# CHAPTER 7

# **Development of Payment and Settlement System**

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### Khin Thida Maw

### **Abstract**

The new government of Myanmar has proved its intention to have good relations with the international community. Being a member of ASEAN, Myanmar has to prepare the requisite measures to assist in the establishment of the ASEAN Economic Community in 2015. However, the legacy of the socialist era and the tight control on the banking system spurred people on to cash rather than the banking system for daily payment. The level of Myanmar's banking sector development is further behind the standards of other regional banks.

This paper utilizes a descriptive approach as it aims to provide the reader with an understanding of the current payment and settlement system of Myanmar's financial sector and to recommend some policy issues for consideration. Section 1 introduces general background to the subject matter. Section 2 explains the existing domestic and international payment and settlement systems in use by Myanmar. Section 3 provides description of how the information has been collected and analyzed. Section 4 describes recent banking sector developments and points for further consideration relating to payment and settlement system. And Section 5 concludes with the suggestions and recommendation.

### 1. Introduction

Practically speaking, Myanmar's economy was cash-based due to the prolonged decline of the banking system after nationalization beginning in the early 1960s. After the promulgation of the Central Bank of Myanmar Law in 1990, the authorities had tried to restore the public's confidence and to enhance knowledge of the banking sector. The 1990 banking regulations allowed the establishment of privately owned banks, followed by a series of financial sector reforms. However, after the 1997 East Asian financial crisis, the momentum towards reform had stagnated and the foreign exchange

licenses issued to private owned banks were revoked. Further pressure to withdraw the 1990 reforms arose when a bank run hit private banks in early 2003, which severely affected public confidence of the banking sector. The situation worsened after closure of some private banks due to anti-money laundering infringement. Myanmar authorities tightened the banking regulations and restrictions, cancelled automated payment card systems (Automatic Teller Machines (ATMs), debit and credit cards), leaving the banking system with just basic services.

With the launching of the ASEAN Economic Community scheduled for 2016, Myanmar's banking payment and settlement system should be able to accommodate financial transactions for the trading of goods, services and investments. Myanmar also should gradually open up to the participation of foreign banks in its financial sector. As timing is very important in market opening, it needs to ensure that every step taken towards market opening is safe and supportive to nation's building, in turn, to bring the most benefit of the public. Therefore, this paper aims to provide the reader with an understanding of the current payment and settlement system in Myanmar's banking sector and to recommend some policies for the authorities to consider.

# 2. Existing Payment and Settlement System

# 2.1 General Overview of Domestic Payments

The present structure of Myanmar's banking institutions consists of a central bank, four state—owned banks, nineteen private banks and twenty-three foreign bank representative offices. The structure of Myanmar's payment system consists of three major layers. At the top of the inverted pyramid is the broad base of economic actors that use the payment instruments of Myanmar's banking sector for their daily transactions. At mid-level are the commercial banks, which hold accounts with the Central Bank of Myanmar (CBM). At the bottom is the CBM, which holds accounts for all commercial banking institutions and serves as the ultimate settlement authority in the country.

One of the objectives of the Central Bank of Myanmar (CBM) is to promote efficient payments mechanisms. Accordingly, the CBM has adopted policies for the improvement of its payment system. Regarding the cash payment system, three principal aspects are covered, such as fulfilling the public need for currency, ensuring that bank notes are fit for circulation, and taking preventive and suppressive measures against the circulation of counterfeit currency. Concerning the non-cash payment system, the policies are focused on reducing risks and improving efficiency of payment system.

Acting as the apex of the banking industry in the country, the CBM ensures the efficient provision of settlement services within its three branches located in Yangon, Mandalay and Naypyitaw. Commercial banks provide payment services by introducing new types of banking facilities with diverse products as well as by extending the banking network throughout the country for wider use of financial services by those people living in rural and remote areas. Cheques, certified cheques, and payment orders commonly are used for large-value payments. Cash, cheques, payment orders, direct debit payments and other types of payment cards (prepaid cards) generally are used for small-value payments. ATMs and Point of Sales (POS) Terminals also are installed for the convenient use of the payment system.

=== Figure 1 ===

# 2.1.1 Payment Methods

# 2.1.1.1 Cash Payments

Myanmar's banking sector has been rejuvenated with private sector participation since 1993. However, the economy still dominantly uses cash for daily economic activities. Table 1 shows the proportion of cash in M2 (Broad Money). The use of cash in the economy before 2003 was decreasing while the use of the country's banking system was increasing. Then the 2003 bank run led to a decrease of public reliance on the banking sector for everyday transactions. Consequently, the ratio of transferable deposits decreased until 2008. After the 2010 general election, public confidence in Myanmar's political and economic reform process improved and hence the national economy has revived somewhat. It must be pointed out that public sentiment in

Myanmar has tended to be business-oriented and, as a result, use of the country's banking system also has experienced an upsurge. The following table illustrates that the ratio of cash to M1 (narrow money) and M2 (Broad Money) exhibits a downward trend while that of transferable deposits indicates an upward trend. Quasi-money portion in broad money, which is people's saving, has been increasing after 2006. In 2012, it reached to 46 percent of broad money.

=== Table 1 ===

Table 2 shows the ratio of cash to M1 in Myanmar as compared with Malaysia, the Philippines and Thailand. Although the trend of the cash to M1 ratio in Myanmar has decreased, it demonstrates that the volume of cash for daily payment transactions in the economy is four times higher than that of transferrable deposits.

=== Table 2 ===

# 2.1.1.2 Non-Cash Payment

Non-cash payment instruments generally can be classified as follows:

- a) Cheques
- b) Payments Orders or Credit Transfer
- c) Direct Debit Payments
- d) Payment Cards

Cheques are mostly used for payments by government institutions as well as for private sector business transactions. Cheques used in Myanmar are classified as bearer cheques, order cheques and gift cheques. However, the use of ordinary cheques is not very popular as there is no penalty for bounced cheques. Certified cheques have been introduced to guarantee that the cheque drawer has enough money in his/her account. It also does not receive much public preference.

Payment orders or credit transfers are made for the purpose of placing funds at the disposal of a beneficiary. This payment method is used for interbank fund transfers as well as for individual payments like utility bills. An account holder gives his/her bank instructions to initiate credit transfers to the payee.

Direct debit payment is used mainly for hire purchase agreements and transactions from a customer's current account. Payment cards generally are classified as Myanmar Payment Union (MPU) debit cards or as prepaid cards. Recently, the MPU was launched as a non-profit organization consisting of all card issuing banks that is meant to institute a more manageable and efficient card payment system. MPU debit cards can be used to make payments at merchant-established POS terminals as well as to withdraw cash at an automatic teller machine from the card holder's account. However, the use of MPU cards is still very limited as POS terminals are found in the Yangon area only. MPU debit cards enable the holder to make purchases and to charge those purchases directly to a current account from the issuing bank. Furthermore, the MPU is acting as the settlement organization for MPU cards.

Taking advantage of being the issuer of settlement money, the CBM provides large value transfer services through its branches and the branches of the Myanma Economic Bank, which keeps the currency chests for the CBM in other major cities. Since December 2011, the electronic fund transfer system has been in effect for large value transfers between accounts of banks with the CBM.

### 2.1.2 Structure, Operation and Administration

As presented above, there are three financial clearing houses in Myanmar. The primary responsibilities of clearing houses are defined in terms of areas and payment instruments. All are responsible for the clearing of cheques and other paper-based instruments used as a means of payment.

There are 192 members in the Yangon Clearing House. The branches of the Myanma Economic Bank and private banks, and Yangon Clearing House members located in Lower Myanmar including Yangon, settle transactions each other through one of the member banks. In general, branches of the Myanma Economic Bank perform as correspondent banks for indirect participants.

The Mandalay Clearing House has a similar structure to the Yangon Clearing House and processes cheques and other paper-based payment instruments for Upper Myanmar. Branches of the Myanma Economic Bank (some of which function as the correspondent banks of other non-member branches of the Myanma Economic Bank), the Mandalay branch of the Myanmar Investment and Commercial Bank and branches

of domestic private banks are members of the Mandalay Clearing House, which now has a total of 171 members.

The Naypyitaw Clearing House was established after the government of Myanmar moved its offices to the new capital of Naypyitaw. There are 46 members in this organization. Regardless of where the clearing house is located, all paper-based payments are finally settled in the books of the CBM.

Membership applications either for admission into or for withdrawal from a clearing house must be made fourteen days in advance. No fees are levied either for membership or for cheque clearing and payment settlement. The operations are carried out manually. Payment instructions are required to be presented to the clearing house physically. Only one meeting is arranged from 1:00 to 3:00 p.m. on each business day, except the closing date of a fiscal year, when it holds two meetings. The banks present cheques received from their customers to the drawee banks. After receiving the cheque, the net obligation of each bank is determined.

After the clearing operation, the bank's representatives return to their banks to obtain payment authorizations and collect any cheques that are to be returned during the next meeting. Debtor banks have to settle their outstanding debit positions by soliciting settlement advice about their deposits at the CBM on the following business day. If a bank's financial obligations cannot be covered by its own account with the central bank, it then could be provided by the CBM either by rediscounting securities or by offering a 92-day loan against collateral presented. However, overdrafts are not allowed. Once all the banks have paid their obligations, the CBM makes payment to creditor banks.

The Central Bank of Myanmar Law of 1990 empowers the Central Bank to set minimum and maximum commission rates, service charges and other fees, which are levied on any type of transaction provided by in-country financial institutions to the public or to other financial institutions. For services rendered by the central bank for large value fund transfers within the Yangon area, no fee is charged, but for the area outside of Yangon, a fixed service fee of .005% is charged to the sending participant. Private banks charge the same fees based on type and amount of transaction. The average fee for interbank fund transfers is .0125%. Additionally, there are some arrangements set by individual private banks that are applicable only within their banking alliance network.

# 2.2 General Overview of Cross Border Payment

Previously, only state-owned banks were permitted to provide foreign exchange banking services in Myanmar. Under this new government administration, private sector participation has been encouraged. Privately owned banks have been permitted to provide foreign exchange services since 2 October 2011. Consequently, 14 private banks have been given authorized dealer license, which permits the provision of foreign banking services to the general public. Seven out of 14 private banks have already commenced this particular service. Therefore, the payment service providers in the foreign banking services are three state-owned banks and seven private banks.

Three state owned banks, namely the Myanma Foreign Trade Bank, the Myanma Economic Bank and the Myanma Investment and Commercial Bank, are providing a full-range of financial services to both the public and private sectors. Seven privately owned banks that have authorization to offer foreign banking services are Kanbawza Bank, Myanmar Oriental Bank, Cooperatives Bank, Ayeyarwady Bank, Asia Green Development Bank, Myanmar Apex Bank and United Amara Bank.

Recently, international payment card issuers, such as Visa, Master, China Union Pay and Japan Credit Bureau, have been granted permission to reenter Myanmar after almost a decade long absence from the economy. The use of these cards is linked to local private banks and settled through the country's banking network. Previously, these credit card payments were settled through their representative offices in Yangon.

### 2.2.1 Payment Media

### 2.2.1.1 Cash

According to the recently issued Foreign Exchange Management Law, the Myanmar currency, the kyat, is not allowed to be utilized in making international payments and transfers, including the physical transfer of cash and payment instruments between Myanmar and other countries. Therefore, cross border payments are made in other foreign currencies, like the US dollar, the Euro and the Singapore dollar.

### 2.2.1.2 Non-cash

In addition to foreign currencies, the Asian Clearing Union (ACU) dollar, which is equivalent to one US dollar, is used as an instrument of payment in global markets by nine Asian Clearing Union member countries - Bangladesh, Bhutan, India, Iran, Maldives, Myanmar, Nepal, Pakistan and Sri Lanka. Authorised travellers' cheques are American Express, Visa, Mastercard and CitiCorp, and are subject to restrictions as well as limited to currencies that are not sanctioned by the US government and its allies.

The Central Bank of Myanmar has issued Foreign Exchange Certificates (FECs) in denominations of 1, 5, 10 and 20 units, which are the equivalent to US dollars 1, 5, 10 and 20 respectively. The availability of FECs since February 1993 was done for the convenience of tourists in particular, and foreign currency account holders in general. FECs are used for various types of payments made by both residents and non-residents alike within Myanmar. After the promulgation of the Foreign Exchange Management Law that permits the limited holding of foreign currency, the functional role of FECs as a facilitator in the economy of Myanmar has been decreasing. In fact, the Central Bank of Myanmar recently has announced the intention to withdraw FECs in 2013.

# 2.2.2 Structure, Operation and Administration

The Controller of Foreign Exchange of the CBM administers foreign exchange regulations in accordance with instructions from the Ministry of Finance and Revenue. All payments for current account transactions are allowed basically after the issuance of the new Foreign Exchange Management Law on 10 August 2012.

Banks in Myanmar use their correspondent banks for making cross-border payments. Domestic banks send messages to their correspondent banks using the SWIFT (Society for Worldwide International Financial Telecommunication) for their international payments and transactions. Since the US imposed sanctions on Myanmar, fund transfers were denominated in Euros only. Recently, the Treasury Department of the United States issued General License No 16, authorizing exportation or reexportation of financial services to Myanmar, directly or indirectly from the United States. However, financial institutions' awareness and understanding of the change in the US policy is still limited.

As a member of the Asian Clearing Union, settlements between member countries are made in Asian Monetary Units through the ACU mechanism. The Chief Accountant of the Central Bank of Myanmar serves as the administrator of the ACU account in Myanmar. The Myanma Foreign Trade Bank and the Myanma Investment and

Commercial Bank have been designated by the Central Bank of Myanmar for the purpose of payments through the ACU clearing facility. The utilization of the clearing facility is optional. According to a decision made at the 37<sup>th</sup> ACU Board of Directors Meeting (effective 1 January 2009), the accounts of the ACU are designated either as ACU dollars or as ACU euros, which are equivalent in value to one US dollar or one Euro, respectively. Starting from the settlement period at the end of August 2003, the CBM has been making settlement payments in Euros with the central banks of other ACU members.

The deferred multilateral net settlement system is used to calculate the net claims or obligations of each bank within the clearing union. Settlement of balances and accrued interests are made bi-monthly. In other words, accrued interest is included in the calculation of the net amount to be paid or received. Interest is paid by net debtors and transferred to net creditors on daily outstanding balances during interval period of two consecutive settlement dates. The rate of interest is determined by the Board of Directors and is subject to change from time to time on the basis of the rate in major financial centers. Each participant is notified of its net position at the end of each settlement period and debtors make the requisite payments within four business days of being notified of their in international reserve assets.

# 3. Timely Information and Payment System Oversight

The Accounts Department of the CBM collects daily the status of clearing operations and related information, such as the banks' balance at the CBM, the net obligations of each bank, the total outstanding of debit/credit positions to the central bank, and the quantity of government treasury bonds held by the each member bank, which is used normally as collateral for central bank lending. Also, the daily position of large-value interbank fund transfers through the central bank is collected. Moreover, weekly and monthly reports of cheque and other payment instruments processed in both clearing houses are compiled. Though the clearing houses are manually operated, the data compilation and processing in the Accounts Department of the CBM are

computerized. Now the authorities are aiming to computerize the whole system. For timely data compilation and reporting, an online banking network has been established.

The Central Bank of Myanmar Law, the Financial Institutions of Myanmar Law and the Control of Money Laundering Law and related rules and regulations constitute the legal basis for operation of a national payment system. As the CBM has a strong interest in the financial stability of the country, it regularly evaluates the payment system as a whole so as to maintain its stability, to ensure security of payment instruments used by the public and to promote greater public confidence in the overall payment structure. In addition, remittance services are subject to oversight by the CBM.

The Committee on Development of the Payment System was established in 2008 with the participation of all the stakeholders - Central Bank of Myanmar, state-owned banks and private banks. In order to support an efficient payment and reporting system, the Committee on Banking Network was formed that same year as well. Nonetheless, it is clear that private sector involvement in the restructuring of Myanmar's banking industry has contributed significantly to the development of more adept payment and settlement systems. Indeed, private banks have extended new banking services as well as payment instruments. However, data availability for the use of payment instruments other than cash by these institutions is absent. Yet this omission will be corrected as the country's national electronic payment card provider, the MPU, will be able to compile the data more effectively. It is believed that the payment and settlement systems will improve after the recent reforms in the banking sector.

The Central Bank of Myanmar has taken stringent measures for all banks to conform to prudential regulations in order to ensure not only the stability of the financial system but also the development of competent payment systems. A comprehensive structure of reporting is in place for verifying bank compliance with reserve, minimum liquidity, capital adequacy and loan provisioning requirements.

# Box 1. Prudential Regulations for the Banking Sector

The elements of the prudential and supervisory regulations and oversight are:

- ❖ A reserve requirement of 10% on total deposits, including foreign currency denominated deposits. At least 75% of reserves must be deposited at the Central Bank and the rest in cash. Holdings of Treasury bonds can be counted as reserve. A penalty of 0.2% per day is levied on any shortfall in the prescribed reserves.
- ❖ A liquidity ratio of 20% is required so that banks can meet demands for liquidity in a cash dominated economy.
- ❖ A 10% risk weighted capital adequacy ratio.
- ❖ A general provision of 2% of outstanding loans, and loan loss provisions of 50% and 100% of the stock of doubtful and bad loans, respectively.
- ❖ A lending limit to a single client is set at 10% of a bank's capital and reserves.
- ❖ An annual on-sight inspection by the Central Bank of Myanmar.
- The following reports must be submitted to the Central Bank of Myanmar.

Required reserves and liquidity ratio (weekly); asset and liabilities statement (monthly); income and expenditure statement (monthly); capital adequacy ratio (monthly); general ledger (monthly); non-performing loans (quarterly); distribution of loans and advances by sector and security (quarterly); provisions of bad and doubtful debts (annually); and profit and loss (annually).

# 4. Recent Banking Sector Development and Further Consideration

Since the assumption of its duties in March 2011, the new government of Myanmar has performed a series of political, economic and social reforms. As such, the leadership of the country has set out to achieve policy coordination between its financial restructuring program and the National Comprehensive Development Plan. The government also has been encouraging all stakeholders involved in Myanmar's banking industry to move forward together. Consequently, the business atmosphere has been improved remarkably and open discussions and forums among the stakeholders have taken place on a regular basis.

The CBM has permitted expansion of the country's bank branch network yet it must adhere to certain criteria, especially capital injection (700 million kyat for opening a new bank branch in major cities and 300 million kyat for small towns and cities). To date, private banks provide services with a computerized system and established branches in major cities as well as in remote rural areas. Total number of 19 private banks' branches is over 430, of which about 130 branches are opened since the inauguration of the new government.

On the other hand, state-owned banks offer nationwide personal, commercial and project development banking services with over 550 branches throughout the country, yet are not fully computerized. Since the private sector has more financial and technical resources at its disposal and more entrepreneurial incentives as well, the role and the market share of private banks compared to state-owned banks has increased significantly in recent years. At the end of March 2012, privately owned banks held 61% of total deposits and 64% of total personal savings accounts. Table 3 provides the monetary data of Myanmar, which illustrates the increasing share of private banks in terms of deposits.

### === Table 3 ===

Considering that Myanmar has a population of approximately 60 million people, with an adult population of more than 35 million, the country's banking network is

relatively small. The total number of accounts held in private banks are estimated around 1.2 to 1.5 million, which is an inflated figure as some customers have on average 2 to 3 accounts. Therefore, compared to the overall population, the number of people in Myanmar that have access to banking services is still very low. With this in mind, greater access to the banking system and its associated expansion are pivotal factors for the economic development of the country, and thus opening new bank branches should be encouraged to broaden the industry's customer base as well as to integrate more of the population into the country's financial structure.

There has existed strong demand within Myanmar for the use of payment cards. Recently issued MPU cards can be utilized at around 100 POS terminals and private bank ATMs nationwide. However, merchants prefer receiving cash rather than paying a 1% commission fee on their sales. Additionally, a limited number of POS terminals has affected public awareness and reliance on payment cards. Government authorities should consider supporting POS usage not only through administrative measures, but also by financing or giving guarantees in the acquisition of POS terminals.

Today the CBM, as an overseer of the country's payment system, has been liberalizing gradually and has introduced new banking facilities such as the issuance of payment instruments and systems, the provision of inter-bank remittances and trade guarantees, hire purchases, foreign exchange operations, and international banking services. Some private banks have realized that locally produced core banking software in use has limitations and no longer can support the extension of new banking facilities and promote effective management. A few major private banks already have taken steps to replace current core banking software with internationally recognized core banking software such as Oracle and Temenos T24. Yet, this modification only addresses a part of the problem as Myanmar's current telecommunications infrastructure cannot sustain a more centralized core banking system.

Recent changes to the transparency policy of the CBM are commendable. Recent incident of a rumor hit the Kanbawza Bank and depositors rushed into its bank branches. As the Kanbawza Bank always follows the banking rules and regulations as directed by the CBM and holds significant amount of government treasury bonds, which can be used as collateral for central bank's discount window lending, the authorities stood firmly to assist with all the means to the Kanbawza Bank. The CBM announced

publicly that all banks operating in Myanmar's financial sector are supervised closely by the central bank so that it can guarantee all the activities of Myanmar banks. In addition, the CBM even in the weekend has provided lending as much as the Kanbawza Bank requests through the central bank's discount window lending facilities. Therefore, the banking industry of Myanmar was saved successfully from a bank run and it was hails as a remarkable achievement of the ongoing banking sector reforms.

The authorities have introduced a deposit insurance plan that aims to enhance public confidence of the banking sector. However, public awareness and understanding of the deposit insurance scheme remain low, as customers are not informed either formally or in a timely fashion. From a quick glance, it seems that the overriding goal of the deposit insurance plan has yet to be achieved. Accordingly, the Government of Myanmar should take the lead in educating the public about banking and financial products and the risks involved so that when the market completely becomes liberalized, people will possess enough knowledge to make use of a large range of banking and financial services.

Previously banks were providing payment services on a competitive pricing basis, which incurred the break-even price of transaction costs as determined by the market. The CBM lately has notified the public of a change on rates charged on local remittance services, which restricts competition and results in higher charges on remittances.

Government authorities in Myanmar need to nurture the spirit of fair competition among local banks. Mitigation of the pricing policy on banking products, including the interest rates on deposits and loans, and fees on banking services, should be considered. Instead of setting minimum interest rates on deposits and maximum interest rates on lending, the authority should consider allowing banks to determine freely their rates on deposits and lending should be considered.

### 5. Recommendations

Since the payment system overwhelmingly affects a large number of economic actors and business activities, its soundness, integrity and security is of vital concern to

the Central Bank of Myanmar, which serves as a guardian of the public interest. The precise role of the central bank will vary from country to country and will depend on the relationship of the central bank to other public sector agencies and the private sector, and on the extent of its own participation in the payment system. Its position in leading the advancement of the payment system arises from its intimate knowledge of payment system issues gained through its own activities, most notably by providing a range of financial services to the government, managing liquidity conditions of the country, and carrying out its oversight of financial clearing systems.

Due to its primacy within the banking system of Myanmar, the CBM is planning to support more reliable payment and settlement systems while private commercial banks have aimed to increase their role in offering convenient and efficient banking services both domestically and internationally. Lack of technology, expertise, capital and poor telecommunication infrastructure are major constraints in the expansion of a national payment system. With the support of the Japan International Cooperation Agency (JICA), the CBM has decided to establish the Automatic Clearing House in 2013. Yet government authorities should pay more attention to solving the issue of poor telecommunications infrastructure in Myanmar, as it becomes a restrictive bottleneck for the further maturity of the banking industry.

In addition to the development of an efficient and effective national payment and settlement system, other pertinent financial issues in Myanmar include Central Bank independence, modernization of the banking network, improvement of banking supervision to deal with existing banking facilities and products, establishment of a legal framework suitable for dealing with future financial sector changes/emergencies and capital market development. These matters are important in order to further the advancement and stability of Myanmar's banking industry. Sound macroeconomic management is a must for building up public confidence in the monetary and banking sectors of the country. Consistency and close coordination between fiscal policy, monetary policy and exchange rate policy are crucial to achieve the aim of the CBM which is to maintain the value of the local currency and stability of the financial system.

Public confidence of the banking industry should be promoted with the support of all stakeholders. Furthermore, public knowledge of banking sector products should be improved. Greater transparency and availability of banking data and information also would enhance public trust. It is recommended that the Government of Myanmar and the authorities at the CBM be more open and willing to make information available to the public. Moreover, access to the banking system should be extended to the entire population. In fact, eliminating restrictions on the opening of bank branches should be considered.

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Bank Negara Malaysia: <a href="http://www.bnm.gov.my/">http://www.bnm.gov.my/</a>

Monetary Authority of Singapore: <a href="http://www.mas.gov.sg/">http://www.mas.gov.sg/</a>

**Table 1: Structure of Broad Money** 

(% of Broad Money Supply)

Particulars	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012
Cash	64.2	45.3	67.5	67.9	67.0	65.1	60.9	57.2	51.8	44.5
Transferable deposits	6.8	14.6	6.2	6.3	6.6	6.0	7.8	9.5	11.0	9.3
Narrow money supply ( M1)	71	59.9	73.7	74.2	73.6	71.1	68.7	66.7	62.8	53.8
Quasi-money	29	40.1	26.3	25.8	26.4	28.9	31.3	33.3	37.2	46.2
Broad money supply ( M2)	100	100	100	100	100	100	100	100	100	100

Source: International Financial Statistics (IFS), International Monetary Fund (IMF), and Central Statistical Organization (CSO) publications

Table 2: Ratio of Cash to M1 (in Percent)

Particulars	2005	2006	2007	2008	2009	2010	2011	2012
Thailand	40.04	39.84	35.91	35.56	35.30	35.93	32.73	32.36
Philippines	70.02	70.16	69.58	70.02	72.25	70.09	70.17	70.90
Singapore	20.86	20.54	19.05	17.17	15.92	14.41	13.41	13.20
Malaysia	24.27	23.71	21.45	22.08	21.62	21.25	20.72	20.72
Myanmar	91.68	91.54	91.06	91.54	88.63	85.78	82.54	82.75

Source: IFS and CSO publications, Bank of Thailand, Bangko Sentral ng Pilipinas

Table 3: Myanmar Monetary Data

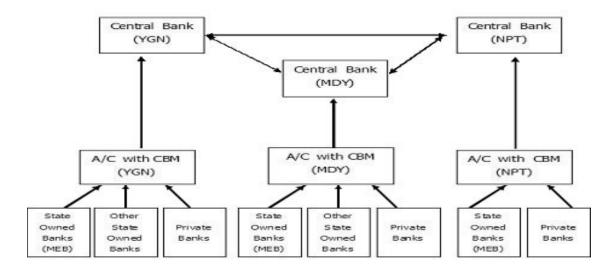
(Kyats in millions)

Particulars	2009 Mar.	2010 Mar.	2011 Mar.	2012 Mar.
<b>Total Deposits</b>	2167459	3159459	4858305	6921672
Of which: State banks	1199625	1744833	2269296	2666255
Private banks	967834	1414626	2589009	4255417
<b>Demand Deposits</b>	432705	701220	1105242	1159332
Of which: State banks	241434	429022	571113	570512
Private banks	191271	272198	534129	588820
Quasi-money	1734754	2458239	3753063	5762340
Of which: State banks	958191	1315811	1698183	2095743
Private banks	776563	1142428	2054880	3666597

Source: CSO Publications

Figure 1: Central Bank Clearing Houses and Data Transfer System

### Data Transfer



Source: Central Bank of Myanmar