In other words inflation has undermined confidence of the ZIM Dollar.

Policy Uncertainty: The current controls on prices of commodities and foreign exchange in an environment of supply shortages have only served to drive markets underground making a fertile playground for speculators.

Impacts of Dollarisation

i) One of the main impacts of dollarisation in Zimbabwe is fuelling of inflation as suppliers of goods and services tend to index their prices in forex;
ii) Those persons who have access to foreign currency find it cheap to live in Zimbabwe as they can afford to keep up with currency speculators and parallel market prices. For the majority of Zimbabweans dollarisation has simply made them poor; and
iii) Complication of monetary policy.

Mitigation Measures Undertaken - There is no easy cure to the dollarisation problem in Zimbabwe. Some of the measures the RBZ and government have put in place include:

i) Price controls on commodities;
ii) Currency reforms;
iii) Allowing forex accounts;
iv) Flushing out speculators; and,
v) Relaxation of export and import of Zim dollars without penalty.

7.0 Lessons Learnt

The high level of dollarisation in Zimbabwe, though unofficial reflects loss of confidence in the Zim$ as a medium of exchange and store of value. The indexing of prices to foreign currency is basically for residents to mitigate against loss of value due to hyper inflation. The other factor is supply assurance. Due to severe cash shortages, holding foreign currency enables residents to access basic commodities either locally or across the borders.

One other lesson for Monetary Authorities in the region from the Zimbabwe case is that dollarisation is not due to existence of LFCCC. Dollarisation is due to macroeconomic fundamentals gone badly. In addition, it might be preferable to have dollarisation exposed through LFCC where orderly currency adjustment can take place instead of parallel markets where currency rates are driven by speculators.

Table 3: Indicators of Dollarisation in Zimbabwe (Billion Zim$)

	Mar 06	Jun 06	Sep 06	Dec 06	Mar 07	Jun 07
Total deposits of banking system	76,249	137,711	393,711	762,620	2,335,803	17,020,433
Total foreign currency deposits of banks	11,548	12,977	48,105	60,640	58,047	3,628
Ratio of FCA to total deposits (%)	15.15	9.42	12.22	7.95	2.49	0.55

Source: Reserve Bank of Zimbabwe

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ANNEX 1: CROSS-CUTTING ISSUES

1. Role of Central Banks in National Payment Systems

Central banks have important roles in the development and operation of payment systems in a country. These roles can be classified under five main functions as indicated below:

i) As a user of payment system

A central bank has its own transactions to carry out, requiring the movement of funds. Most obviously these include settling official open market operations including Repo operations through the payments system, so as to implement monetary policy; settling payments for official transactions in government securities (including new issues, redemptions and rediscounts), either short-term in the money markets or longer-term in the government bond (capital) markets; and settling the domestic currency leg of official foreign exchange transactions. And, like any other enterprise, the central bank will also have bills, salaries, pensions, etc to pay, all requiring the use of payment system.

ii) As an operator of the payment system

In most countries the central bank is itself the operator of at least one systemically important payment system. One of the critical systems is the RTGS system, and the Clearing Houses in some countries. The Banks also operate the Central Depository Systems (CDS) for government securities.

iii) As a member of payment systems

As a member, the central bank can make and receive payments on behalf of its own customers, for example government departments and other central banks. Central banks are also members of the Clearing Houses for both locally and foreign currency issued cheques.

iv) As a settlement agency

These services include the provision of settlement account facilities to the commercial banks operating in the payment systems; and providing ñ either on its own or jointly with commercial banks or other commercial entities - the system hardware, software, operating procedures, or the communications network for the payment systems infrastructures.

v) As an overseer of the payment system

This is much broader and may involve any of the following: acting as payment system regulator; acting as an overseer of system members (banking supervisor); providing administration and planning for the payment systems; arbitrating in the event of complaints and handling compensation procedures. The central bank may also be involved in wider issues such as promoting competitiveness or encouraging the development and adoption of technical standards.

2. Payment Systems Risks

There are several types of risks that payment systems encounter as explained below:

Settlement Risk - Settlement risk is at the heart of all the risks associated with payment systems. It is the risk that one or more participants are unable to settle which may or not lead to financial losses depending on the magnitude and risk reducing measures in place. It is present in differing forms in different payment systems usually as credit, liquidity, or unwinding risks etc

Forex Settlement Risk - At its core, settlement of the foreign exchange (FX) trade requires the payment of one currency and the receipt of another. In the absence of a settlement that ensures that the final transfer of one currency will occur if and only if the final transfer of the other currency also occurs, one party to an FX trade could pay out the currency it sold but not receive the currency it bought. This principal risk in the settlement of the foreign exchange transaction is variously called foreign exchange settlement risk or cross-currency settlement risk. FX settlement risk clearly has a credit risk dimension: whenever a party cannot make its payment of the currency it sold conditional upon its final receipt of the currency it bought. FX settlement risk also has a liquidity risk dimension: if a party did not receive the currency it purchased when due, it would need to cover and to finance this shortfall.

Credit Risk - Credit risk is the current or prospective risk to earnings and capital arising from an obligor's failure to meet the terms of any contract with the bank or if an obligor otherwise fails to perform as agreed. The largest source of credit risk is loans. However, credit risk exists throughout the other activities of the bank both on and off the balance sheet.

Liquidity Risk - Liquidity risk exists when payment orders cannot be settled due to lack of funds even though all the parties are financially able. In other words, it is the risk that a party within the system will have insufficient funds to meet financial obligations within the system as and when expected, although it may be able to do so at some time in the future.

Unwinding Risk - Unwinding risk can be the result of receivers not being able to settle transactions due to some instructions being revoked or unwound. Unwinding occurs when there is settlement failure in netting systems and the daily payment orders need to be revoked.

Legal Risk - Is the risk that a poor legal framework or legal uncertainties will cause or exacerbate credit, liquidity and litigation risks.

Operational Risk - Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and system or from external events. It is the risk of loss arising from the potential that inadequate information system; technology failures, breaches in internal controls, fraud, unforeseen catastrophes, or other operational problems may result in unexpected losses.

Systemic Risk - In the context of payment systems, this is the risk that the inability of one of the participants to meet its obligations, could result in the inability of other system participants or of financial institutions in other parts of the financial system to meet their obligations as they become due. Such a failure could cause widespread liquidity or credit problems and, as a result, could threaten the stability of the system or of financial markets.

3. International Best Practices and Standards

The objectives of the Committee of Payment and Settlement System's (CPSS) Core Principles and the responsibilities of the central banks are the safety and efficiency in Systemically Important Payment Systems. Globally, an important driving force behind payment systems development and the harmonisation of payment system standards across countries has been the CPSS, which has introduced a set of 'Core Principles for Systematically Important Payment Systems'.

These Core Principles are intended for use as universal guidelines to encourage the design and operation of safe and efficient systematically important payment systems worldwide. The forex instrumentsí clearing and settlement arrangements are now designated by most central banks as systemically important payment system because of their exposure to systemic risk especially after the failures of Herstatt Bank (1974), BCCI (1991), and the Barings Bank (1995).

This study looks at the respective member countriesí degree of compliance and application of the best practices within their Local Currency Cheques Clearing arrangements. These international best practices are indicated below:

a) Core Principles for Systemically Important Payment Systems (SIPS)

1. The system should have a well-founded legal basis under all relevant jurisdictions.
2. The system's rules and procedures should enable participants to have a clear understanding of the system's impact on each of the financial risk they incur through participation in it.
3. The system should have clearly defined procedures for the management of credit risk and liquidity risks, which specify the respective responsibilities of the system operator and the participants and which provide appropriate incentives to manage and contain those risks.
4. The system should provide prompt final settlement on the day of value, preferably during the day and at the end of the day.
5. The system, in which multilateral netting takes place should, at a minimum, is capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participants with the largest single settlement obligation.
6. Assets used for settlement should preferably be a claim on the central bank, where other assets are used; they should carry little or no credit risk and little or no liquidity risk.

The system should ensure a high degree of security and operational reliability and should have contingency arrangements for timely completion of daily processing.

8. The system should provide a means of making payments which is practically for its users and efficient for the economy.
9. The system should have objective and publicity disclosed criteria for participation, which permit fair and open access.
10. The system governance arrangements should be effective, accountable and transparent.

b) Responsibilities of the Central Bank in Applying the Core Principles

1. The central bank should define clearly its payment system objectives and should disclose publicly its role and major policies with respect to systemically important payment systems.
2. The central bank should ensure that the system it operates comply with the Core Principles.
3. The central bank should oversee compliance with the Core Principles by systems it does not operate and it should have the ability to carry out this oversight.
4. The central bank, in promoting payment system safety and efficiency through the Core Principles, should cooperate with other central banks and other relevant domestic or foreign authorities.

4. Dollarisation of the Domestic Economy

Dollarisation occurs when residents of a country extensively use a foreign currency alongside or instead of the domestic currency. Existing literatures distinguish three varieties of dollarisation: unofficial dollarisation, official dollarisation and semi-official dollarisation.

Unofficial Dollarisation: Forms, Stages, Measurement, and Impact - Unofficial dollarisation occurs when people hold most of their financial wealth in foreign assets even when foreign currency is not legal tender. This variety of dollarisation may be with or without formal legal approval. In some countries it is legal to hold some kinds of foreign assets but illegal in others unless special permission has been granted. Unofficial dollarisation usually occurs in response to economic instability and high inflation and the desire of residents to diversify and protect their assets from the risk of devaluation of their own currencies. Unofficial dollarisation can include any of the following four situations:

i) Foreign bonds and other monetary assets, generally held abroad;
ii) Foreign currency deposits abroad;
iii) Foreign currency deposits in domestic banking system (deposit dollarisation); and,
iv) Foreign notes (paper money) in wallets and mattresses (currency dollarisation)

Unofficial dollarisation often occurs in three stages, corresponding to the classical functions of money as a store of value, means of payment and unit of account. The first of these stages is referred as asset substitution. In this stage, people hold foreign bonds and deposits abroad as a store of value. Primary motivation for the asset substitution is protection against loss of wealth through high inflation or hyperinflation in domestic currency or through outright confiscations that some countries have made.

The second stage in the unofficial dollarisation process is known as currency substitution. In this stage, people hold large amounts of foreign currency deposits in domestic banking system (if permitted) and later foreign notes both as a means of payment and a store of value. During this stage, wages, taxes and every day expenses such as groceries and utility bills are paid in domestic currency, but expensive items such as automobiles and houses are invoiced in foreign currency.

In the final stage of the unofficial dollarisation process, people think in terms of foreign currency and prices in domestic currency become indexed to the exchange rate. The United States Dollar is a widely used foreign currency of unofficial dollarisation in most of the Latin America and Caribbean countries (Argentina, Bolivia, Mexico, Peru, and Central America); Most of former Soviet Union (Armenia, Azerbaijan, Georgia, Russia and Ukraine); and various other countries including Mongolia, Mozambique, Romania, Turkey an Vietnam). Other unofficial dollarisation currencies include the Euro (some French colonies in Africa and Balkans), Hong Kong Dollar (Macau and Southern China) and Russian rubble (Belarus).

Measurement of the Dollarisation Depth - Today, unofficial dollarisation is significant in many developing countries. However, measuring the extent of unofficial dollarisation is difficult. Accurate statistics on how much people hold in foreign bonds, bank deposits, or notes and coins are usually unavailable. Consequently, a widely used measure of the extent of unofficial dollarisation is the proportion of foreign currency deposits in the domestic banking system to the relevant monetary aggregate (M3). In a survey of 52 selected countries, the IMF (1999) used this ratio to categorize the countries as either highly or moderately dollarised. The survey included Malawi, Mozambique and Uganda. Highly dollarised countries were categorised as those whose ratio exceeded 30%, while moderately dollarised countries were those with ratios below 30%. Of the three MEFMI member countries covered in the survey, only Mozambique was categorized among the highly dollarised countries while both Malawi and Uganda were classified among the moderately dollarised countries.

Official Dollarisation - Official dollarisation, also known as full dollarisation, occurs when foreign currency has exclusive or predominant status as full legal tender. In this case, not only is foreign currency legal for use in contracts between private parties, but also the government uses it in payments. Officially dollarised countries vary concerning the number of foreign currencies they allow to be full tender and concerning the relationship between domestic currency, if it exists, and foreign currency. Most officially dollarised countries give one currency status as legal tender. Some officially dollarised countries do not issue domestic currency at all while in others it is issued but confined to a secondary role, such as being issued only in the form of coins having small value. As of August 2005, the United States Dollar (British Virgin Islands, East Timor-issues own coins, Ecuador-issues own coins, El Salvador, Marshall Islands, Federal States of Micronesia, Palau, Panama-issues own coins, Turks and Caicos Island); Euro (Kosovo, Monaco-formerly French Francs and issues own coins, Andora- formerly both French Franc and Turkish Peseta, San Marino-formerly Italian Lira and issues own Euro coins, Montenegro-formerly German Mark Yugoslav dinar); Pound Sterling; New Zealand Dollar (Cook Islands, Niue, Tokelau, Pitcaim Island); Turkish new lira (Cyprus, Northern); Russian rubble (Abkhazia,South Ossetia); Swiss Franc (Liechtenstein); Indian Rupee (Bhutan, Nepal) and the Australian Dollar (Kiribati-issues own coins, Nauru, Tuvalu-issues own coins) were the only currencies used by other countries officially dollarised. From the foregoing it can be observed that independent officially dollarised countries use the currency of a large neighbour or that of former colonial power.

Official dollarisation is rare today except among very small countries because of political symbolism of a national currency and economic factors such as perceived costs of dollarisation.

Semi-official Dollarisation/Official Bi-monetary System - Semi-official dollarised countries are those the IMF (1998) identifies as having foreign currency as the 'other legal tender'. Hence, under semi-official dollarisation, foreign currency is legal tender and may even dominate bank deposits, but plays a secondary role to domestic currency in paying wages, taxes and every day expenses such as grocery and utility bills. Unlike officially dollarised countries, semi-officially dollarised ones retain a central bank or other monetary authority and have corresponding latitude to conduct their monetary policy.

Semi-officially dollarised countries using the United States Dollar include Bahamas, Haiti, Laos (Thai baht). Other foreign currencies used in semi-official Dollarisation include Indian Rupee (Bhutan), German Mark (Bosnia, Montenegro), Singapore Dollar (Brunei), British Pound (Channel Islands, Isle of Man), South African Rand (Lesotho, Namibia), Belgian Franc (Luxembourg), Yugoslav Dinar (Montenegro), and Russian rubble (Tajikistan).

Costs and Benefits of Dollarisation

Unofficial and Semi-official Dollarisation - Most studies written about dollarisation have concerned unofficial dollarisation especially its ëícurrency substitutioníí stage (i.e. the phase at which people use foreign currency to pay for expensive items even though legally they are supposed to use domestic currency). The findings of these studies have varied widely because unofficial dollarisation has mixed effects. First, they make demand for domestic currency unstable. A large switch by individuals into foreign currency can cause domestic currency to depreciate, starting an inflationary spiral. Second, where people hold extensive foreign currency deposits, a change in domestic or foreign interest rates can trigger large shifts from one currency to the other as a means of speculating the exchange rate. Such shifts complicate the job of the central bank that is trying to target money supply.

On the other hand, unofficial dollarisation provides a hedge against inflation in the domestic currency and can increase stability of the banking system. Acceptance of deposits in foreign currency by domestic banks means that depositors do not have to send their money out of the country when they want to switch it into foreign currency. The risk of a currency devaluation causing a bank run is small engendering a stable financial system.

Official Dollarisation - Impact of official dollarisation is easier to analyze than unofficial Dollarisation because by eliminating the domestic currency it eliminates problems from shifts between domestic and foreign currency. Since high inflation and other monetary problems in developing countries more often originate from the domestic currency rather than from widely used foreign currencies, official dollarisation eliminates these problems.

An officially dollarised country is part of unified currency zone with the country whose currency it uses. An officially dollarised country relinquishes an independent monetary policy and 'imports' monetary policy of the country whose currency it uses. Because of this, inflation rates tend to be broadly similar except for immobile goods e.g. real estate. Also interest rates tend to be broadly similar throughout the zone; any differences may be attributed to other factors including political risk.

The main benefit of issuing currency is the seignorage, which is revenue from issuing a currency. Net seignorage is the difference between the cost of putting money into circulation and the value of the goods and services the money will buy. The main attraction of full dollarisation is elimination of the risk of a sudden, sharp devaluation of the countryís exchange rate, reducing risk premium attached to its international borrowing and obtaining lower interest for government and private investors. Lower interest rates and more stability in international capital movements cut the cost of servicing the public debt, and encourage higher investment and capital growth.

The primary cost for officially dollarising countries is the cost of lost seignorage. A country adopting a foreign currency as legal tender sacrifices its seignorage (i.e. the profit accruing to the monetary authority from its right to issue currency). Other costs of official dollarisation include one-time cost of converting prices, computers, cash registers and vending machines; and cost of losing a domestic central bank as lender of last resort.

5. The Intra-day Liquidity Facility

Intra-day liquidity provision might be described as an activity where the central bank is the lender of first resort. This function is separate from the central bank's classic role of lender of last resort. Central banks often provide minimum intra-day liquidity to payments systems for the smooth running of the RTGS system. International experience shows the RTGS is demanding in terms of intra-day liquidity management. Most RTGS systems provide the following capabilities for intra-day liquidity management of participants: intra-day overdraft available to the participant for its account(s) within the established limits; credit available from the Central Bank; and Repo transactions. The main principles governing the grant of intra-day facilities to a participant are:

i) The authorisation of such facilities, provided that the participant complies with the rules established by the Central Bank (regulation of the system);
ii) Availability of eligible collaterals, the list of which is established by the Central Bank (Lombard list for example);
iii) Pricing (tariff) policies for intra-day and 'day plus' transactions involving liquid assets to encourage timely completion of transactions; and,
iv) Intra-day facilities are to be reimbursed by the participant before the end of the current business day or transformed by the Central Bank into 'day plus' facilities.

To ensure smooth functioning of the RTGS system and to avoid possible gridlock, central banks extend short-term intra-day credit to eligible financial institutions especially commercial banks. Access to intra-day repurchase agreements (Repo) is restricted to credit institutions; some limit the amount to their capital reserves while some give unlimited amounts so long as it is collaterised by eligible liabilities. Most public debt securities that are eligible for the normal overnight Repo operations authorised by the central banks are accepted as collateral. Some Banks, collateral is received at its net present value (being the securities secondary market rate plus the discount and hair cuts are applied. Some Banks charge for the facility while others do not charge.

The Intra-day Facility versus Monetary Policy and Financial Stability - While it is reasonable for central banks to provide intra-day facilities as a safety-valve mechanism to meet the day to day needs of the banking system, it is important for the central banks to maintain proper control on this facility. This is because if intra-day liquidity facility is converted into an overnight loan, this may lead to an increase in reserve money thus adversely affecting reserve money levels. Consequently, each central bank should carefully consider the effect of a failure by the banks to repay this intra-day credit. In particular, a central bank should examine what would happen should the financial system come under stress. This is therefore compromise between liquidity provision and financial stability.

Haircuts on Eligible Assets - Collateral taken for intra-day credit should protect the central bank from credit risk. Since the market value of the securities taken as collateral can fall in value, it is important to assign them a collateral value below their market value. The difference is known as a haircut, and it should be large enough to make it highly unlikely to fall in value below the amount of the intra-day credit. If the intermediate monetary policy target of the central bank is to keep short-term interest rates within bounds, haircuts are easy to calculate for securities with a short-term to maturity or with adjustable rates, since the value of these securities does not change much.

Prudence dictates that limits should be placed on any central bank intra-day credit that is not fully covered by collateral. These limits should be carefully set by the central bank considering the size of each bank, its management and other relevant characteristics.

Some of the countries that have successfully implemented LFCCs clearing systems include Peru, Singapore and Hong Kong. Some of the conclusions that can be drawn from their experiences are that:

i) Central banks of those countries have been actively involved in the development of the clearing systems;
ii) The operation and significance of FCAs can occur in both stable and unstable economies. Singapore and Hong Kong have been stable and fast growing while Peru experienced severe economic instability evidenced by high levels of inflation and debt; and,
iii) The clearing houses need not be domiciled in or owned by the central banks, but settlement arrangements are crucial to the functioning and stability of the financial system.

1.0 Peruvian Experience

The Central Reserve Bank of Peru (BCRP) operates the cheque clearing and settlement system for both local and foreign currency. The Clearing House is domiciled at the Central Bank. The bank's participation in the Clearing House is voluntary and the only requirement is the observance of Clearing House rules.

Cheques are the most widely used form of non-cash low value payment instrument in Peru. A large share (76%) of the total cheque value is accounted for by US Dollar cheques. One reason for this large share is that there is a fee charged for the transfer of foreign currency (cash) at the central bank, while there is no charge for domestic cash transfers. Secondly, as a reflection of the country's historical experiences with high rates of inflation, savings are held largely in US Dollars. For example, more than three quarters of private deposits in the banking system and bank credits to the private sector were denominated in Dollars at the end of year 1999. At present funds are available within 72 hours in those locations where the central bank has branches. Upcountry cheques may last as long as 15 days.

Cheque clearing and settlement procedures are governed by the Clearing House Operating Rules (one for domestic currency and another for foreign currency). The Clearing Houses are operated by the central bank and sessions take place in its facilities, both at the head office and its branches.

There are two different sessions for the two currencies, one each for submissions and another for rejections. Under current procedures, the banksí duly accredited representatives arrive with the checks to be exchanged with a spreadsheet and a diskette containing all the relevant data. They then proceed to the physical exchange of documents and determine net multilateral balances. Once these balances are obtained, settlement of the respective accounts the banks hold with the central bank is made. Balances resulting from the clearance of foreign currency denominated cheques are always settled in accounts denominated in US Dollars held with the Central Bank's head office.

2.0 Hong Kong Experience

Hong Kong is a major financial centre where international transactions occur. The country has a successful US Dollar clearing system largely due to the existence of massive transactions in foreign exchange parallel to Hong Kong Dollar transactions. The country introduced RTGS payment System in December 1996 for the inter-bank payments in Hong Kong Dollars. This was later extended to cover the US Dollar payment system as well. The factors that necessitated the establishment of a US Dollar cheques clearing system in Hong Kong are as follows:

i) Hong Kong is a major financial centre where the US Dollar is used as a vehicle currency;
ii) Hong Kong Dollar is linked to the US Dollar and the traders and investors have confidence in either currency;
iii) There is extensive holding of US Dollars and a considerable trade in US Dollar denominated assets in Hong Kong; and,
iv) At the end of 1999 US Dollar deposits in the Hong Kong banking system amounted to U$ 106 billion which amounted 25% of total bank deposits in that country.

Hong Kong and Shanghai Banking Corporation (HSBC) was appointed by Hong Kong Monetary Authority as a settlement institution. HSBC in turn appointed Hong Kong Inter-bank Clearing Ltd (HKICL) as the clearing agent. HKICL is a private company jointly owned by the Hong Kong Monetary Authority and the Hong Kong Association of Banks. HKICL was established in May 1995 to take over in phases the clearing functions previously provided by HSBC. HKICL provides inter-bank clearing and settlement services to all banks in Hong Kong.

3.0 Singapore Experience

The Singapore Clearing House Association (SCHA) provides three payment clearing and settlement systems for its member banks:

i) Singapore Dollar Cheque Clearing System (SDCCS);
ii) US Dollar Cheque Clearing System (USDCCS); and,
iii) Inter - Bank GIRO System.

The Clearing Systems provided by SCHA are operated by the Automated Clearing House (ACH). The operation of ACH is contracted to Banking Computer Services Pte Ltd as the operator by the Singapore Clearing House Association (SCHA). BCS is a wholly owned subsidiary of Overseas Chinese Banking Corporation Ltd.

Obligations arising out of the Singapore Dollar Cheque Clearing System and the Inter-bank GIRO Systems are settled across banks, current accounts held at Monetary Authority of Singapore (the Central Bank) while obligations arising out of the US Dollar Cheque Clearing System are settled across participantsí accounts held with Citibank-the settlement Agent. At a stipulated time each working day, the settlement obligations for each participant are sent to Citibank (This is similar to the case in Hong Kong where US$ settlement is done through one designated bank i.e. HSBC) US Dollar Cheque Clearing System (USDCCS) was launched in 1996 to clear and settle US dollar denominated cheques drawn on banks in Singapore. The system significantly reduced the time needed to clear a USD cheque from the previous two to four weeks to only three days. For the settlement of USD cheques, participating banks must maintain USD Accounts with Citibank with minimum balances of USD 10,000. The clearing and settlement process for USD cheques is as follows:

i) USD cheques are delivered to the ACH by presenting banks;
ii) At the end of the first day, the ACH will generate a settlement statement to the settlement bank setting out the total credits and total debits of each of the participating banks;
iii) The settlement bank then advises participating banks if there will be insufficient funds in their accounts with the settlement bank, based on a comparison of the total debit position against available funds in each participating bank's account. Participating banks are required to meet any projected shortfall;
iv) The ACH processes and sorts the USD cheques and these are available for collection by the relevant paying banks on the second business day. Settlement occurs on the second business day across participating banks' accounts with Citibank, but the funds are not considered 'cleared funds' until the end of day three;
v) All returned unpaid USD cheques are delivered to the ACH at the latest by the morning of the third business;
vi) The ACH processes the returned cheques and the relevant presenting banks collect them by noon on the third business day; and,
vii) The customers can withdraw the proceeds after 14:00 on the third business day.

ANNEX 3: A FRAMEWORK FOR AN OPEN AND RISK FREE ARCHITECTURE FOR LOCAL FOREIGN CHEQUES CLEARING

1.0 Preamble

Secure and well functioning payments systems are necessary for the attainment of a country's economic growth and social objectives and in particular the Central Banks' monetary policy and supervisory roles. They are also essential mechanisms in the management by individual commercial banks of their assets and liabilities, and in the settlement of their own transactions as well as those of their customers. It is therefore appropriate that Central Banks should be concerned that the settlement arrangements in the foreign exchange markets should be structured so as to minimise systemic risk.

Globally, Central Banks interest in payment systems' efficiency, safety and security arises from the high possibility of systemic risk or domino effect on the stability of the financial system resulting from failure of one market participant to meet its required forex settlement or other obligations when due. The failure may further exacerbate significant liquidity or credit problems for other participants, and hence threaten the stability of the financial markets. Some of the recent global bank failures have arisen from significant liquidity and credit problems of international banks' foreign exchange and settlement operations. It is in this context that the BIS Committee has designated the foreign exchange and settlement system as a systemically important payment system requiring Central Banks focused oversight attention within their operations and statutes.

One of the deliverables of the MEFMI study is the proposal of an appropriate institutional, legal and policy framework for establishing efficient and risk free foreign cheque clearing systems. With the aforesaid, fundamentally, an appropriate Local Foreign Currency Cheque Clearing (LFCCC) arrangement must pass the test of compliance with the Core Principles and Lamfalussy Standards. To complement the core principles, are the international corporate governance standards and best practices and prudent payment system risk management guidelines.

9.2 The Fundamentals of an Appropriate LFCCC Arrangement

2.0 Sound Corporate Governance Structure

An ideal LFCCC system must have a defined management structure with defined functions and roles among the system participants. The system governance arrangements should be effective, accountable and transparent. One cardinal rule is that of separation of roles with specific reference to the two functionalities of clearing and settlement functionalities. The MEFMI study shows that the Zambian banking system has the best arrangement where there is a distinct legal separation of the two functions of clearing and settlement. The Zambian Electronic Clearing House Limited is a corporate body jointly owned by the banking industry. In Kenya the industry association (KBA) owns the Kenyan Automated Clearing House while the Ugandan, Tanzanian, and Mozambique the scenarios do not conform to this best international principle and practice, as they are legally owned by the respective Central Banks under their statutes.

3.0 Sound and Well-Founded Legal Basis

The LFCCC system should have a well-founded legal basis under all relevant jurisdictions. The LFCCC arrangement just like any payment system must have a firm legal foundation and established legal rules to govern the transfer of means of payments and transfers in such ways that serve the interest of the commercial parties who use the payment system to settle their financial obligations in a predictable, timely safe and efficient manner. The legal foundation of the payment systems should be built around five fundamental principles, namely:

- i) firm establishment of rule of law;
- ii) accountability of the institutions involved in funds transfers;
- iii) integration with other bodies of law;
- iv) fraud prevention; and,
- v) supporting the financial market.

The MEFMI study reveals that all the two types of domestic foreign currency cheque clearing arrangements, namely the Club and open systems, have a well-founded legal framework anchored on the Laws of Contract with stipulated jurisdictions. However, the national payment systems of Zambia and Zimbabwe countries have a firmer legal foundation and environment with the existence of explicit National Payment System Acts in place. The MEFMI member countries are yet to adopt UNCITRAL (United Nations Committee on International Trade Laws) model law on e-commerce to support the anticipated growth in e-commerce and electronic financial transactions within their economies.

4.0 Well Articulated Rules and Procedures

The LFCCC system rules and procedures should enable participants to have a clear understanding of the systemís impact on each of the financial risk they incur through participation in it and their obligations. The MEFMI study reveals that both the LFCCC Club and the open architectures have defined rules, procedures and obligations but with the Zambian FCCC Rules being more comprehensive and elaborate by including qualification of membership, management of the FCCH Committee, general rules of the FCCH etc and lastly the obligations and responsibilities of the paying, receiving and collecting banks. The Zambian system is also unique and more appropriate in that the Zambian Electronic Clearing House (ZECH) has two distinct and separate houses within the same ZECH.

5.0 Prudent Management Procedures for Both Credit and Liquidity Risks

The system should have clearly defined procedures for the management of credit risk and liquidity risks, which specify the respective responsibilities of the system operator and the participants and which provide appropriate incentives to manage and contain those risks. This is one area that is recognised that banks and other participants in the cheque clearing and settlement systems may find it difficult to comply with the Core Principles. The best and only way to enable quantification of possible risks and enable banks to manage both credit and liquidity risks is for Central Banks to set in the system limits-Capping- for instance on the size of cheques being issued, in an attempt to contain these risks. The MEFMI study reveals that the member Central Banks have done well in this regard; the Central Banks of Kenya, Uganda, Tanzania and Zambia have defined and capped their large value payment systems at varied amounts while it is only Kenya that is yet to cap the cheque amounts.

6.0 A Defined Mechanism for Completion of Daily Settlement

The system should provide prompt final settlement on the day of value, preferably during the day and at the end of the day. In a cheque clearing system, adequate arrangements (collection of cheques, fast processing, rapid communications etc) could allow participants to be aware of their settlement obligations early enough to fund them and complete inter-bank final settlement in due time. This may be difficult to achieve in a large country and where communications between regions is a challenge as is the case in Mozambique. The MEFMI study reveals that the Zambian LFCCC system is the best in this regard as it has a near T+0 cycle for local clearing, followed by Tanzania with the T+3 cycle for local clearing while Kenya's scenario is at T+7 cycle for country wide clearing. The MEFMI study reveals that the best way to reduce the cycle and the possible introduction of more risks within the LFCCC system, is the prudent realignments of the opening and closing times of both the domestic cheque clearing and LFCCC arrangement with the global Time Zones where the offshore settlement accounts are domiciled augmented with the use of the reliable fund transfer technology-the SWIFT and the putting in place two clearing sessions. The Zambian Electronic Clearing House (ZECH) balances these fundamentals well. However for countrywide reduction in the clearing cycle, the member banks attempt to electronically integrate the various clearinghouses operations should be recognised especially the Zambian and Tanzanian efforts in this regard.

7.0 A Defined Mechanism for Finality of Settlement of Large Value Payments

The system, in which multilateral netting takes place, should at a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participants with the largest single settlement obligation. The solution in this regard is the introduction of multilateral netting system through the RTGS system and a complementing 'Failure to Settle' mechanism. The MEFMI study reveals that it was only the CBK-KEPSS where the LFCCC system is on a multilateral netting system that is further supported by a Guarantee Fund and where the settlement leg is linked to the RTGS system. However, as regards the 'failure to Settle' mechanism, the Zambian Electronic Clearing House had the best within the MEFMI member countries in the form of a 'Collateral Pool, with Treasury Bills placed with the BOZ as the underlying asset; the only drawback with the Zambian system is that the clearing system is on a bilateral and manual system.

8.0 Settlement in Central Bank Money

Assets used for settlement should preferably be a claim on the central bank. Where other assets are used they should carry little or no credit risk and little or no liquidity risk. Particular considerations arise if a systemically important payment system uses claim on a Central Bank to settle payments in a currency that the Central Bank does not itself issue. However, the chance of a Central Bank failure to a commercial bank is remote and hence the case of having both local and foreign currency settlement accounts at the Central Banks. The MEFMI study reveals that it is only at the Central Bank of Kenya where the multi-currency settlement system is availed and in Central Bank money while the Central Bank of Tanzania offers the same but only for a single currency - the US Dollar. However Central Banks of Uganda, Tanzania and Zambia have stringent legal and regulatory offshore placements and deposit policies on correspondent banks ratings and operational limits where offshore settlement accounts are domiciled; the policy stance is to avoid dealing with weak unsupervised financial institutions which may go under with local depositorsí funds.

9.0 An Operational and Reliable Cutting - Edge Technology and Business Continuity Mechanisms

The system should ensure the operational reliability of technical systems and the availability of back-up facilities capable of completing daily processing requirements. The system should also ensure a high degree of security and operational reliability and should have contingency arrangements for timely completion of daily processing. MEFMI study reveals that the Kenyan banking system has a reliable technology for the LFCCC system from the presentation leg of electronic files via dedicated lines from participating banks to the ACH to the domestic multilateral netting settlement of the 3 foreign currency accounts held at the CBK through RTGS and ultimate foreign currency offshore settlement via SWIFT with a Disaster Management Centre located more than 12 kilometres away at the Kenya School of Monetary Studies (KSMS). The banking systems of Tanzania and Zambia are still on manual clearing systems although the foreign settlement legs are via SWIFT. The same is applicable for the Ugandan Club arrangement.

10.0 An Open and Competitive System

The system should have objective and publicly disclosed criteria for participation, which permit fair and open access. Competitive market conditions for most payment services, including the inter-bank payment and settlement services, offer the most promising results in terms of efficiency and innovation. The MEFMI study reveals that, as opposed to open architectures obtainable within the inter-bank exchanges of Zambia and Kenya, the LFCCC Club arrangements are more of oligopolistic in nature and exclusive to the chosen few banks. The clearing and settlement costs to their customers and the member banks related operation costs are lower in comparison to the non-member banks and their customers. It is in this context that there is a case for MEFMI member Central Banks' oversight role includes the pursuit of a higher level of competitiveness among system participants and/or consumer protection. The overseer should make all efforts to ensure that all market forces are free to participate in the payment system. Finally, the market for payment services must be open to the entry of new operators.

11.0 Defined Procedures and Core Risk Containment Measures in Multilateral Netting Systems

Multilateral netting systems should have clearly defined procedures for the management of credit risks and liquidity risks, which specify the respective responsibilities of the netting provider and the participants. These procedures should also ensure that all parties have both the incentive and the capabilities to manage and contain each of the risks they bear and that limits are placed on the maximum level of credit exposure that can be produced by each participant.

12.0 Presence of Defined Central Bank Oversight Functionality for the LFCCC Arrangement

The central bank should define clearly its payment system objectives and should disclose publicly its role and major policies with respect to the LFCCC operations while ensuring compliance with the Core Principles and Lamfalussy Standards. The Core Principles are very clear that central banks should oversee compliance with the principles by systems it does not operate, and in promoting payment system safety and efficiency through the same principles should cooperate with other domestic bodies.

The MEFMI study reveals that in countries with the LFCCC Club arrangements, the respective central banks have failed in this role; the best examples are the Ugandan banking system and partially the Tanzanian system where the Bank has been oblivious to the efforts of the Bankers Association in transforming the manual LFCCC system to an automated system.

The best strategy in this regard, which would be desirable for adoption by most of the MEFMI member Banks, is the Kenyan banking system where during June 2003 Clearing House Sub-Committee, comprising the CBK and the KBA was instituted with the objective to propose amendments to the ACH rules to incorporate the BIS Standards, review systemic risk in the Local Domestic Foreign Currency resulting from bank failure and to review the BIS standards and in particular to ëfailure to settleí in the Clearing House.

13.0 Observation

At the end of the day, the promotion and success of an open architecture for clearing locally issued foreign cheques lie with the Central Banks as the sole regulator, supervisor and overseer of the smooth operations of the wider banking system. In countries where the central banks have played a proactive role, the LFCCC systems have met most of the appropriate institutional, legal and policy fundamentals that resemble international best practices and standards. Within MEFMI member countries reviewed by this study, it is clear that where the Central banks have been playing proactive promotional and active developmental roles, their LFCCC systems are enjoying higher compliance ratios with the international best practices and standards as articulated by the BIS Committee on Payment and Settlement System.

ANNEX 4: LIST OF INSTITUTIONS SURVEYED

Kenya
Central Bank of Kenya
Kenya Bankers Association
Barclays Bank of Kenya Limited
Commercial Bank of Africa Limited
Equity Bank Limited
National Bank of Kenya Limited
NIC Bank Ltd

Mozambique
Bank of Mozambique

Tanzania
Bank of Tanzania
Tanzania Bankers Association
National Bank of Commerce (NBC) Limited
Kenya Commercial Bank (KCB) Limited
Barclays Bank of Tanzania (BBT) Limited

Uganda
Bank of Uganda
Standard Chartered Bank of Uganda Limited
Crane Bank Limited

Zambia
Bank of Zambia
Zambia National Commercial Bank Plc
Investrust Bank Plc
Bankers Association of Zambia

Zimbabwe
Reserve Bank of Zimbabwe
Barclays Bank of Zimbabwe
Stanbic Bank
Kingdom Bank
Interfin Merchant Bank
Standard Chartered Bank of Zimbabwe

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