



# **Payment Systems Annual Report 2008**

**Reserve Bank of Malawi**

**April 2009**

## **1.0 FOREWORD**

The Reserve Bank of Malawi Act 1989 mandates the Reserve Bank of Malawi (RBM) to promote a sound financial structure in the country including payment systems. Empowered by this Act, the RBM continued to play a leading role in payment systems in 2008. The RBM ensured that stakeholder consultation is encouraged through the various organs of the National Payments Council. Consultations on payment systems issues were also made through the Bankers Association of Malawi.

In order to strengthen the relationship between the RBM and commercial banks and in a bid to reach a common understanding in making Malawi's national payment system safe and sound, the RBM conducts biannual on-site oversight activities through which a team of payment systems experts from the RBM meet individual commercial banks. During such bilateral meetings, the performance of individual banks is discussed and identified risk mitigating measures agreed.

The Reserve Bank of Malawi is committed to implementing strategies aimed at making Malawi's national payment system safe and efficient in line with Malawi's National Payment System Vision and Strategy Framework for 2009 - 2013.

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## 2.0 INTRODUCTION

Malawi's national payment system (NPS) continued to operate efficiently in 2008 and no major system related problems were recorded. Both the number of participants as well as values of transactions in the Malawi Inter-bank Transfers and Settlement System (MITASS) and the Electronic Cheque Clearing House (ECCH) reflected an increasing trend.

During the period under review, the Reserve Bank of Malawi (RBM) conducted on-site oversight visits to members of MITASS and ECCH. The visits were aimed at ensuring that risks in both systems, which were designated as systemically important, were adequately managed. The RBM shall continue conducting bi-annual on-site oversight activities in addition to off-site oversight activities so that chances of systemic repercussions arising from system failures are minimised.

The National Payments Council (NPC) and the Bankers Association of Malawi have also played a crucial role in complementing RBM's NPS modernisation initiatives. Through the NPC, a Task Force was established to implement the ATM Interoperability Project. The Task Force comprises officials from NPC member institutions and is spearheaded by commercial banks. Once implemented, the Project will enable an account holder to access any ATM and point of sale (POS) device irrespective of the bank that maintains his/her account. This will therefore increase efficiencies in the NPS. Through the NPC, a Contingency Committee on Financial Infrastructure (CCFI) was also formed whose main objective is to coordinate or manage NPS crises issues. The CCFI complements RBM's oversight activities but does not replace each institution's independent responsibility for ensuring its own business continuity and disaster recovery plans.

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### 3.0 MALAWI'S PAYMENT SYSTEMS LANDSCAPE

Malawi, just like any other developing country, has a dual payment stream in which electronic based payment facilities coexist with cash and paper based payment instruments. The efforts of the RBM have however been geared towards promoting the use of electronic payment products. Since the ATM Interoperability Project is underway, a graphical representation of automated systems in Malawi remains as it was in 2007 which is reflected in Figure 1 below.

**Figure 1: Inter-bank systems in Malawi**

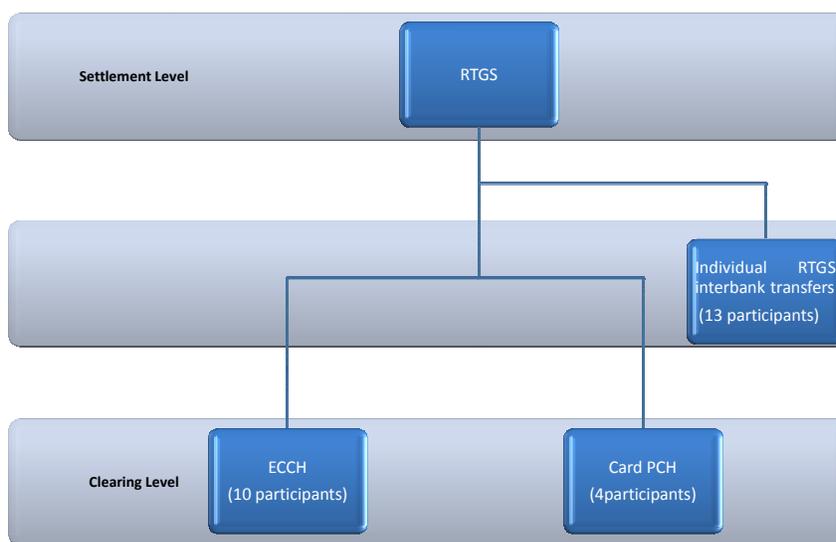


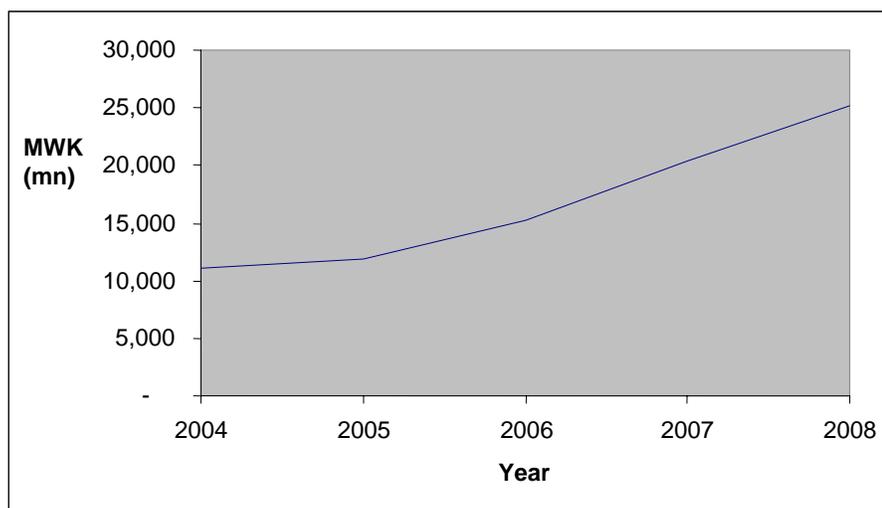
Figure 1 above shows that commercial banks in Malawi are linked together by interbank systems that make it possible for them to settle their claims. At the highest level of this structure is the Malawi Inter-bank Transfers and Settlement System (MITASS) which is owned and operated by the RBM. The MITASS settles single funds settlement instructions (FSIs) posted by individual banks and also concurrently batched transactions from the Electronic Cheque Clearing House (ECCH) and the Smartcard payment clearing house.

Subsequent sections provide a detailed description of the cash and automated payment systems in Malawi.

### 3.1 Cash

The population of Malawi is predominantly rural-based and cash remains the primary means of payment in the household sector. The value of total currency in circulation during the period 2005 to 2008 shows yearly increases as shown in Figure 2 below. Compared to other payment instruments, the RBM regards cash to be a vital payment instrument due to its availability and acceptability to a larger part of the public. The RBM further expects cash to continue to play an important role in Malawi's NPS.

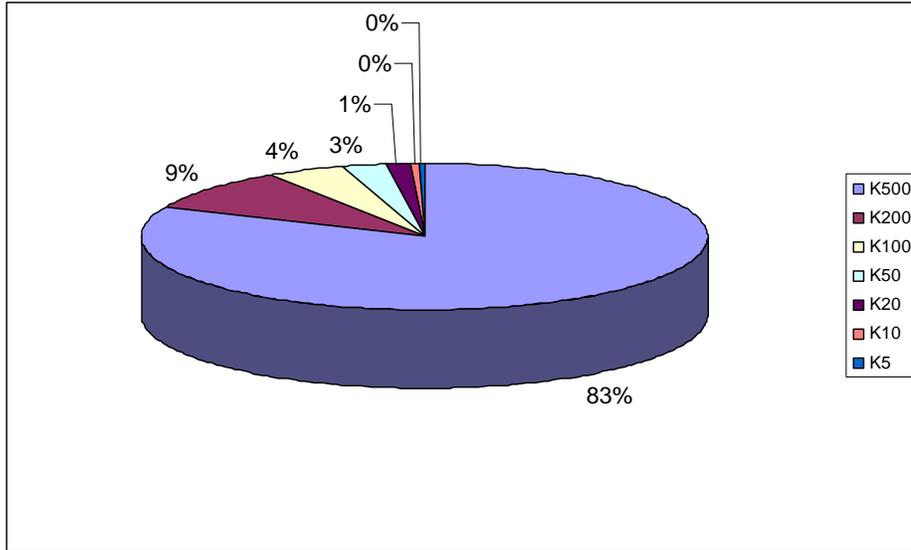
**Figure 2: Currency in circulation: 2004-2008**



Currency in circulation has maintained an increasing trend from 2004 to 2008. For instance, currency increased by 29% from 2005 to 2006, 33% from 2006 to 2007 and 24% from 2007 to 2008. Increases in 2007 could be attributable to Government payments on targeted farm inputs while 2008 figures could be a combination of Government payments on subsidized farm inputs and preparations for the 2009 general elections.

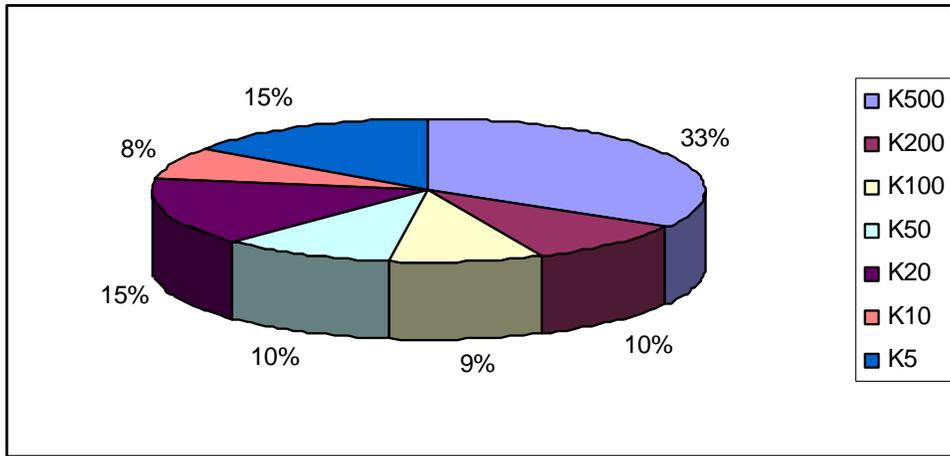
An analysis of the composition of notes in circulation for 2008, as depicted from Figure 3 below shows that the K500 note constituted 83% of the total value of notes in circulation for 2008 followed by the K200 note which stood at 9%. The percentage share values of the remaining notes are as follows: K100 (4%), K50 (3%) and K20 (1%). Both K10 and K5 registered zero percent since their figures were insignificant mainly due to the fact that the RBM discontinued issuing lower denominated notes of K10 and K5.

**Figure 3: Composition of notes in circulation (Value) - 2008**



Although both K10 and K5 notes recorded zero percentages in terms of value, their volume (in terms of pieces in circulation) constitutes 8% and 15% respectively (Figure 4 below).

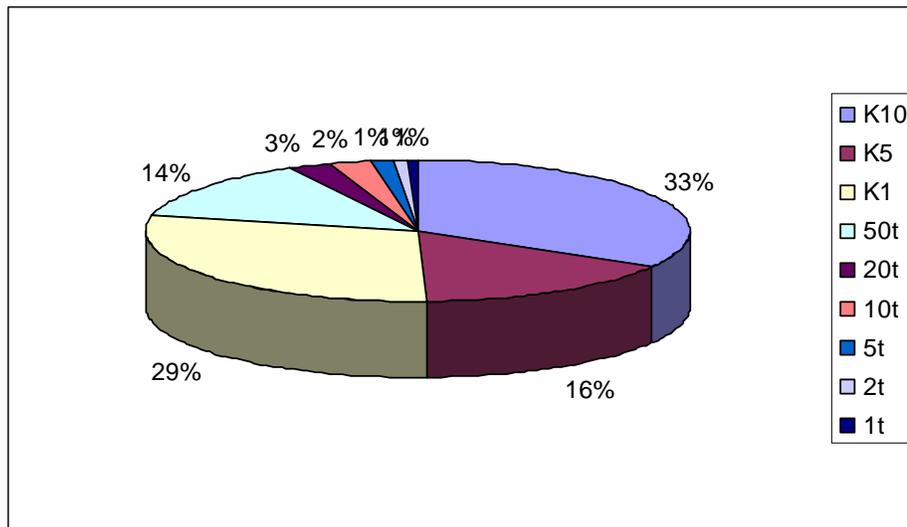
**Figure 4: Composition of notes in circulation (Volume) -2008**



The K500 note also took up the largest share (33%) of the volume of notes in circulation for 2008 followed by K20 and K5 notes which registered 15% each. K10 note, at 8%, was the lowest in terms of pieces in circulation. The high share value of K500 note in both volume and value may suggest that the K500 note is the most widely used note (it could be in terms of store of value or as a payment instrument) in the banknote family.

The composition of coins, as reflected in Figure 5 below, shows that K10 coin constituted 33% of coins in circulation followed by K1 which stood at 29%. The share value of the other denominations is as follows: 50t (14%), 20t (3%) and 10t (2%). 5t, 2t and 1t each recorded 1%.

**Figure 5: Composition of coins in circulation - 2008**



### 3.2 MITASS Operations

The RBM, as owner of MITASS ensures that the system is operated efficiently and is available to participants. Although there were some temporary network disruptions thereby affecting system availability, no major problems were recorded during the period under review. The system is open from 08:00 hrs to 17:00 hrs from Monday through Friday. The standard charge for processing transactions in MITASS is K100.00 and changes depending on the processing window.<sup>1</sup>

#### 3.2.1 MITASS Throughput

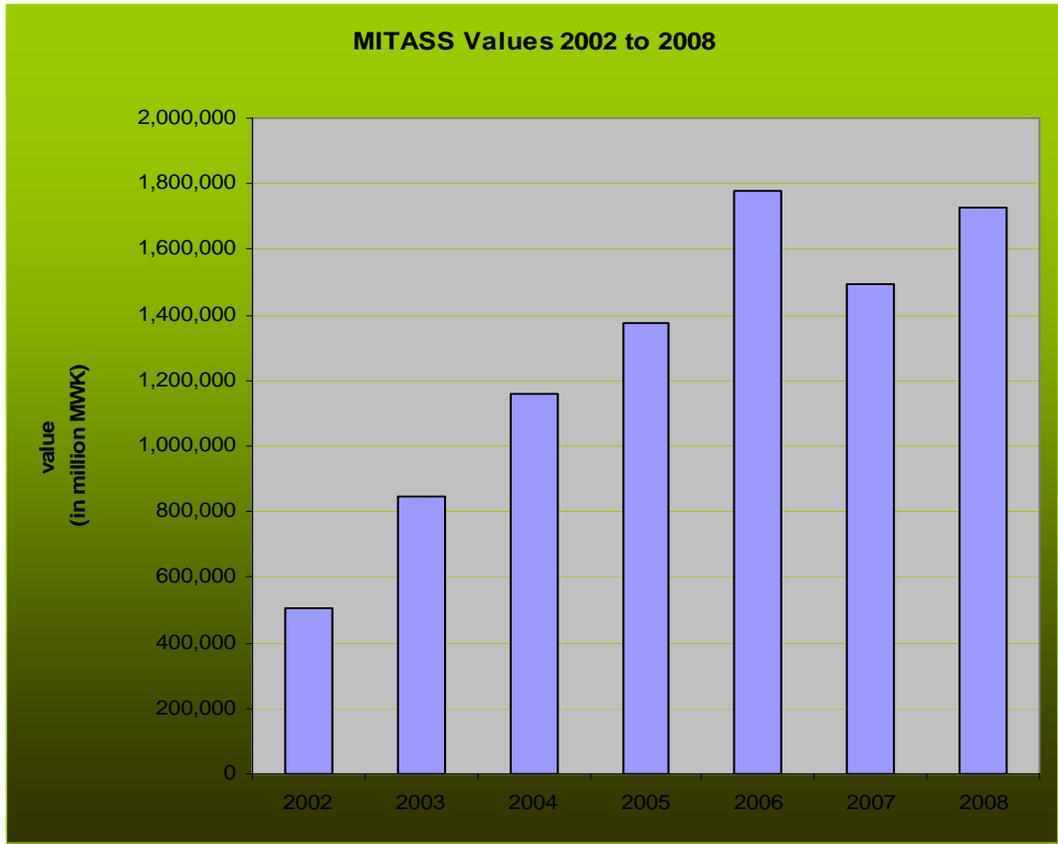
##### (a) Value

The number of participants during the period under review grew from 12 to 13 following entry into the settlement system by FDH Bank in August 2008. The membership therefore comprised of the RBM, two discount houses and 10 commercial banks. The value of Throughput grew by 16% from K1,494.9 billion recorded in 2007 to K1,733.5

<sup>1</sup>See Payment Systems Annual Report 2007 for a detailed outline of RTGS windows and charges

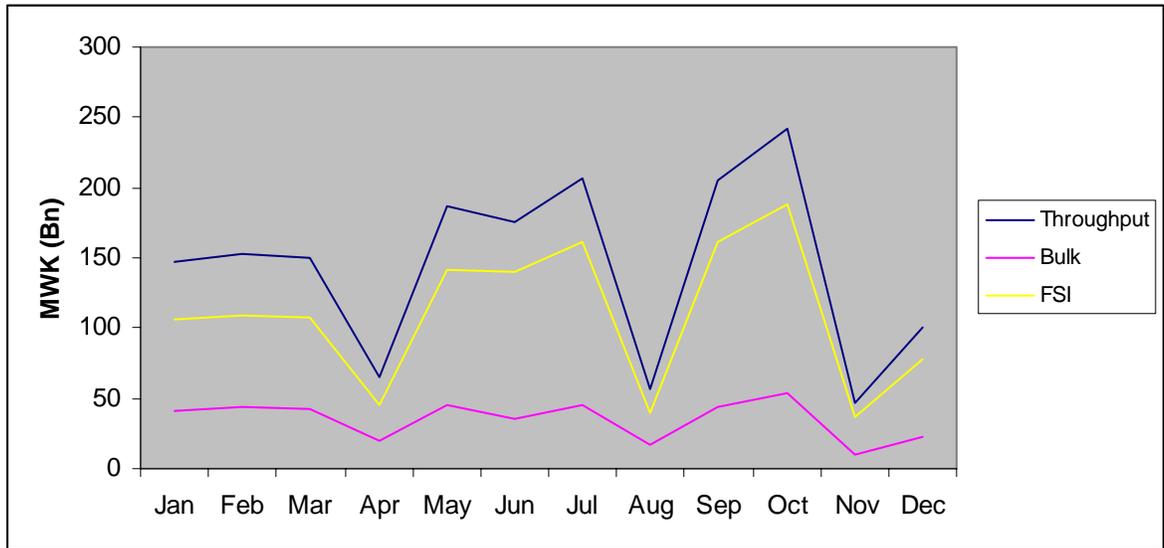
billion registered in 2008. Figure 6 below presents the trend of MITASS Throughput from 2002 to 2008.

**Figure 6: MITASS Throughput: 2002 - 2009**



The increase in MITASS Throughput was largely accounted for by an increase in the share value of single funds settlement instructions (FSIs). For instance, the share value of FSIs in MITASS Throughput increased from 75% in 2007 to 76% in 2008, indicating that more transactions were settled as single FSIs. The remaining 25% for 2007 and 24% in 2008 comprised of batch settlements from the ECCH and the smartcard stream. Figure 7 below provides monthly movements of the share value of FSIs for 2008.

**Figure 7: FSI Movement - 2008**



A month to month analysis reveals that the FSI share value in MITASS Throughput ranged from 69% recorded in April 2008 to 78% observed in September 2009. A total Throughput of K64.5 billion was recorded in April 2008 which comprised of K44.7 billion FSIs and K19.8 billion batch settlements while the month of September 2009 registered a Throughput of K205.5 billion whose composition was K161.9 billion FSIs and K43.6 billion batch settlements. Overall, FSIs and hence Throughput have been fluctuating widely while the movement of batch settlements has been within the K50.00 billion band.

In December 2008, the RBM activated the Liquidity Optimising Mechanism (LOM) facility in MITASS. The LOM facility provides an opportunity for banks to queue transactions and process them as and when their liquidity position improves. The RBM expects MITASS players to resort to this facility in times of liquidity shortages.

**(b) Volume**

Volume, on a year to year basis, decreased by 8% from 83,815 recorded in 2007 to 77,434 reflected in 2008. Table 1 below contains monthly volumes of transactions for 2008.

**Table 1: Volume of transactions: 2008**

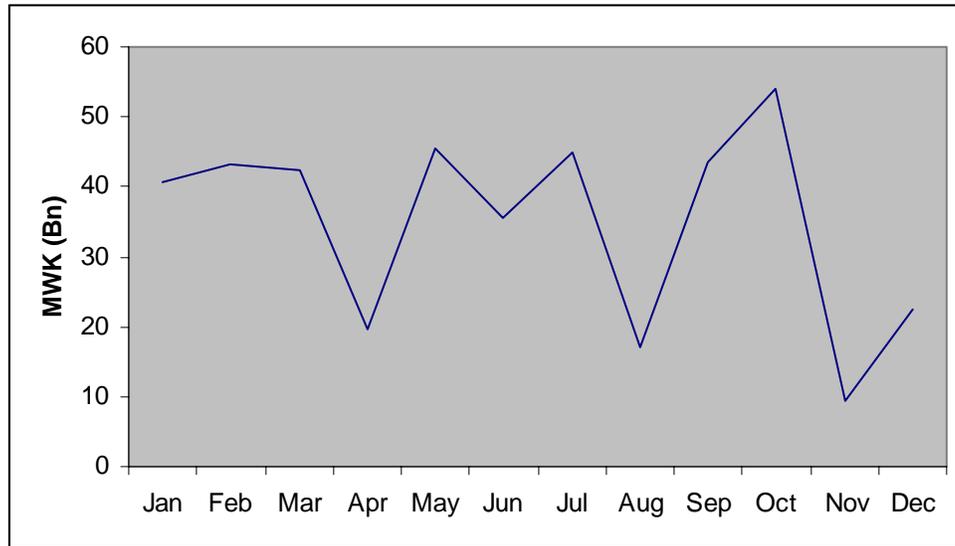
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
7954	8643	8343	3952	8363	7759	7502	2966	7590	8894	2238	3230

The highest number of transactions (amounting to 8,894 instructions) was recorded in October 2008 while November 2008 (2,238 payment messages) registered the lowest volume of transactions.

### 3.3 Electronic Cheque Clearing House ECCH

Monthly movement of ECCH transaction values has been between the K10.0 billion to K50.0 billion band. The highest transaction value of K53.9 billion was recorded in October 2008 and the lowest value (K9.5 billion) was registered in the following month – November 2008. Figure 8 below shows monthly movements of ECCH transaction values.

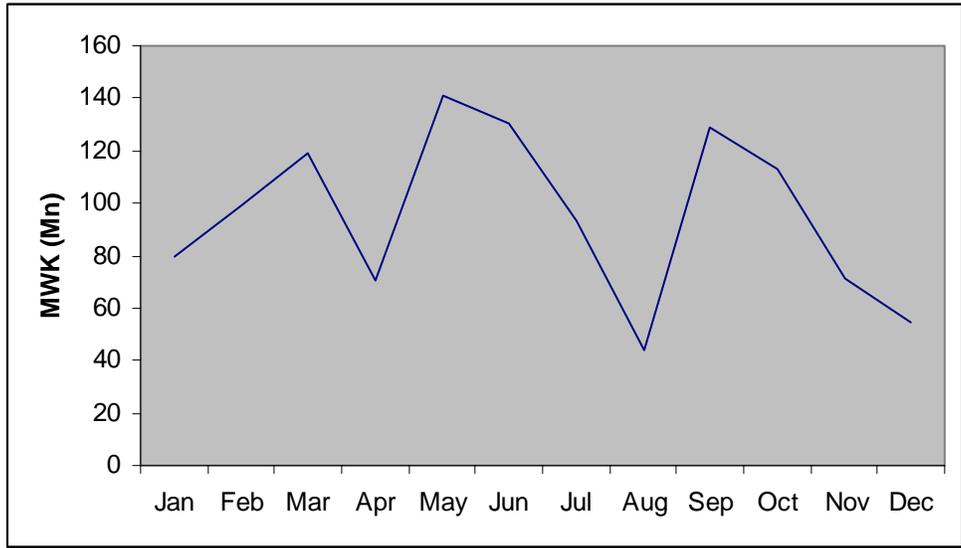
**Figure 8: ECCH monthly values - 2008**



### 3.4 Smartcard Scheme

Unlike ECCH transaction values, smart cards registered the highest value in May 2008 which amounted to K140.9 million and the lowest was in August 2008 which stood at K43.9 million as shown in Figure 9 below.

**Figure 9: Smart card transactions - 2008**



The Oversight Section of the RBM will investigate the reasons accounting for sharp decreases in transaction values in FSIs, ECCH and smart cards recorded during the months of April, August and November 2008 as shown in Figure 7 through Figure 9.

#### **4.0 OVERSIGHT OF THE NPS**

The RBM continued with its offsite and biannual on-site oversight activities in 2008. A Team of payment systems experts visited MITASS participants, MALSWITCH and BAM. Areas requiring the attention of MITASS participants, BAM as owners of the ECCH and MALSWITCH as technical administrators of both MITASS and ECCH were identified and discussed.

Some of the issues covered during the on-site oversight included participant profiles in MITASS, charges/penalties incurred by banks, liquidity management and disaster recovery. The analysis of payment profiles revealed that many banks process their transactions through single funds settlement instructions (FSIs) as opposed to cheques. There were however a few banks with a significant share of cheque transactions in their institutional MITASS Throughput. The banks in question were urged to process their transactions through FSIs.

#### **4.1 Role and legal mandate of RBM as overseer of the NPS**

In the absence of the NPS Act, the RBM carried out its oversight activities by use of the RBM Act (1989) Chapter 44:2 which stipulates that the principal objectives of the RBM shall be, *inter alia*; to *promote a sound financial structure in Malawi, including payment systems, clearing systems and adequate financial services*. Efforts are however underway to have the NPS Act in place.

#### **4.2 Scope of RBM Oversight**

During the year under review, the scope of RBM's oversight activities was limited to MITASS and the ECCH which were designated systemically important. In addition to participant profiles, oversight activities included analysis of system availability, security, backup, disaster recovery and help desk issues. The RBM intends to expand its scope in 2009 to include oversight of retail payment systems.

#### **4.3 Oversight Standards for MITASS and ECCH – the Core Principles**

In carrying out oversight activities for both MITASS and ECCH, the RBM largely used internationally recognised benchmarks - *the Core Principles for Systemically Important Payment Systems*<sup>2</sup> which provide a set of minimum standards for payment systems, covering legal risks (Core Principle I), credit and liquidity risks (Core Principles II to VI) and operational risks/business continuity (Core Principle VII), as well as efficiency (Core Principle VIII), access criteria (Core Principle IX) and governance issues (Core Principle X). A reassessment of MITASS and ECCH in line with the Core Principles is scheduled for 2010.

### **5.0 REGIONAL AND INTERNATIONAL COOPERATION**

In line with the *BIS Central Bank Responsibility D*, the RBM cooperated with both local and foreign bodies involved in payment systems. **Responsibility D** states that *the central bank, in promoting payment system safety and efficiency through the core principles, should cooperate with other central banks and with any other relevant domestic or foreign authorities*. Locally, the RBM continued to cooperate with the NPC and BAM in a number of payment systems. Internationally,

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<sup>2</sup> The full text of the Core Principles and guidance on their implementation are available on the BIS website (CPSS (2001), Core Principles for Systemically Important Payment Systems, available at [www.bis.org/publ/cpss43.htm](http://www.bis.org/publ/cpss43.htm)).

the RBM cooperated with SADC Payment Systems Project and the International Monetary Fund. The following sub-sections provide highlights of the areas in which the RBM cooperated with foreign institutions.

### **5.1 Southern African Development Community**

The Southern African Development Community (SADC) Payment Systems Project, which among others was established with the aim of assisting individual SADC member countries to define domestic payment strategy and a development plan, has played a significant role in payment systems capacity building activities and sharing of experiences in payment systems. As one way of benefiting from the expertise of SADC Payment Systems Project, the RBM participated at the SADC Payment Systems Annual Regional Conference which covered crucial topics like collateral management, technical support in RTGS operations, cost recovery models, cross border payment models and approaches to oversight among others.

### **5.2 International Monetary Fund and the Bank of Norway**

The RBM continued to enjoy technical support from payment systems experts under the IMF technical cooperation through the Bank of Norway. The support focussed on consolidating activities that were carried out in 2007 which, among others, saw the completion of the revision of the NPS Vision and Strategy Framework for 2009-2013 in 2008. In conformity with the BIS Core Principles for Systemically Important Payment Systems - **Core Principle IX** and **Central Bank Responsibility A**, the RBM disclosed its NPS Oversight Policy and MITASS Access Criteria through RBM website in January 2008. Core Principle IX states that *the system should have objective and publicly disclosed criteria for participation, which permits fair and open access*. Responsibility A, on the other hand, states that *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*.

## **6.0 WORK IN PROGRESS**

### **i. ATM Interoperability**

In a bid to improve efficiencies in card payments, the NPC established a sub-committee that is working on the project to link all ATMs and POS in the country. The Project will reduce the need for customers and merchants to respectively hold more than one brand of cards and POS devices. This will inevitably reduce costs associated with possession of

more than one brand of cards by clients and POS by merchants or retailers. With only one card, clients will be able to access any ATM or POS in the country.

**ii. Mobile Payments initiatives**

While developments in mobile technology have eased access to financial services by economic agents, the same pose regulatory challenges to central banks. Despite the challenges, the RBM as a payment system regulator and catalyst works towards promoting rather than stifling innovation. In order to ensure the smooth functioning of mobile payments, the RBM established a Task Force on E-Banking whose primary objective is, among others, to study various mobile payment schemes and formulate guidelines. Membership of the Task Force comprises officers from the following departments of the RBM: Banking and National Payment System, Information Communication and Technology, Exchange Control and Debt Management, Bank Supervision, Internal Audit and Legal Affairs.

**7.0 CONCLUSION**

Malawi remains committed to improving its NPS by implementing world-class innovative products. In order to ensure that the domestic NPS is safe and sound, the RBM shall implement appropriate policies in line with internationally accepted best practices. Measures shall also be designed to ensure that the majority of the general public reduce reliance on cash as a payment instrument. Cooperation with stakeholders shall continue to be encouraged through the NPC, BAM and the relevant foreign bodies.