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МОНГОЛЫН ЭДИЙН ЗАСАГ: ИХЭР ХЯМРАЛ

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Abstract

In this paper, causes and effects of Mongolian economic and financial crisis is analyzed. Expansions in the real sector and the financial sector, along with foreign factors, led to soaring inflation and inflation stabilization policy of the Bank of Mongolia popped up a bubble in the financial sector, creating liquidity crunch, followed by credit crunch. This policy may have taken the economy out of the crises with modest cost, but when combined with the balance-of-payments crisis caused by non-credible nature of the Bank of Mongolia's policy and the global financial crisis, domestic economy took a double blow. Policy measures of Mongolia under conditions of IMF reached its goal in the short-term, so we advise Mongolia to implement policy to recover the real economy.

- **Introduction**

Mongolia had a controlled economy in most of the 20th century before it began the transition to the market economy in 1990. Transition was costly, as Mongolia lost 10 years of growth between 1990 and 2000. In the first half of 1990s output declined, inflation soared, and unemployment increased, while in the second half, major banking crisis occurred. These crises were idiosyncratic, and Mongolia was not affected by Asian crisis and Russian crisis in late 1990s because Mongolia was not integrated into international financial markets.

Industry and services sectors started growing gradually by late 1990s. Agricultural sector, which comprises about 20 percent of the GDP, took a hard blow during harsh winter and summer drought in 2000-2002, but started growing afterwards. Financial intermediation deepened as credibility on banking sector increases and economy grows. Economic growth was further fueled by boom in mining sector caused by high commodity prices, namely copper and gold, which are main export products of Mongolia, starting 2004 (Figure 1, Panel a). High commodity prices contributed to increase in export revenues, followed by increase in imports, increase in fiscal revenues, and surge in net foreign reserves. Mongolia started to implement expansionary fiscal policy and monetary policy during this period.

From second half of 2007, inflation started to soar. This was mainly due to expansionary fiscal and monetary policy on the demand side, and due to high commodity prices, notably oil and food, on the supply side. From second quarter of 2008, Bank of Mongolia (The Central bank) implemented tight monetary policy and decreased growth in money supply. This measure led to liquidity crunch and credit crunch. Also, this policy caused imports boom, possibly due to non-credible nature of the policy.

The global financial crisis, which started in sub-prime market of the United States in July 2007, started to spill over to emerging countries through financial and trade channels. This resulted in decrease in commodity prices, and as price of copper goes down sharply in international markets, Mongolia took hard blow in export revenues in the second half of 2008, and when coupled with imports boom, this led to huge trade deficits. Bank of Mongolia used about 40 percent of its reserves of over 1 billion USD to defend tugrik (Mongolian currency) and kept tugrik relatively stable until the end of 2008, but starting second half of December 2008, tugrik started to depreciate and it went on to depreciate 33 percent in 5 months from its peak in October 2008 to March 2009.

Depreciation of tugrik led to deterioration in the financial condition of domestic borrowers who borrowed in foreign currency, which increased credit risk of domestic banks, thus further deepening banking problems. As a result of twin crises, domestic output started declining sharply beginning 1st quarter of 2009, and Mongolia need to take immediate measures to prevent from full-fledged economic crisis.

The rest of the paper proceeds as follows: In Section II, we look closer into the cause and effects of banking sector problems. Then in Section III, we discuss balance-of-payments crisis, followed by policy analysis and recommendations in Section IV. Section V concludes.

- **Banking Problems**

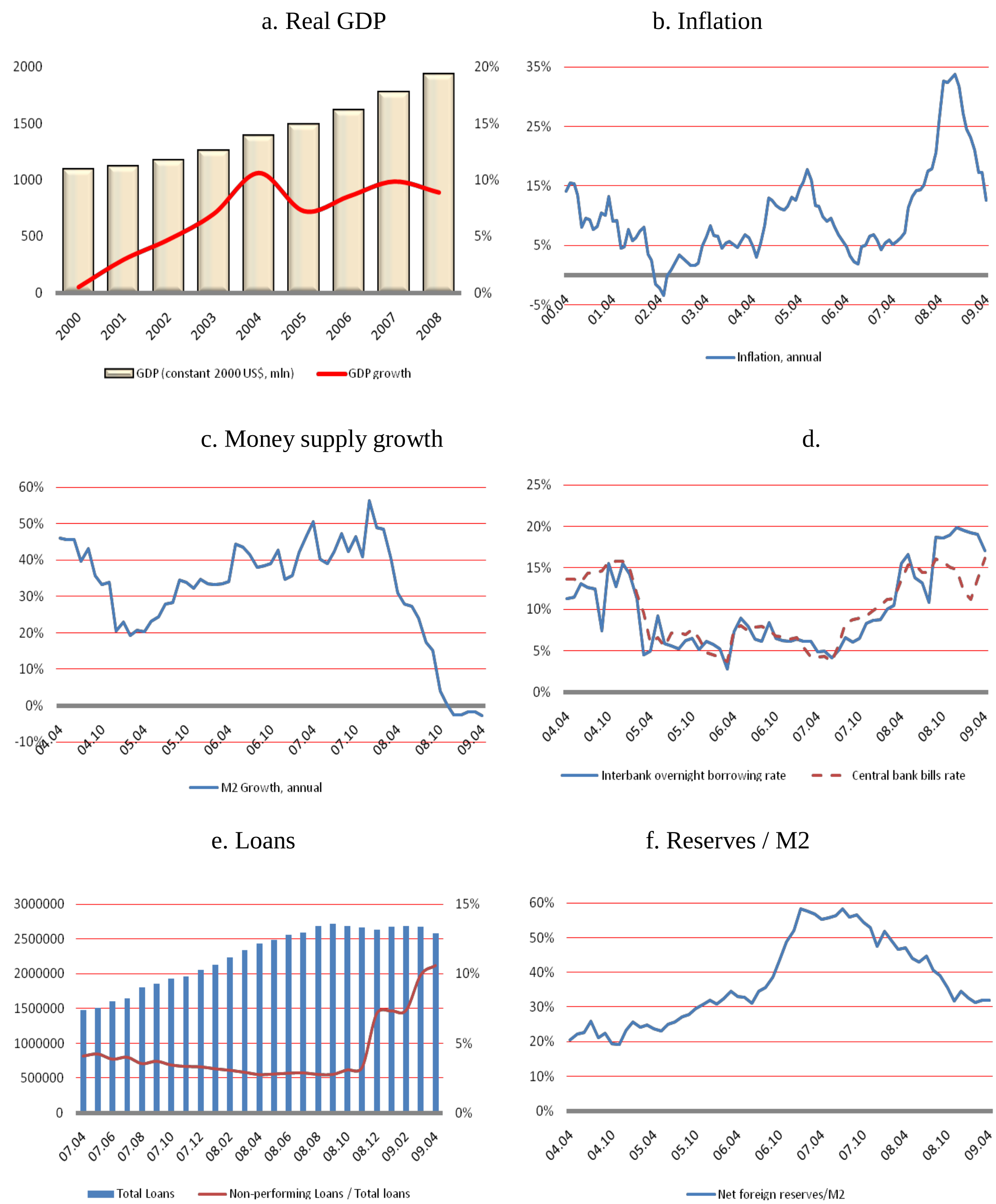
Surge in commodity prices from 2004 led to high fiscal revenues, as well as increase in international reserves. Significant part of fiscal revenues is spent for increasing consumption, for example, as a form of increase in wage of public sector employees and increased spending for social care. Also, monetary expansion was huge, where money supply was growing 40 percent annually on average from 2005 to beginning of 2008. These expansionary policies led to an increase in domestic demand. On the other hand, increase in commodity prices led to an increase in import prices, especially oil[1] and food. Besides these developments, housing sector exploded in recent years. Growth in private income and development of housing loans market caused asset prices boom.

From third quarter of 2007, inflation started to increase (Figure 1, Panel b) and peaked at 33.7 percent annually in August 2008. Bank of Mongolia started implementing tight monetary policy from second quarter of 2008, and in August 2008 it further tightened monetary policy. As a result of tight monetary policy, annual growth of M2 money supply decreased from an average of 40 percent to an average of 15 percent for the rest of 2008 (Figure 1, Panel c). This measure helped bring the inflation down, which by May 2009 inflation declined to 8.0 percent. But tight monetary policy revealed another problem, which banking sector was overheated, and it became eminent that it has to cool down.

Following tight monetary policy, liquidity became scarce among banks. It can be seen from interbank market rates: interbank overnight borrowing rate, which is price of liquidity in the interbank market, was roughly equal to the central bank bills rate for previous four years, but became higher starting September 2008 (Figure 1, Panel d).

[1] By 2008, imports of petrol and diesel comprises 23.0 percent of total imports

Figure 1. Banking Problems



To prevent form bank run and to increase liquidity in banks, Parliament approved the law to make a blanket guarantee on banks' deposits in November 2008, and offered to place

Government funds in banks under certain conditions, but only two banks used the opportunity so far. This is maybe because of tight conditions of placing funds at a bank, or banks avoided form sending the negative signal to the market by using Government funds. On top of that, fifth largest bank of Mongolia came on the verge of bankruptcy, and Bank of Mongolia took control of the bank. Although this problem was specific to that bank, public perceived it as banking sector is in problem.

Following liquidity crunch, banks became reluctant to lend and credit growth slowed down (Figure 1, Panel e). This attributed to output collapse in the 1st quarter of 2009.

- **Balance-of-Payments Crisis**

Starting May 2008, import growth accelerated (Figure 2, Panel a) and imports stayed at high level until the end of 2008. It could have been due to expectation of tugrik depreciation, which will result in increase of tugrik-denominated price of imports, but since such expectation should have stronger impact on the exchange rate, such scenario is unlikely. This leads to the conclusion that surge in imports was caused by domestic factors.

Increase in imports is consistent with the consumption boom in the non-credible or temporary policy models[2]. Implication of the model is: inflation stabilization policy of the Bank of Mongolia did not receive enough credibility among the public, and public perceived that Bank of Mongolia will implement this policy for temporary period only and will abandon afterwards, which will increase inflation in later period, making consumption more expensive, and will increase nominal interest rates, thus making savings more attractive, which both lead to increase in consumption today. This phenomenon, so called consumption boom, is consistent with the increase in imports, since significant part of consumption in Mongolia comes from imports.

Asian crisis and Russian crisis of late 1990s did not affect Mongolian economy, mainly because Mongolia was not integrated into international financial markets. When subprime crisis started in advanced countries and continued to become full-fledged financial crisis, general expectation was that it will not affect Mongolia because Mongolia was still not integrated into international financial markets and capital inflow was not huge. But crisis hit Mongolia through another channel.

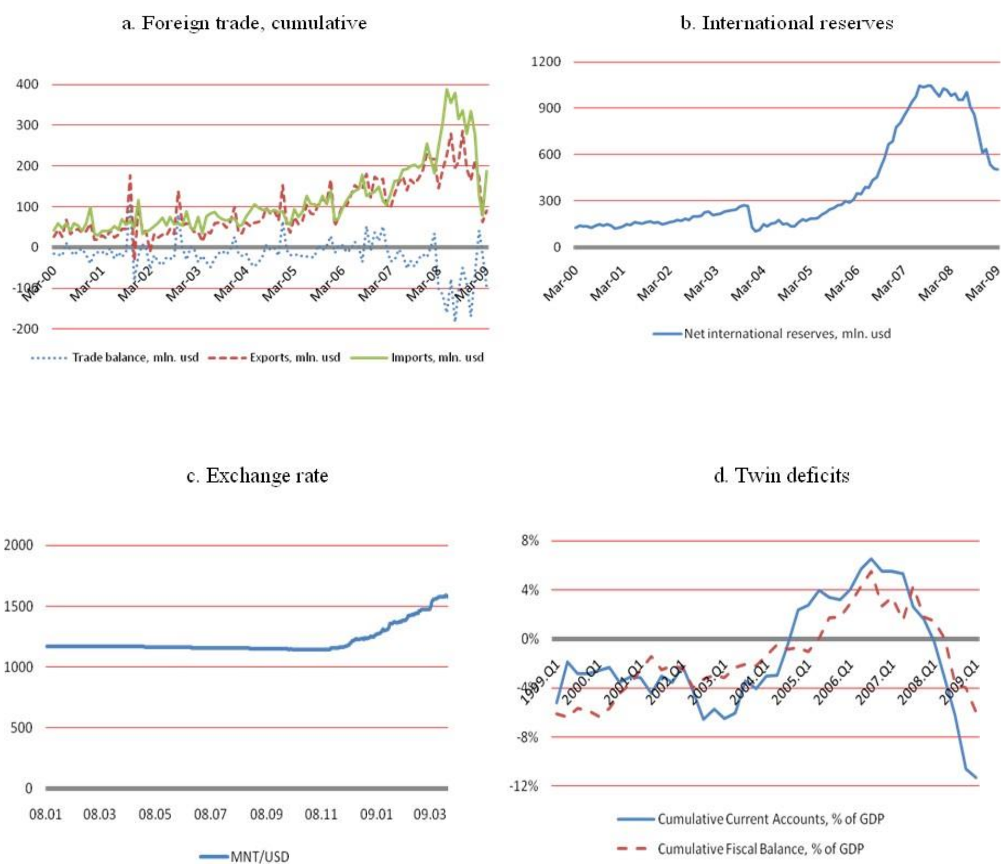
Following increase in commodity prices since 2004, Mongolian economy expanded, and became reliant on commodity exports as reflected in dramatic increases in fiscal spending and imports. As sub-prime crisis, which started in advanced economies in

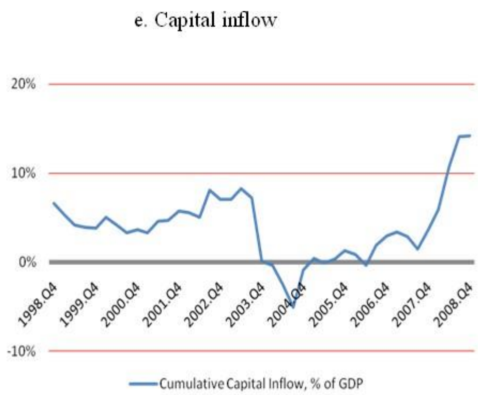
[2] For more on temporary policy, see Calvo, 1987.

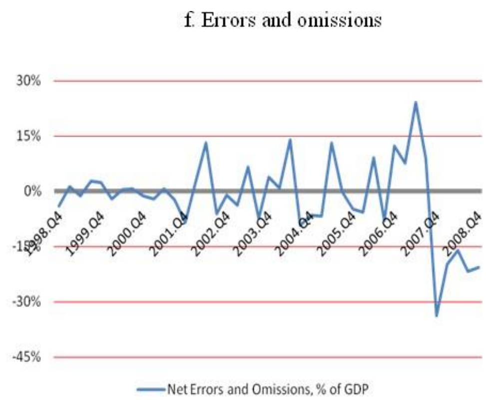
July 2007, spills over to emerging countries, trade and industrial production declined, and demand for commodities decreased. This resulted in decrease in commodity prices, and price of copper goes down sharply in international markets.

Sharp decline in copper price starting from 3rd quarter of 2008 caused sudden decrease in Mongolia's export revenue, and when combined with increase in imports, trade deficits became huge, and it stayed at high level until the end of 2008 (Figure 2, Panel a). Increase in foreign currency demand caused by trade deficit put downward pressure on tugrik, and Bank of Mongolia used about 40 percent of its foreign reserves to protect tugrik from depreciation until December 2008. As soon as Bank of Mongolia stopped defending tugrik in December 2008, tugrik started to depreciate and it continued until March 2009. In total, tugrik depreciated 33.0 percent in five months from its peak in October 2008 to March 2009 (Figure 2, Panel c).

Figure 2. Balance-of-Payments Crisis







Besides current account deficits, decrease in export revenues also resulted in decrease in government budget revenues, which increased budget deficits. It seems that net capital inflows are financing part of trade deficits (Figure 2, Panel e), but errors and omissions in the balance-of-payments account decreased by huge amount (Figure 2, Panel f), which suggests possible capital flights. If that is the case, capital flights may have offset significant part of capital inflows.

Sharp depreciation of tugrik and decline of domestic consumption resulted in dramatic contraction in imports in first four months of 2009. Although these corrections decreases trade deficits, trade deficits are still significant.

- ***Policy Analysis and Recommendations***

Because of huge trade deficits and expected depreciation of tugrik, Government of Mongolia requested financial support from IMF in December 2008. IMF and Mongolia reached staff level agreement of $224 million loans on March 6th, 2009. According to the agreement, following measures are taken in terms of fiscal and monetary policy:

- Fiscal deficits is limited to 6 percent of GDP;
- Policy rate of the Bank of Mongolia increased from 9.75 percent to 14 percent;
- Increased capital adequacy requirement for banks from 10 percent to 12 percent, and decreased provisioning requirement on bank's loans.

According to press releases of IMF and the Bank of Mongolia, these policies should help restore fiscal sustainability, strengthen domestic finance by safeguarding international reserves, preventing nominal exchange rate overshooting, decreasing inflation, and containing liquidity. Also Bank of Mongolia started organizing currency auction with banks to prevent from currency speculation.

IMF executive board approved $229.2 million stand-by agreement for Mongolia on April 1st, 2009, and a loan of $76.4 million became immediately available to Mongolia. But even before this loan becomes available, tugrik started to appreciate, which suggests evidence of nominal exchange rate overshooting and measures taken by the Bank of Mongolia were effective in reversing the expectation of tugrik depreciation. From March 19th to April 7th, tugrik appreciated back about 15 percent compared to its peak level and is relatively stable afterwards.

Although measures taken by the IMF and the Bank of Mongolia were effective in reversing tugrik depreciation, it was not able to bring some desired results. For example, their claim that high tugrik interest rates should help contain liquidity is doubtful because in current crisis, capital is flying to quality, rather than high-return, high-risk assets (Calvo, 2009). Also Mongolia's loan interest rates were always high in the past, yet not much capital flown into Mongolia. Above measures may help change composition of banks' liabilities from foreign currency to tugrik, thus decreasing domestic demand of foreign currency, but it also misses the key fact that most of the foreign currency demand comes from trade deficits. At last, increasing policy interest rates will lead to increase in banks' interest rates, and this may help increase banks' deposits, which will improve liquidity of banks and thus may support credits.

But this view is also deficient. In case of Mongolia, balance-of-payments crisis coincided with liquidity crunch among banks, followed by credit crunch. Increase in nominal interest rates will increase cost of doing business, hurting businesses further which were already hit by shrank demand and liquidity crunch. In turn, contraction in the real sector may lead to delay of loan payments, decreasing banks' performances. Non-performing loans increased notably in recent months (Figure 1, Panel e) to reach 10.6 percent of total loans. Bank of Mongolia's decision to increase capital adequacy requirement following IMF program will cause lending to decline, but decreasing provisioning requirement for banks offsets some part of that negative effect.

As a result of decrease in domestic demand (which is consistent with the sudden drop in consumption when consumption boom ends) and credit crunch, GDP declined 4.2 percent year-on-year in the 1st quarter of 2009, worst since mid-1990s. This contraction is most notable in the manufacturing sector, where total output is declined by 19.5 percent.

Effect of tugrik depreciation did not have huge negative impact on banks as banks tend to balance their assets and liabilities in each foreign currency following prudential regulations, but it has negative impact on borrowers who borrowed in foreign currencies, thus increasing credit risk of banks. Also, asset prices are expected to decline, and when they do, it will decrease value of banks' loan collateral. These effects together with liquidity crunch and output decline, are deepening banking problems. Although Government promised to guarantee deposits at banks, if public perceive Government has limited ability to hold on to the promise because of budget constraints, it may lead to bank runs.

Since policy measures against balance-of-payments crisis reached its goal in the short-term and annual inflation declined to 8.0 percent by May 2009, Mongolia should implement policy to recover economy by supporting domestic demand. Thus our policy recommendation is to:

- Decrease policy rates
- Increase fiscal spending

Decision of the Bank of Mongolia to decrease policy rate by 1.25 percent in May and June are first steps in this direction. Since Mongolia has limited ability to implement these measures because of its agreement with the IMF, Mongolia should actively discuss with the IMF about changing its conditions. Since IMF is looking back to its policies in the past, and is on the course for change recently, it may reconsider Mongolia's proposal to save the economy.

- ***Conclusions***

Mongolia was hit by two shocks, one endogenous and one exogenous. Inflation stabilization policy implemented by the Bank of Mongolia in second quarter of 2008 turned out to be not credible, which led to dramatic increase in imports and liquidity crunch among banks. Soon after that, subprime crisis came to Mongolia in form of decrease in copper prices, which led to decrease in export revenues and decrease in fiscal revenues. When these crises are coupled, tugrik faced with huge downward pressure. Mongolia turned to IMF for help, and conditions came with the IMF support package and measures taken by the Bank of Mongolia stabilized tugrik depreciation. But credit crunch caused by banking problems, along with demand contraction, affected real economy, and domestic output started declining, In order to recover domestic economic from crisis, we recommend Mongolia to support domestic demand through monetary and fiscal policies.

References

Guillermo A. Calvo, 1987, "On the Costs of Temporary Policy" *Journal of Development Economics*, Vol. 27, Elsevier Science Publishers
Guillermo A. Calvo, 2009, "Lender of Last Resort: Put It On the Agenda!"
www.voxeu.org
www.imf.org
www.worldbank.org
www.mongolbank.mn
www.nso.mn
www.news.mn
www.gogo.mn

Appendix. Data

Data	Source	Period	Frequency
MNT/USD rate	Bank of Mongolia website	12/30/05-05/31/09	daily
Inflation	Bank of Mongolia, Monthly Bulletin	1998.01-2009.04	monthly
Interbank overnight borrowing rate	Bank of Mongolia, Monthly Bulletin	1998.01-2009.04	monthly
Central bank bills rate	Bank of Mongolia, Monthly Bulletin	1998.01-2009.04	monthly
Total loans	Bank of Mongolia, Monthly Bulletin	1998.01-2009.04	monthly
Non-performing loans	Bank of Mongolia, Monthly Bulletin	1998.01-2009.04	monthly
Tugrik interest rate	Bank of Mongolia, Monthly Bulletin	1998.01-2009.04	monthly
USD interest rate	Bank of Mongolia, Monthly Bulletin	1998.01-2009.04	monthly
Exports	Bank of Mongolia, Monthly Bulletin	1998.01-2009.04	monthly
Imports	Bank of Mongolia, Monthly Bulletin	1998.01-2009.04	monthly
Trade balance	Bank of Mongolia, Monthly Bulletin	1998.01-2009.04	monthly
et international reserves	Bank of Mongolia, Monthly Bulletin	1998.01-2009.04	monthly
Fiscal balance	Bank of Mongolia, Monthly Bulletin	1998.01-2009.04	monthly
M2	Bank of Mongolia, Monthly Bulletin	1998.01-2009.04	monthly
MNT/USD rate	Bank of Mongolia, Monthly Bulletin	1998.01-2009.04	monthly
Trade composition	Bank of Mongolia, Monthly Bulletin	1998.01-2009.04	monthly
Consumer price index	Bank of Mongolia, Monthly Bulletin	1998.01-2009.04	monthly
USA CPI	International Financial Statistics, IMF	1998.01-2009.04	monthly
China PPI	The People's Bank of China website	1998.01-2009.04	monthly
Russia PPI	Central Bank of Russia website	1998.01-2009.04	monthly
Current accounts	Bank of Mongolia, BoP Report	1998Q1-2009Q1	quarterly
Net capital inflows	Bank of Mongolia, BoP Report	1998Q1-2009Q1	quarterly
Net errors and omissions	Bank of Mongolia, BoP Report	1998Q1-2009Q1	quarterly
GDP, real	National Statistics Office of Mongolia	1998Q1-2009Q1	quarterly