PAYMENT SYSTEM OF MONGOLIA

General comment

The Mongolian Banking Law was passed on 20th of April, 1991. This law set standards for banking practices and commercial aspects of the banking industry. A two- tier banking system was established where central bank and commercial bank functions were separated. The Bank of Mongolia's (BOM) role to manage the interbank clearing and settlement services was set down in the Banking Law and the clearing and settlement services were launched in 1993.

In 1995 the banking "Law on Deposits, Loans and Banking Transactions" was passed which allowed Mongolian banks to start using non-cash based payment instruments such as payment orders and invoices, letters of credit, checks, bills of exchange and payments cards. The "Bills of Exchange Act", passed in 1995 further helped banks to offer a wider range of non-cash based services and helped the national stock exchange market grow.

In 1997, an electronic domestic interbank clearing and settlement network was introduced allowing for all commercial banks to multilaterally settle payments sent in batches amongst themselves through this network twice every business day. Regulations governing the rules and procedures for this network were established by the BOM /Mongolbank/ with the objective of strengthening the reliability and efficiency of the network's clearing and settlement arrangements. To allow for international payments, Mongolbank became an active participant of the international SWIFT network as result of which international payments have become more efficient and reliable.

In 2006 the Switch Clearing Center was established and the aforementioned domestic interbank clearing and settlement system underwent improvements related to the IT infrastructure, security in the system and reducing settlement risk. As a result of these improvements, participants of the network were able to send payments and manage and monitor liquidity in real time. To further strengthen the regulatory framework of this system BOM's Governor passed a resolution dated 19th of January, 2006, which approved the regulations for clearing and settlement of low-value interbank transactions and high-value interbank transactions separately. These changes represented a significant step towards strengthening the safety and efficiency of Mongolia's payments system.

In 2009, BOM launched its real time gross settlement system, Banksuljee. This system provides finality and irrevocability of transactions thereby reducing interbank settlement risk. Banksuljee is a more secure, reliable network not only for interbank transactions but also for exchanging files, reports and other financial information between the system's participants. Banksuljee is able to integrate other systems such as Security Settlement and Forex systems.

In 2009, Mongolbank undertook a work program to improve the legal framework related to its oversight of the payments and settlement system in order to enhance the reliability and efficiency of the payments and settlement system. BOM is now working with various government institutions on finalizing a complete set of law and regulations in this respect.

1. General Structure

1.1. Legal structure

The parties that are involved in the national clearing and settlement are: the BOM, commercial banks and the Treasury Department of the Ministry of Finance. The non bank financial institutions without direct access to the system are participating in payment systems through the commercial banks. The Banking system is regulated by the Central Bank Law, The Banking Law and other related laws such as Banking "Law on Deposits, Loans and Banking Transactions" and Bill of Exchange Act.

1.1.1. The Central Bank

The Central Bank Law passed on the 3rd of September 1996 (updated on the 28th of January, 2010) establishes Mongolbank's legal status and governs the BOM's activities on monetary policy, on banking supervision. The Central Bank Law also authorizes Mongolbank to conduct interbank clearing and settlement services.

1.1.2. The Private Sector

Commercial Banks

The Banking Law was passed on 3rd of September, 1996, and updated on 28th of January, 2010. The Banking Law outlines which activities are permitted or prohibited for banks and details the activities related to the foundation of a bank.

The Banking "Law on Deposits, Loans and Banking Transactions" was passed on 31st of October, 1995. This law governs the way in which a bank and its management can carry out its activities relating to deposits, clearing and settlement and lending.

As the end of 2010, there were 14 commercial banks operating in the territory of Mongolia (one state owned and 13 privately owned banks).

Non-Bank Financial Institutions (NBFIs)

The Non-Bank Financial Institutions' Law was passed on the 12th of December, 2002. The Law defines non-banking financial activities as commercial lending, financial leasing, payment guarantee, factoring, electronic payment settlement, money order, trustee service, foreign exchange transactions, investment in short –term financial instruments and consulting in investment finance. The provisions in Clauses 7.1.5-7.1.7, state that NBFIs are able to provide to legal entities various payment services defined in this law and participate indirectly in clearing and settlement systems through commercial banks.

On the 17th of November, 2005 a Financial Regulatory Commission Law was passed, establishing the Financial Regulatory Commission (FRC) as the entity responsible for the oversight of NBFI's operations.

At the end of 2010 there were 182 NBFIs operating in the state of Mongolia.

Credit Unions

The Law on Unions was passed on 8th of January, 1998. It was updated on the 12th of December, 2002 with a Section on Credit and Savings for Unions was added and the law was renamed as the Law on Credit Unions. Moreover, Clause 48-1-3 was added, stating that credit unions are able to offer credit and savings services only based on Special Permit issued by the FRC. Similar to the NBFIs, credit unions are also able to participate indirectly in clearing and settlement system through commercial banks.

At the end of 2010, there were 179 credit unions operating in the state of Mongolia.

Legal framework on Payment Instruments

Cheques and Promissory Notes

Use of cheque as a payment instrument is not practical in Mongolia. Only banks buy, sell and cash out foreign cheques. No law exists for cheques.

The Bill of Exchange Act was passed on 2nd of November, 1995. This law regulates relationships incurred by using bills of exchange by households and legal entities and identifies rules and obligations to be followed by each relevant party.

Payment Cards

The Central Bank Governor's resolution #440, dated 6th of August, 2009 approved a Card Clearing Regulation, which regulates issues related to the card clearing and settlement system, and the issuance and refusal of participants' licenses on issuing and acquiring payment cards. The Central Bank Law, The Citizens' Law, the Law on Deposits, Loans and Banking Transactions also apply.

1.1.3. Banking network and the Switch and Clearing Center (SCC)

The Switch and Clearing Center was established as part of the Financial Capacity Modernization Project MOG-3659 in 2006. This project was initiated by Mongolbank with funding from the World Bank.

This project resulted in the launch of two national payment systems - Clearing and Settlement system of low value payment as launched on 1 February, 2006 and Banksuljee (a Real Time Gross Settlement (RTGS) system for high value payments) was launched on the 29th of May, 2009. These two new systems allowed for minimal risk and maximum security for interbank payments as well as urgency in terms of speed, as both worked on a real time or online basis. The systems are regulated by Clearing and Settlement Regulation for Low-value Interbank Transactions and Clearing and Settlement Regulation for High-value Interbank Transactions, approved by Central Bank's Governors' resolutions dated 26th of May, 2009 and 12 of February, 2007, respectively.

1.2. The Central Bank's responsibilities

Based on the Central Bank Law passed on 20th of April, 1991 Mongolbank /BOM/ was formed. Mongolbank's head office is in the capital Ulaanbaatar. The Central Bank has also 17 branches located throughout the country and a representative office in United Kingdom of Great Britain and Northern Ireland.

The Mongolbank has the following responsibilities: issuing currencies into circulation, formulation and implementation of monetary policy by coordinating money supply in the economy, acting as the Government's fiscal intermediary, supervision of banking activities, organizing of interbank payments and settlements, holding and managing the State's reserves on foreign currencies. The Central Bank's Board of Directors is in charge of these tasks.

According to Article 20 of Central Bank Law, Mongolbank conduct the following activities to facilitate interbank settlements:

- 1. Arrange the clearing and settlement of interbank payments and make payments through each bank's current account with the Bank of Mongolia.
- 2. Open branches for settlement of interbank payments.
- 3. Issue regulations on settlement of interbank payments.

1.2.1. The Banknotes' Circulation

The Mongolbank is in charge of banknotes' issuance and circulation. The issuance of banknotes by parties other than the Central Bank are prohibited by law. The official currency of Mongolia is Tugrug. The banknote's designs are approved by the Mongolian Parliament (State Ikh Khural). Tugrug is a currency for all valid financial transactions on the territory of Mongolia. All other payment instruments which are used to substitute Tugrug, must be first approved by the Central Bank.

Mongolbank circulates currency through its 17 branches. The branches have a certain amount of currency in reserve to supply commercial banks in their vicinity. Only the Mongolbank headquarters conducts foreign exchange transactions.

1.2.2. Clearing and Settlement Services

The Mongolbank headquarters and its 17 branches provide commercial banks.

Mongolbank circulates not only currency through commercial banks, but also conducts other financial transactions related to Central bank bills, Government bonds, financing for repurchase agreements, and the provision of overnight loans and intraday credit. Mongolbank provides such services only to commercial banks. Individuals or other legal entities are able to get these financial services from commercial banks.

Mongolbank arranges interbank clearing and settlement via the SCC network and collects fees associated with it. However, the fees do not fully cover the operational costs of SCC. For example: the loss of SCC was 18 million Tugrugs in 2007, reached to 88 million in 2008, and 81

million Tugrugs in 2009. The SCC fee structure is a non-profit based method. Mongolbank is subsidizing the losses of the SCC.

1.2.3. Commercial Bank Oversight

Mongolbank oversees and supervises commercial banking activities. The following regulations apply:

- Licensing of the bank and its unit
- Regulation on imposing conservatorship on a bank
- Commercial Bank's operations, financial reporting, assessment and audit.
- Assets classification and provisioning
- Other regulations and instructions related to banking supervision

The Financial Regulatory Commission (FRC) is in charge of NBFI's, credit unions, insurance and brokerage companies. It also processes relevant regulations and conducts onsite audit.

1.2.4. Monetary Policy

The Central Bank is in charge of formulating and implementing the national monetary policy. Mongolbank prepares Monetary Policy Guidelines and presents it to the Parliament (Ikh Khural) on the 1st of October of each year. Based on these guidelines the Parliament approves monetary policy, foreign exchange reserve policy and other banking policies for the year ahead with a resolution. The Central Bank's performance is reviewed by the Parliament on a quarterly basis.

1.3. Financial institutions providing transaction services

There are three types of financial intermediaries offering financial transaction services in Mongolia's banking and financial sector: commercial banks; Single Treasury Fund of Ministry of Finance; and Securities Clearing Settlement and Central Depository House. These institutions differ greatly from each other by their service type and applied rules & regulations.

1.3.1. Commercial banks

Commercial banks are mainly engaged in accepting deposits, providing current accounts, disbursing loans, transactions and other services for their customers. As at the end of 2010, there were 14 commercial banks with their 1052 branches and units throughout the country.

Commercial banks' operations are inspected on-site and off-sight by the Mongolbank. On-site inspections are conducted at least once each year whereas off-site inspection is the monthly procedure of the Supervision Department within Mongolbank. Mongolbank's Financial Information Department, Monetary Policy and Research Department and Law Division occasionally carry out on-site inspections in partnership with relevant ministries and other government implementing agencies.

The State Ikh Khural (Parliament of Mongolia) guaranteed citizens' deposits placed in commercial banks with its "Law on Savings Guarantee", which was adopted on 25 November 2008. The law was amended on 6 March 2009, its Article 2.4 provided guarantee on balances of current accounts of legal entities in commercial banks which widen the number of customers receiving the guarantee. According to the law, all savings in commercial banks registered in Mongolia that have a licence for savings activity have been guaranteed by the state. The guarantee runs for four years.

In Mongolia, commercial banks are the key and direct performers of cash and non-cash payment systems serving as financial intermediaries of its clients including business entities, institutions and individuals.

Licensed commercial banks (by Mongolbank) operate the following transaction services in accordance with the Law on Banking, Chapter 2, Article 11:

- 1. Provide all types of transaction and settlement services for customers in compliance with contract made with clients;
- 2. Provide non-cash transactions within the client's current account balance in response to requests/orders made by clients. (Transactions made in response of court decisions, Mongolbanks' representative and/or in accordance with contract and payment documents-signed by the client stating the non-judicial foreclosure shall be considered as transactions made by clients order.);
- 3. Setting charge for transaction services;
- 4. Making inter-bank transactions through the account at Mongolbank;
- 5. Regulate payment transactions in compliance with legislation.

1.3.2. Other institutions that provide payment services

Single Treasury Fund of Ministry of Finance (STF)

The Single Treasury Fund runs the duty of government budget generation and expenditure in compliance with Budget Law, making transactions, reporting and financing the budget, its deficits and budgeted programs/projects with the least possible cost in conjunction with solvency of government agencies.

The Payment division of Single Treasury Fund, under its key duty of ensuring the government budget implementation, undertakes income and expenditure related transactions of government budget, recording and overseeing. Its activities include:

- 1. Performing transactions on timely and effective manner based on primary payment requests of state organizations;
- 2. Accurate and timely record keeping; and
- 3. Interbank transactions.

Securities Clearing Settlement and Central Depository House

In terms of the stock market, the key institution responsible for securities related transaction is the state-owned Securities Clearing Settlement and Central Depository House.

1.3.3. Other relevant organisations

National Payment Council (NPC)

Driven by the goal of developing the national payment systems through aggregating the interests of the payment systems stakeholders and promoting their cooperation, the Governor of Mongolbank, the Minister of Finance and the Chairman of FRC issued a collective order on 24 April 2008 establishing the National Payment Council (NPC). The NPC is made up of representatives from Mongolbank, the commercial banks, the Mongolian Banks Association, the Single Treasury Fund of Ministry of Finance, the Securities Clearing Settlement and Central Depository House, the Stock Exchange, the FRC and the Information Technology and Communication Agency.

The NPC develops policy and strategy documents relating to the development of the national payments system and its components. The NPC approved the "Mongolian Payment Systems Development Strategy for 2009-2014" which outlines a strategy for ensuring safe and efficient payment and settlement operations in the overall financial sector.

Mongolian Banks Association (MBA)

MBA is an independent, non-profit, non-government organization established by banking and non-banking financial institutions, officially licensed to operate within the territory of Mongolia, with the purpose of serving its members.

MBA aims to protect the common legal interest and rights of its members. MBA also coordinates members' responses on policy issues facing the banking and financial industry sectors.

Financial Regulatory Committee (FRC)

As a government regulatory institution, FRC is assigned to develop unified policy for ensuring financial market stability, coordinating activities of NBFIs, insurance, credit and savings cooperatives, securities market as stated by law.

Non-bank Financial Institution (NBFI)

NBFIs perform under the licensing entitlements from the FRC. NBFIs may offer non-banking financial services defined in the "Non-Bank Financial Institutions Law".

By the end of 2009, a total of 172 NBFIs were licensed by FRC in compliance with Law on non-bank financial operations.

Securities Clearing Settlement and Central Depository House (SCSCDH)

With the inception of Mongolian Stock Exchange in 1991, the Clearing and Depository Unit was established as one of the departments of the Mongolian Stock Exchange (MSE). In October 2003 it was reorganized into the Securities Clearing Settlement and Central Depository House as a state owned legal entity. The main activities of SCSCDH are to settle a transaction based on contract, to record transferring of owner rights to others and to deposit stocks. Mongolbank and SCSCDH have agreed to connect the SCSCDH into the Banksuljee's (RTGS) system, and this integration commenced in 2010 and is expected to be completed by the end of 2011.

2. Non-financial institutions payment instruments

2.1. Cash

Cash payment is the key transaction form in Mongolia. Salaries, pensions and welfare allowances are disbursed in cash with the exception of some larger entities directly transfer staff salaries to staff bank accounts.

Official monetary unit in Mongolia is Tugrug (MNT) used since 1925.

Mongolbank issued 1, 5, 10, 20, 50, 100, 500, 1000, 5000 and 10000 MNT bank notes in 1993 and a 20 000 MNT note in 2006, which are widely in use. 50, 100 and 10000 MNT notes are used in large quantity in transactionsⁱ. In addition, Mongolbank also issued 20, 50, 100, 200 and 500 coins in circulation.

Total cash in transactions totals 371.8 billion MNT as the end of 2009.

Mongolbank is looking to change this usage of cash to more advanced electronic methods to provide greater efficiency and utilization. Mongolbank has determined one of its core focuses in payment systems to be the development of non-cash payment instruments and a shift to a cashless society in the near future.

2.2. Non cash payment instruments and transactions

Mongolian commercial banks offer wide variety of payment services including non cash transaction the most of which is credit transaction.

Credit transaction

By the end of 2009, interbank non cash transactions (both debit and credit) totalled 2.6 million transactions of 7.9 trillion MNTⁱⁱ.

Clients choose either electronic or paper based form for their payment orders. Banks use electronic forms of payment orders for interbank transactions where the electronic payment order is initiated by the payer's bank and sent to the payee's bank.

Debit transaction

Interbank debit transactions take place in smaller amounts relative to interbank credit transactions. In the event that the client's and receiver's bank accounts are positioned in the same bank, that particular bank allows debit transactions for apartment utility payments, landline phone fees, cell phone payments and internet fees made through debit transactions.

Card transaction

One of larger commercial banks, Golomt Bank, received membership to "Master card international" in the second quarter of 1999. This was the pioneering non-cash transaction service in Mongolia. Currently, 9 banks offer various card services of which Khaan Bank, Trade and Development Bank and Golomt Bank operate their own card payment network while the remaining banks serve as the subsidiary members of the main network for card transactions.

The number of card users increased from 241,000 at the end of 2005 to 1.9 million as of the end of 2009, a seven fold increase. Active usersⁱⁱⁱ reached 476,200 as at the end of 2009. End of 2009 demonstrated a total of 20.2 transactions worth 1.4 trillion MNT were made through the cards^{iv}. Currently, chip based card and magnetic stripe cards are extensively used in Mongolia non-cash for transactions.

Debit and Credit cards

Khaan Bank, Trade and Development Bank and Golomt Banks issue international debit and credit cards (Visa, Mastercard, China Union Pay) and act as acquirers for payments received through international cards including Visa, Mastercard, China Union Pay, American Express and JCB.

At the end of 2009, debit card transactions totalled 739.8 billion MNT, representing 9.9 million transactions while credit card transactions totalled 64.6 billion MNT, representing 0.7 million transactions^v.

Prepaid card (e- money)

Pre-paid cards enable the card users to place funds for specific use onto the card (the value may be stored on the card or separate to the card in a virtual account. In Mongolia, pre-paid cards are used in limited scope mainly in gift card form offered by the service providers. Mobile money service was introduced with the name of "Most money" in 2009 by "Mobifinance" NBFI. Customers of "Mobifinance" NBFI are able to use their mobile phones to create a mobile wallet where funds are stored. The funds can be accessed using the mobile phone. The funds can be used to reload airtime on the prepaid mobile phone, or to send funds to other mobile phone users within the same system, or to purchase products from the mobile network operator and to purchase goods and services from a limited number of merchants. The service is operated by MobiCom, a cell phone network operator.

ATM, card imprinters, POS and POB terminals

An ATM service was first introduced in Mongolia in 2001. As at the end of 2009 there were a total of 5,649^{vi} ATMs, card imprinters (a hand operated machine for printing the details of a customer's credit card on a sales voucher), POS and POB terminals in use throughout Mongolia.

At the end of 2009 there were 292 ATMs. The volume of transactions for ATMs in 2009 was 15.3 million while the value of transactions was 874.9 billion MNT. Conversely, imprinter numbers

decreased to^{vii} 417 at the end of 2009 compared to 470 in 2008^{viii}. Even though 417 imprinters are still remained to exist in market, no transaction was made through imprinters in 2009.

There were 3,754 POS terminals at the end of 2009, and 1,186 POB terminals. By that time, 1.7 million transactions worth 100.3 billion MNT was made through POS terminal while the number of POB terminal transactions reached 3.2 million representing 453.6 billion MNT in value^{ix}. The numbers of businesses accepting cards are 4,078 at the end of 2009^x.

2.2.1. Other payment instruments

As stated in NPC approved policy document in 2009, "Strategy for developing Mongolia's transactions and payment systems for 2009-2014" and under its strategic objective "Developing non cash payment instruments and new systems for payment", the activities aim at enabling access to financial services for the citizens of remote and inaccessible areas regardless their geographical location, income level and time.

Money remittance

Citizens currently have access to remittance services for internal cash remittance through three banks' networks.

Remittances of cash to foreign countries are extensively used in Mongolia. "Western Union" started its service in Mongolia in 2000 at four commercial banks in Mongolia, while "MoneyGram" started in 2001 with six commercial banks.

Bill of exchange

Two types of bill of exchange are used in Mongolia; simple and convertible. For the entire banking sector in 2009, 7 bills of exchange were received worth 6.7 billion MNT in 2009, 13 simple bills of exchanges worth 61.2 billion MNT and one convertible bill of exchange worth 7.9 billion MNT were used for payment.

Cheque

Mongolian banks offer buying, selling and cashing out cheques issued by internationally renowned banks and financial institutions; customers for this type of service are usually foreigners. In 2009, 8,858 international cheques were cashed out representing 6.1 billion MNT, while 684 domestic cheques were cashed out internationally for currency equivalent of 1.6 billion MNT.

2.2.2. Branchless banking

Mobile banking

This type of service is currently at start-up level. In order to provide access to banking services of the citizens living in remote areas, banks introduce mobile banking services. The service

enables the clients to access their bank account using their mobile phone to make transactions. Aggregate commercial banks statistics for their mobile banking service indicate they attracted 41.4 thousand customers in 2009, representing 351.2 transactions for 570.5 million MNT.

Message (SMS) banking allows customers to send an SMS to their bank in order to access their accounts for transactions. In the past few years, the message banking service has greatly expanded with a total of 9 commercial banks and a NBFI providing message banking to citizens. The largest network of message banking, AMAR, is operated by XacBank. Users of any cell phone operator may pay for goods and services using their cell phone as well as make deposits and withdrawals without going to the bank branch and through the authorized agents outside of office hours

Internet banking

Internet banking is a service that enables customers to make transactions from his/her account through the internet. The following services are available from internet banking: make inquiry related to transaction, bill, account detail information, information of loan accounts and check the expiry date of term deposit accounts and interest rates, make intra, interbank and international transfers, loan payment, check and print bank statements, exchange rate and extending the term of your savings account.

Internet banking services were introduced by banks in 2002 and the number of service providers reached 9 commercial banks by the end of 2009. As of 2009, internet bank users numbered 3,566, representing 134,100 transactions and 3.3 billion MNT in value.

3. Interbank transactions and payment systems

3.1. General overview

Since Mongolia shifted to a two-tier banking system in 1991, interbank transactions were made through interbank payment systems operated by Mongolbank. Since 2006 all transactions are classified by their value: large value transactions are made through the Banksuljee system, while low value transactions are made through the Financial Intermediary Network (FIN) operated by the Mongolbank's Switch Clearing Centre. Settlement results are closed at Banksuljee system.

3.1.1. Banksuljee (RTGS) system

Banksuljee system transmits payment orders sent by the banks on a real time basis to receiver banks, reports status real time enabling the commercial banks to control transaction related risks, manage their assets properly and link all systems of transactions (securities, currency trading and small amount transactions). The system is a real time gross settlement system for interbank payment and settlement.

Real time gross settlement system allows the data to be transmitted without waiting. One-on-one basis transaction means each transaction is made independently and separately as the final transaction

Operational rules and regulations

Operation of Banksuljee system is regulated by "Clearing and Settlement Regulation for High value Interbank Transactions". Participation in the system is governed by contractual obligations defined in "Contract on high value interbank transactions" as the appendix of the regulation.

System stakeholders

The participants in Banksuljee include: Mongolbank, the central offices of 14 commercial banks and the Single Treasury Fund of Ministry of Finance. "Regulations on large value inter-bank transactions", issued by the Mongolbank states the performance of client banks, access to system, conditions for performance, limitations on access and prohibitions.

System function

Banksuljee system functions:

a/ processing the electronic transactions for the following tasks:

- Implementation of monetary policy of Mongolbank (credit, deposit, currency trading and other payment transactions),
- High value transactions of participants and Mongolbank and transactions between the government and banks,
- Transaction relevant to mandatory reserve assets of commercial banks.

b/ developing electronic notice to provide the following data and info:

- Balance of participants current accounts,
- Low value inter-bank transaction result.

RTGS system procedure

High value transactions include interbank MNT transactions, credits and deposits to sustain the mandatory deposits, repo, reverse repo, overnight financing, cash cheque, stocks and letters of credit related transactions.

In the case where the account balance in the payer's bank is sufficient, then the electronic transactions report is included in the accounts of receiver's bank as real time. In case where the account balance is not sufficient, then the electronic payment is held off shifting to restrained and wait mode. Banks are able to prioritize processed payments to regulate the sequence of payments. Sequenced payments are made in turns; for the same priority/rank transactions are made using first-in, first-out (FIFO) principles. In the case of the commercial banks mandatory deposit at Mongolbank reaching sub level amounts, the Mongolbank requests to supplement the insufficient amount of deposit.

RTGS system operational schedule

The Banksuljee system operates on weekdays between 9 am-6 pm except for public holidays.

RTGS system risk management

In order to prevent and manage transactions related risks, Mongolbank undertakes the following measures:

- Perform the transactions of RTGS system within the account balance,
- In the event that commercial banks' account balance is not sufficient to perform the transactions, take necessary actions and use mechanisms for proper solution to the failure.
- Use the back-up server for transactions in the event of a failure in the RTGS system,
- Comply with the emergency plan and shift operations to back up servers when necessary.

RTGS system pricing and charging policy

Mongolbank does not charge commercial banks to open accounts at Banksuljee system, but it does charge 150 MNT for every debit transaction in compliance with Article 1.2 of "Service charges condition of Mongolbank".

High value transactions made through the system takes by value 97.5% and by volume 15.9% of total of interbank transactions as the end of 2009. The rest of interbank transactions are low value interbank payments.

3.1.2. Switch clearing center (SCC)

SCC has the responsibility to organize and manage the interbank settlement in low value transactions through the Financial Intermediary Network (FIN) which is connected by cable, reserved line and physical cable. This network covers 14 commercial banks, the Treasury fund of the Ministry of Finance and Mongolbank. SCC provides the technical support and back-up site for its members.

Main center and back-up site of the SCC are providing continuously and reliable interbank settlement. Head computer of main center is able to transfer data to head computer of back-up site in the emergency case.

The FIN provides the following services to banks and financial institutions:

- Final settlement transfer of interbank low value transactions,
- Network connections to the SCC system
- Data transfer of an online security system of Mongolbank,
- Data transfer of credit information (from a commercial bank to Mongolbank)

Operational guidelines and regulations of low value interbank transaction system / LVP system/

Low value payment system /LVP system/ operates according to "Clearing and Settlement Regulation of Low Value Interbank Transaction" and participation in the system is governed by contract between the system participants.

System participants

Participants of the LPV system are Mongolbank, 14 commercial banks and the Treasury Fund of the Ministry of Finance.

LVP system executes interbank low value payment and settlements in accordance with the international financial data standard ISO8583 and other requirements from Mongolbank.

Transactions of the LVP system

The SCC executes the following activities in accordance with "Clearing and Settlement Regulation of Low Value Interbank Transaction" approved by the Resolution # 91, dated on February 12, 2006, of the Governor of the Bank of Mongolia:

- Receive and send electronic data on interbank low value transactions from the participants through LVP system between 9:00-16:30 on working days,
- Interbank low value transaction is completed, when electronic data was sent to relevant recipient,
- Final settlement's data of the interbank low value transactions will be sent by SCC at the end of the day.

Time table of the LVP system

LVP system operates from Monday to Friday between 9:00 – 17:00, excluding public holidays,

Risk management of LVP system

Mongolbank is implementing the following procedures to prevent and manage settlements risks:

- In case of unexpected failure of FIN or computer and software error, the interbank transactions shall be executed via back-up site server and software,
- Follow emergency plan,
- Transfer to reserve centers when required

Pricing policy of the LVP system

In accordance with the Provision #1.2, "Service Providing General Conditions of the Bank of Mongolia", each interbank low value transaction is charged at 200 MNT.

At end 2009, transactions made via this system accounted for 2.5 percent of the total value of interbank transactions and 84.1 percent of the total number of the transactions.

3.1.3. Card network

On January 16, 2010 the Interbank Payment Card Centralized Network (IPCCN), which aims to create a non-cash payment dominated society and to develop payment card services in Mongolia, announced its official opening by SCC of Mongolbank and KHAAN Bank and Trade & Development Bank (main members) and Capital Bank and Ulaanbaatar City Bank (associate member on December 2010) joined the network. Later, Golomt bank and Savings bank are joined the network in October and December 2010 respectively.

Operation guidelines and regulations

The main regulation for the IPCCN participants is "The Payment Card Regulation". SCC has also established "Partnership Agreements" with the KHAAN bank, Trade & Development Bank, and Golomt bank. The following regulations and guidelines were approved as Appendixes to the "Partnership Agreement' and are to be adhered to by the participants:

- "Guidelines for Formulation on Interbank Payment Card Settlements",
- "Guidelines on Distribution of Cards seized by ATMs",
- "Guidelines on Interbank Payment Card Transaction Related Conflict Management",
- "Guidelines on Continuous and Regular Operation of Interbank Payment Card Network, and Troubleshooting of Network Problems and Damages".

System participants

IPCCN covers Mongolbank, 6 commercial banks as direct participants and 3 banks as indirect participants. Interbank card transactions shall be executed through the FIN which is operated by SCC in accordance with the international financial data standard ISO8583" and other regulations and requirements approved by the Bank of Mongolia.

Settlement procedures of the IPCCN

IPCCN's transactions are executed according to the following principles as agreed in the "Partnership Agreement":

- Participant parties shall process the payment card settlements payment via "FIN" by real time schedule of 24 hours (24/7) in MNT only,
- End of the day settlement, the report from card issuing and card receiving banks shall be executed in MNT only and on multilateral procedure.

Time schedule of the IPCCN

IPCCN operates according to 24 hours schedule (24/7).

Risk management of the IPCCN

"The Guidelines on Continuous and Regular Operation of Interbank Payment Card Network, and Troubleshooting of Network Problems and Damages" shall be followed in order to ensure network continuity.

Pricing policy of the IPCCN

According to the "Partnership agreement" established between the IPCCN's participants, the transaction fees are fixed as below:

Card receiver bank shall charge following fees from the card holders:

- 500 MNT (five hundred) from ATM based Interbank payment card cash withdrawal;
- 500 MNT (five hundred) from cash withdrawal transaction of up to 800,000 MNT (eight hundred thousand) on POB terminal;
- 100 (one hundred) MNT from balance checking transaction on ATM and POB terminal

It was agreed in the "Partnership agreement" that SCC will not charge any fee from card issuing and card receiving organizations until November 2011 with an aim to support the operations of the centralized network. Further, since November 2011 the below listed transactions fees shall be charged and the banks, card holders and card payment banks agreed not to make changes in current transaction fees as below:

• 5 (five) MNT from each balance checking transaction on ATM and POB terminal,

- 20 (twenty) MNT from cash withdrawal from ATM and POB terminal, from card receiving bank,
- 20 (twenty) MNT from each transaction amounted above 3000 (three thousand) MNT on POS terminal,
- 1 (one) MNT from each transaction amounted lower than 3000 (three thousand) MNT, from card issuing and card receiving banks.

3.1.4. Cross-border foreign currency transfer system

Cross-border foreign currencies transfers are executed via customer accounts of domestic and foreign authorized banks. In Mongolia 14 banks have been issued with special permission to process international transfers. These banks use payment instruments such as letter of credit, transfer, guarantee, invoice in their foreign transactions. Cross-border transactions of foreign currencies shall be regulated by settlement agreement by the Bank of Mongolia and Central banks of other countries, regulations of the Bank of Mongolia, and agreements established between authorized banks and customer banks.

Cross-border transfers in foreign currencies shall be executed according to the payment request by account holder and deducting from the customer's account.

The banks transfer payment requests through SWIFT network. Mongolia joined the SWIFT network in 1997 and commercial banks execute foreign transactions using this network. By early 2009 Mongol Bank received 7,923 payment messages through the SWIFT network and sent 1,964 messages and executed transaction of 10.0 million USD on average per day.

4. Security payments

4.1. Securities on stock exchange

In Mongolia, the Government, Mongolbank, banks, financial organizations, companies and economic entities issue securities, bonds and trade them in interbank market and stock exchange center.

Main products in the securities market are shares and bonds. Currently book-entry securities of the Government and companies are trading in the Mongolian Stock Exchange Center.

4.1.1. Trade of the Government Bond and Central bank bills

Government Bond

The Government of Mongolia issue bonds in opening and closing form. If issues open form, short and mid-term bonds will be sold to the commercial banks and private companies. In 2004-2007 Government Bond were actively traded in the open market.

The Ministry of Finance of Mongolia described the Government bond's issue as bringing the following benefits to the market.

- The Government can raise the fund from the market within short time,
- Establish a beneficial environment to develop securities market,
- Establish stable rate for a good condition to develop banking and financial sector,
- Important motivation to develop secondary market and increase the money circulation,
- The Dependence of the Government debt and foreign investment shall decrease, and will improve the financial freedom,
- Establish stable economic situation, to develop relevant financial infrastructure and competitiveness, will improve financial intermediary.

The Government of Mongolia issued bonds to the open market in amount 44.2 billion MNT in 2004, 720.6 billion MNT in 2009.

Central bank bills

Central bank bills (CB bills) are the main instruments used in implementing monetary policy set forth by the Mongolbank. Mongolbank trades bills with different tenor, interest rate, trading conditions and means in the interbank market of Mongolia.

1-week central bank bill

A bill with 1-week tenor is considered the main instrument of monetary policy of the central bank and plays key role in governing bank reserves. The interest rate of such security is also the policy rate of the central bank and acts as a discount rate in the interbank market. The flat rated, limited amount instrument was first introduced in July 2007 and was traded on every Wednesday

in the interbank market of Mongolia. Commercial banks were particularly interested in the instrument as it offered the banks a good opportunity to place its idle reserves in short-term, interest rate backed assets. The banks observed notable changes in the way their reserves were managed.

The central bank initiated auction trading on its 1 week bill with an interest rate intervals in May 2010 in order to make it more market oriented and uphold the right balance between MNT and USD market yields. In this process, the floor and ceiling rates should be in a range between +/-2 unit deviation from the policy rate. This average rate shall provide interbank market of Mongolia a favorable environment to function in the mid-term.

12 week interbank security

In order to create adequate yield curve in the financial markets, the central bank forges the starting point and the market shall determine its mid to long term interest rates itself. Therefore, Bank of Mongolia intervenes in short term market rate through its 1-week bill, whereas interest rates for longer than 1 week are determined in the interbank market. Mid to long term interest rates are speculated on the expected trading volume, risk and reserve of central bank bills. Bank of Mongolia introduced this limited amount, market oriented bill in august 2007 and relatively longer term asset backed securities were made available in the domestic market with its introduction. As the central bank regularly trades this bill once in every two weeks, domestic money market participants has access to risk free 2-12 week (14-84 days) financing.

According to the Resolution #311, dated 2, July, 2007 of the Governor Bank of Mongolia Monetary Policy Department (MPD) is responsible to organize the trading procedure of the discounted Central bank bills to commercial banks. By this resolution approved the trade charter of the central banks bills. Trading procedures performed book-entry principles. Commercial banks proposals for the auction of the bills are automatically booked and distribution of the bills depends on book time and interest rates, which are suggested form banks.

The staff of the Monetary policy division are formulating following data in the book-entry system related to bills: trade number, date, time, maturity date, discounted price, total amount /total number of bills/. Therefore, they have to check the online proposals of the banks and send the decision to the Payment and Settlement department. An Accountant of this department will approve the final transaction accordance with the decision related bank's account, which is booked at the Central bank's balance.

4.1.2. Bills of the private companies

Currently in Mongolia only one state owned company "Mongolian Securities Clearing Settlement & Central Depository House Co Ltd" (SCSCDH) is providing bills trade settlement between domestic companies.

At theend of 2009 the SCSCDH placed dividends in the amount 610.0 million MNT of 101.4 thousand customers of 38 joint stock companies /JSC/. It is working under the partnership

agreement with 44 broker companies, which are members of the Mongolia stock exchange and 60 JSC.

Main activities of the company

Main procedures of the company are divided into 3 components:

- 1. Describe the payment amount and settlement based on approved deal of the authorized organization of the SCSCDH.
- 2. Receive the broker, dealer's supporting document and book of customer's transactions of the central depository.
- 3. Settlement fees will be charged.

End of 2009, 1098 customers placed deposits in amount 24.3 billion MNT through 3,308 transactions at central depository organization, were credit transactions in amount 23.4 billion MNT of 4,192 customers, debit transactions in amount 47.7 billion MNT of 5,290 customers.

If compare debit, credit transactions data with last year's date, debit transactions decreased by 71.8 %, and credit transactions decreased by 73 %, customers amount 58.6 %. This result shows customer's initiatives have decreased in the securities market.

End of 2009 SCSCDH has booked 2.3 billion bonds of the private companies, 170.0 thousand Government bond, 617.9 thousand bills of 662 domestic companies, which have an account at central depository, and 443.3 thousand citizens of Mongolia, 69 foreign companies and individuals are hold an account at depository.

4.2. Trade method

4.2.1. Government Bond and Central bank bills

If the Government issues bonds in the open form, it will be settled by SCSCDH. Central bank bills trade will be settled by the following procedures:

- Based on the decision of the Central banks staff shall send "trade notice" to banks through interbank electronic trade system,
- MPD has the responsibility to access trade notice to the interbank system before 9.30 a.m at trade day,
- Commercial banks shall send the purchase proposals at the announced rate through interbank electronic trade system to MPD between 9.30-11.00 a.m at trade day,
- Distribution of the Central bank's bills will be based on the coherence of proposals. MPD will send the last decision at 12.00 o'clock through interbank electronic trade system to the Settlement and Accounting department, and transaction will be done.

Currently, the interest rate of a bill with 1-week tenor is announced in the interbank market in unlimited amount, and 12 week interbank security were traded in principle to compare interest rate's proposals.

4.2.2. Securities of the private companies.

In 2007, SCSCDH's information became separate from the data of the Mongolian Stock exchange and established new "E-clearing" system in accordance with international standards. This system is based on two main systems, first sub system of the bill settlement, second sub system of recording depository and proprietary.

These sub systems are centralized program software and based on information basis. They provide the following services: data formulation, account information of the customers by internet, securities settlement using internet banking service.

4.3. Payment settlement

4.3.1. Government Bond and Central bank bills

Government Bond and Central bank bills are recorded in the book-entry system. Settlement of Securities of all commercial banks are performed through accounts, which is booked in the balance of the Bank of Mongolia.

The procedure of SCC is based on real time settlement and all transactions related to bond and bills are transmitted quickly and finally.

4.3.2. Securities of the private companies

Most bonds and securities of the private companies registered on SCSCDH are in book-entry form. SCSCDH shall settle all securities trades and send settlement documents as paper form to the commercial banks as third partner. This procedure may bring payment and settlement risks. In the future, the Bank of Mongolia will co-operate with SCSCDH through electronic network and all securities settlements of the companies will be performed by the SCC.

PAYMENT POLICY AND REGULATION DIVISION THE BANK OF MONGOLIA (THE CENTRAL BANK)

i Excerpts from comments by an economist of Monetary Policy and Research Department, BoM.

ii Source: "Survey on inter-bank non cash transactions" Page 3, Table 3. Value and volume data for debit and credit transactions is only available in aggregate.

iii Active users are considered those use their cards at least five times a month.

iv Source: "Survey on payment card needs" Page 8, Table 6

vSource: "Survey on payment card needs" Page 8, Table 7

vi Source: http://www.mongolbank.mn/c/document_library/get_file?uuid=278d2d40

vii Mechanical devise used for approving card transactions

viii Source: http://www.mongolbank.mn/c/document_library/get_file?uuid=278d2d40

ix Source: http://www.mongolbank.mn/c/document-library/get-file?uuid=278d2d40

x Source: http://www.mongolbank.mn/c/document-library/get-file?uuid=278d2d40