The political economy of central bank's quasi-fiscal operations implemented for 2012-2016 in Mongolia

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Abstract

This paper reviews issues associated with quasi-fiscal operations of the Bank of Mongolia (BOM) implemented during the period 2012-2016 in context of political economy. Under the quasi-fiscal operations, the BOM injected about MNT 7 trillion (which is equivalent to 40 percent of GDP) into the economy over the period 2012-2016. The politically driven quasi-fiscal operations to buffer the economy from external shocks supported growth for a while, but at the cost of increasing economic vulnerabilities. Several lessons are learned from the quasi-fiscal operations. The case study of Mongolia supports the view that politics leads to the economic fluctuations not only through fiscal policy, but also through monetary policy in developing countries.

JEL classification: E02, E52, E58, P48.

Keywords: Central bank independence, Political pressure, Quasi-fiscal operations, Monetary policy, Mongolia.

[1] The views expressed herein are those of the author and do not necessarily reflect the views and policies of the Bank of Mongolia.

1. Introduction

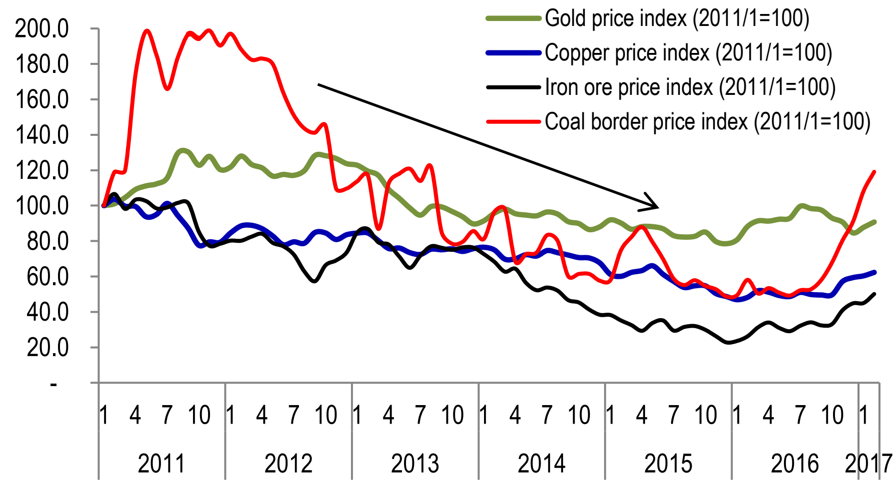
Since Global financial crisis (GFC), several central banks expanded their balance sheets by implementing unconventional policy actions. Some forms of the policies are referred to as a 'quasi-fiscal operations' of central banks since they do not conform to traditional monetary policy used to stabilize inflation by controlling the policy rate (Park 2015). Several papers (i.e., Sims 2003, Klux and Stella 2008 and Goodfriend 2011) highlight that the quasi-fiscal operations of the central bank may undermine its independence and ability to stabilize inflation. Moreover, Kuttner and Posen (2013) emphasize that the crisis made monetary policy decisions extremely salient politically. Several papers (i.e., Woolley 1994, Alesina and Stella 2010, Ehrmann and Fratzscher 2011) have shown that politics reflected in monetary policy decisions.

In the context, this paper reviews issues associated with the Bank of Mongolia (BOM)'s quasi-fiscal operations implemented during 2012-2016 in context of political economy. The BOM is engaged in quasi-fiscal policy roles in 2012. However, the BOM's quasi-fiscal operations have some different characteristics compared to other central banks' unconventional monetary policies. First, the unconventional monetary policies are conducted by advanced economies' central banks rather than those in developing countries like Mongolia. Second, central banks implemented unconventional operations by accumulating risky assets in an attempt to mitigate the financial turmoil. In the case of Mongolia, the operations were more like policy lending programs (at the below market rate) targeted on specific sectors to spur economic growth when the economy was hit hard by adverse external shocks. Third, the unconventional monetary policies are implemented with zero-interest rate policy in advanced economies. However, the BOM's operations have been implemented even with higher policy interest rate. Hence, lessons from the case study would be of high relevance identifying the policy responses to maintain macroeconomic stability for developing countries.

As a small open economy highly dependent on production and exports of mining commodities, the Mongolian economy is prone to price swings of commodities such as coal and copper at the global market and foreign investors' sentiment towards the mining sector. Similar to the real sector, the bank-centered financial sector is dependent on cycles of capital flow driven by the mining sector.

In recent years, the Mongolian economy experienced boom-bust cycles on several occasions. With the extraction of strategic mines coupled with positive sentiment in the global commodity market, Mongolia received large capital inflows, mirrored by large current account deficits and high economic growth between 2009 and 2012. Though it could have been a blessing, Mongolia failed to lead its economy into a sustainable economic growth path and suffered enormously from the global commodity market downturn. With minerals accounting for up to 90 percent of total exports, a collapse in foreign direct investment (FDI), the growth slowdown in China and the sharp drop in commodity prices from 2012 onward strictly affected to the balance of payments and fiscal position (Figure 1 and Figure 2).

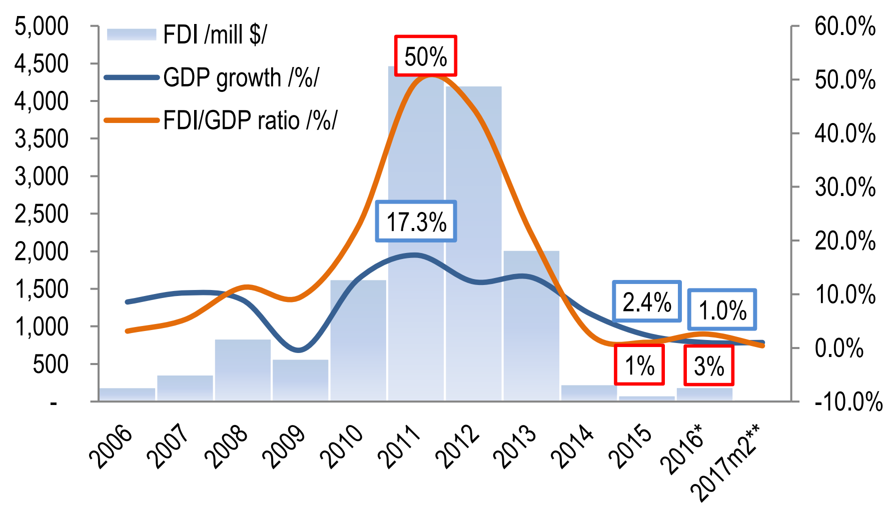
Figure 1. Commodity price indexes, 2011.M1=100



Source: Bloomberg and the Bank of Mongolia

The politically driven expansionary policies implemented for the period 2012-2016 compounded the adverse external shocks. In addition to the state budget, four off-budget financing operations have been implemented over the period 2012-2016: (i) central bank's quasi-fiscal operations including the Price Stabilization Program (PSP), (ii) the lending from the Development Bank of Mongolia to publicly-motivated projects (using USD 600 million DBM bond proceeds), (iii) the use of 'Chinggis' bond proceeds (USD 1.5 billion sovereign bond is issued in the international market at the end of 2012), and (iv) concession agreements.

Figure 2. Foreign direct investment (FDI) and economic growth



Source: The Bank of Mongolia

The central bank's quasi-fiscal operations (i.e., policy lending programs) were launched in late 2012 when the political demand for higher spending mounted. As the budget revenue growth gradually slowed amid declining FDI and the weakening export revenues, the currency issuance power of the central bank was seen as a reliable financing source that could be tapped to support growing spending demand without revenue constraints. Hence, the government relied on central bank as an alternative financing source to fiscal operations. The political demand was particularly high with the PSP including subsidized housing mortgage program as a previous mortgage program financed by the government had to be stopped due to revenue shortages. Such quasi-fiscal lending programs implemented by the BOM blurs the boundary between central bank's balance sheet and the government budget, thereby undermining the role of the central bank as an independent keeper of the price stability. The BOM has attempted to reduce inflation and spur economic growth using unconventional operations. However, the exceptionally large monetary and quasi-fiscal stimulus provided through various programs risk ratcheting up inflation, increasing public debt, adding to balance of payment (BOP) pressures, and heightening banking sector vulnerabilities. Loose monetary and fiscal policies to buffer the economy from the external shocks supported the economic growth for a while, but at the cost of economic vulnerabilities. Consequently, rating agencies were racing to downgrade Mongolian sovereign ratings and investors' confidence was weak. A large budget deficit was inevitable due to fiscal consolidation, while balance of payment pressures and speculative attacks were rapidly depleting international reserves. As a consequence, market confidence waned and growth stagnated in 2016.

Markiewicz (2001) argues that the concern is the problem of transparency in fiscal and monetary accounts when the central bank undertakes quasi-fiscal operations in transition economies, and quasi-fiscal operations can also jeopardize monetary policy designed to maintain price stability. Park (2015) show that central banks cannot successfully unwind inflated balance sheets and stabilize inflation during the implementation of exit strategy, and therefore, fiscal authorities' backup is a pre-condition for effective monetary policy when central banks are engaged in quasi-fiscal policy roles.

A few papers have addressed the effects of the BOM's quasi-fiscal operations yet. Batsukh et al. (2015) study the effects of PSP on the inflation dynamics. He finds that (i) seasonal effects of the food prices observed in the spring have been lowered, but the effects observed in the autumn are augmented during the PSP, (ii) while food inflation is lowered as a result of the PSP, non-food inflation including prices partially controlled by the government increased, and (iii) 10 percent depreciation of exchange rate lead to 2 percent increases in consumer price index (CPI). Urgamalsuvd (2018) examines the overall effect of the monetary policy measures implemented during the period 2012-2016 on the Mongolian economy using the model-based scenario analysis. She concludes that the overall effect of the measures on the economy was negative as the measures accelerate increases in domestic demand (measured by the output gap), inflation and exchange rate depreciation.

The paper is structured as follows. Section 2 discusses origins of the BOM's quasi-fiscal operations. Section 3 reviews the central bank independence issue in Mongolia. Section 4 describes the characteristics of the BOM's quasi-fiscal operations. Section 5 discusses macroeconomic effects of the quasi-fiscal operations. Finally, section 6 concludes the paper by summarizing lessons learned from the quasi-fiscal operations in Mongolia.

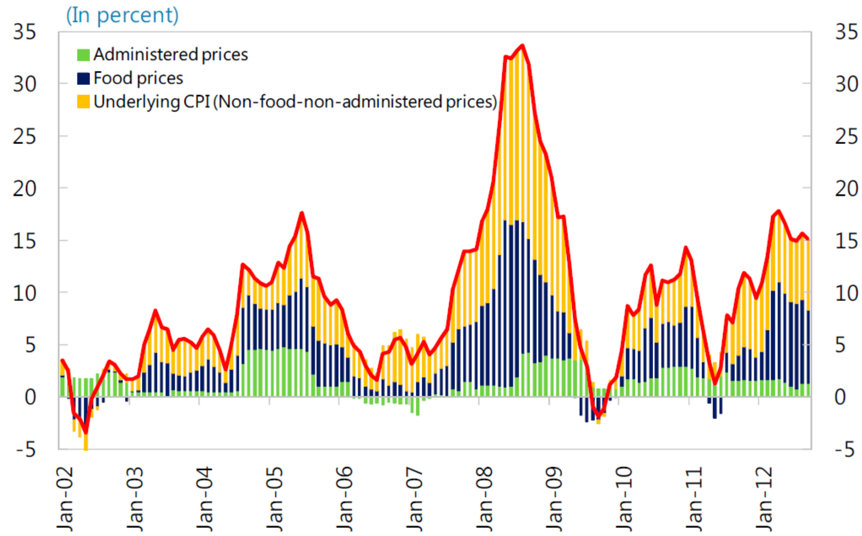
2. Origins of the BOM's quasi-fiscal operations

The Mongolian economy is subject to large supply and demand shocks. On the supply side, Mongolia is a landlocked country, experiences harsh winter conditions, and is geographically large all of which point to high transport costs and the potential for supply bottlenecks. On the demand side, mineral exports are a key driver of the economy, but are also volatile due to global commodity price shocks (Barnett et al. 2012).

The political interest of the price stabilization program is originated based on the public inflation aversion and the public demand for housing. Scheve (2004) shows that (i) economic context, defined by inflation and unemployment performance, has a substantial impact on the public's economic objectives, (ii) there is significant cross-country variation in inflation aversion, controlling for economic context, and (iii) some of the cross-national variation is accounted for by national-level factors affecting costs of inflation and unemployment.

Inflation in Mongolia has been volatile and fairly high before October 2012 when the PSP started (Figure 3). After peaking at over 30 percent in the summer of 2008, inflation turned negative a year later, and then returned to double digits in mid-2010. Inflation dipped again in early 2011 to return to double digits by the summer of 2011. Inflation can be better understood by splitting the Consumer Price Index (CPI) into its components. IMF (2012) distinguished CPI inflation into three sub-indices: (i) administered prices; (ii) food prices; and (iii) underlying prices, which cover all non-food and non-administered prices. In the IMF calculation, administered prices, accounting for 22 percent of the basket, include items whose prices are adjusted infrequently, such as tuition fees that are adjusted once a year when the new school year starts. Decisions for setting administered prices generally have a strong backward looking aspect-catching up with past inflation-and include a policy element as discretion can be exercised in deciding when and by how much to adjust administered prices. Food prices, which account for about 40 percent of the basket, are a key driver of changes in inflation and of inflation volatility. Food prices constitute the largest bucket in the CPI and are more volatile than other components (Figures 3). Movements in food prices reflect to a large extent supply shocks to agriculture, such as the severe winter in 2010–11, rather than changes in demand conditions. Food price inflation was the main driver of high headline inflation over the previous year, reaching 32.5 percent at the end of 2012 and contributing one-third of the headline inflation. A major factor behind the soaring food inflation last year was a hike in meat price caused by supply shortages.

Figure 3. Headline inflation: Contributions to year-on-year change



Source: IMF (2012)

There was also an observation taking more attention that inflation, mostly driven by food inflation, is aggravating poverty and worsening the income distribution. The main argument is that poorer households feel more pressure when prices of food and fuel increase since these goods' weight in their consumption basket. Ragchaasuren and Tsolmon (2015) show that share of food in the consumption basket is about 60 percent for the lowest expenditure quartile of households. As public understand rising and more volatile inflation is harmful, the public places greater emphasis on low inflation.

Moreover, public willingness for affordable housing has been growing in Mongolia. As household average income is relatively low compared to apartment prices, many cannot afford to buy an apartment. The demand for housing has been growing as income and population growths. Therefore, housing has been a political issue in Mongolia. Government housing policies in Mongolia were oriented towards both large-scale housing construction programs and subsidized mortgage loan programs. In 2004, the new government formed based on the June 2004 parliamentary election initiated 4-year '40000 apartments program' to promote the housing supply and provided financing of 32.7 billion MNT (government bond of 28.3 billion MNT and ADB project financing of 4.4 billion MNT) to participant banks, which lend the financing to participant construction companies. In 2009, the new government formed based on the June 2008 parliamentary election implemented '4000 apartment program' to support the construction sector to sell their apartments and public servants to buy apartments. Under the program, public servants who work for public sector not less than 3 years took (up to) 20 years mortgage loans of (up to) 40 million MNT at 8 percent (annual) interest rate to buy apartments hold by banks as collaterals of construction companies' loans. In 2010 and 2012, the government approved '100000 apartments program' (75000 apartments in Ulaanbaatar and 25000 apartments in provinces) to stimulate the housing supply and 'Regulation on 6 percent subsidized mortgage loan' to promote the housing affordability, respectively. The 6 percent subsidized mortgage loan program is continued only five months until the June 2012 parliamentary election, and about 1000 individuals took (up to) 20 years mortgage loans of (up to) 50 million MNT at 6 percent (annual) interest rate to buy apartments which are less than 55 square meters and built under the '100000 apartments program'.

Though several government housing programs were implemented prior to 2013, their results were not sufficient compared to the existing public willingness for affordable housing. Moreover, the mortgage market development was weak. For instance, as end of 2012, total mortgage loan to GDP ratio was only 5.1 percent, which was 7 times lower than Hong-Kong and Japan and more than 10 times lower than advanced economies, 29.9 thousand borrowers took mortgage loans, and the share of mortgage loan in the total loan outstanding was 12.1 percent. Mortgage annual interest rate was 15.3 percent, too high for an average income household to buy an apartment by using the mortgage loan. Out of 306.8 thousand of Ulaanbaatar households, 39 percent of 119.7 thousand households were living in apartments.

The June 2012 parliamentary elections were won by the opposition Democratic Party, which formed a coalition government with three smaller parties. As stated by "older" public-choice view, monetary authorities are also exposed to strong political pressures to behave in accordance with the government's preferences. As a "right-wing" government is established, it gave a high priority to lower inflation. Preoccupation with the presumed adverse effects of high inflation and high public demand for affordable housing has led the newly appointed government officials to initiate a program to stabilize domestic prices, not only of food and petroleum, but also of import raw materials for construction as well.

3. Central bank independence in Mongolia

Politicians do not directly control the instruments of monetary policy, while they are able to influence central banks' decisions. Monetary policy's powerful instruments are controlled by central banks, which vary widely across countries in their degree of statutory independence (Johnson and Siklos 1996). Theoretically, central bank independence may reduce pre-election manipulation of monetary policy, hence may also result in more stable money growth and, therefore, less variability in inflation and stable economic growth. Countries with relatively independent had a better inflation performance than countries in which politicians have control over the central banks (Eijffinger, S and De Haan, J 1996). If central banks are truly independent, there should be no variation in monetary policy associated with elections. The only good central bank is one that can say no to politicians. However, in democratic society, monetary policy has ultimately to be under the control of democratically elected politicians; one way or another, the central bank must be accountable. In other word, the objectives of monetary policy (rules of the game) are settled by the legislatures in accordance with normal democratic procedures. The "game" (monetary policy), however, is delegated to the central banks. In case the specified objective is not realized, the central bank, or politician who bears final responsibility through his or her power overrule the bank's policy, can be held accountable. Moreover, monetary policy can be easily used strategically by politicians to achieve short term goals with cost hard to detect for the voters for possibly a long time. Therefore, there is a need of much more agreement about the "correct" long run goal for long-run goal for monetary policy.

In the law of Mongolia on central bank (Bank of Mongolia), it is clearly stated that the Bank of Mongolia (BOM) shall be independent from the Government. However, the BOM is not independent from the political pressures. According to the law, (i) The BOM shall be headed by the Governor appointed by the parliament (the State Ikh Khural) and he/she shall be accountable and shall report to the parliament. The appointment of the Governor of the BOM shall be made at the proposal of the Speaker of the parliament and be for a period of six years, (ii) BOM shall formulate State monetary policy guideline for the next year, and present that policy to the parliament by October 1 of each year, (iii) the BOM shall report to the parliament on the State monetary policy, implementation of relevant legislation and the money and credit situation every quarter, and (iv) the parliament shall monitor whether the activities of the BOM are consistent with legislation but shall not interfere in activities relating to the implementation of State monetary policy by the BOM.

De-facto implementation of the law is as follows: when the parliament passes the monetary policy guideline for the next year, it changes policy measures presented by the BOM and add inconsistent measures, which calls for broader mandates and quasi-fiscal activities. Whenever, the BOM reports to the parliament on the monetary policy implementation, parliament members call for greater criticisms on the stance of monetary policy and the floating exchange rate. The parliament economic (or/and fiscal) standing committee, consisting of one-fourth of all parliament members, passes the resolutions adding more tasks for the BOM to implement, in some cases, the tasks are inconsistent with the ongoing monetary policy actions. Moreover, National Security Council, consisting of the president of the State, prime minister and speaker of the parliament, passes the advisory notes providing some recommended measures for the BOM to implement. Though governor of the BOM is appointed for a period of six years, eight governors have been appointed for the last 26 years. Out of the eight governors, only one governor completed his full term, and others are resigned mainly because of the parliamentary election result or political situation. Another determinant of central bank independence in Mongolia is political stability as incumbent politicians fortify their hold on the central bank if there is a greater probability of government change and will eventually overrule central bank decision making. Moreover, any attempts trying to build central bank independence has been often criticized by politicians and public in recent years.

As stated by the law, the BOM has the sole authority to maintain economic order, and the government gives them no guidelines. Though the independence from the government has many pros raised by the literature on central bank independence, monetary policy makers are also allowed undisciplined discretion. As an example of abuse power, central bankers are sometimes tempted to use monetary policy to affect the outcome of elections. In the case of Mongolia, the ruling governments are tempted to pursue expansionary policies to accomplish their election promises including cash transfer programs, pension and wage increases and to increase and stimulate production and employment before the election. Thus, to extent that government officials ally themselves with politicians, discretionary policy led to the political business cycles. Up to August 2012, contributions of the BOM to the political business cycles were twofold. First, in some years when the government revenue was weak, the BOM was partially finances the government spending by purchasing the long-term government bond or giving loan to the government at the below market interest rate. Second, the BOM was tempted to stabilize (or appreciate) the exchange rate by intervening in the foreign exchange market just before the election to highlight economic condition at election time as stable, knowing that the resulting consequences will not show up until after the election.

The independence of the BOM has been under treat from politics. In particular, the implementation of quasi-fiscal operations such as the PSP has led to the political business cycle. As the Mongolian economy started to face a recession in 2012 driven by the sudden stop in the FDI and commodity price falls, the political pressures on the BOM raised. The global factor behind the increase in political pressures includes active roles of advanced central banks since the global financial crisis (GFC) and their success in economic recovery and stabilizing financial system. The domestic factor is the tightened budget as the government started to implement special fiscal requirements on structural debt and public debt set by Fiscal stabilization law passed in 2010. Therefore, burdens for economic recovery passed on to the BOM. In the other hand, the new governor of the BOM believes that the financing schemes under PSP are helpful to stabilize the inflation and introduce sustainable mortgage financing in the economy. The political pressure (or support) and the governor's belief overlap at same time, and as a consequence, the BOM starts to implement the quasi-fiscal operations. At the early stage of discussion with the government, the BOM prepares to provide financing to the government through purchasing the government bond instead of financing the PSP itself, and asks the government to take full ownership of the program. However, because of the budget constraint, the government officials and politicians decided to leave the financing of the PSP to the BOM. According to the memorandum signed by the government and the BOM, the financing provided by the BOM to commercial banks was planned to be replaced by the Government through domestic government bond issuance in 2013. However, the exit of the BOM from the program through transferring it into the budget was deferred as requested by the government.

The parliament approves the BOM to jointly implement the PSP with the government by passing resolution #57 on monetary policy guideline for 2013 and resolution #62 on monetary policy guideline for 2014. The approval of the parliament also allows the BOM to take on quasi-fiscal roles. Morgan Stanley (2013) has named the BOM operation as Mongolian-Style Quantitative Easing (QE)-A Risky Strategy.

The announcement of the PSP and its first phase (i.e., food price stabilization based on warehouse financing scheme, domestic petroleum price stabilization program) are started just before the local election held in October 2012. Though it is tough to distinct the effect of the PSP on the public voting, the ruling party has won a majority of seats in the most province election. The subsidized mortgage sub program, the second phase of the PSP, also started just before the presidential election held in June 2013. The sitting president, candidate of the ruling party, is reelected in the election. Through purchasing the long-term government securities, the BOM partially financed the government's off-budget 'good programs' implemented just before the parliamentary election held in June 2016. The unsustainable, election-oriented, subsidized loan and cash-transfer programs targeted on students, herders, individuals living in ger district, and general public to take their votes, and the ruling party officials were saying that the programs will continue only if the party wins in the coming parliament election. Moreover, the BOM directly gives loans to the government and made a lot of intervention in the foreign exchange market to relieve the depreciation pressure driven by the money injection over the period 2012-2015. The four year implementation of the PSP package and the BOM's quasi-fiscal operations have resulted in a huge deficit of the BOM and a boom-bust cycle in the economy, and the details are discussed in Section 5.

Regarding to governance and independence issues, lessons learned from the BOM's quasi-fiscal activities may include (i) to rethink about the superpower of the BOM governor in the decision making, (ii) to restrict the BOM's quasi-fiscal activity by clearly stating what the BOM can or cannot do, (iii) to clearly state the relation of the BOM with the government, and (iv) to clearly state the objective of monetary policy as maintaining price stability in the central bank law.

The central bank law was amended in January 2018, and the amendment has addressed the first four lessons as follows:

- Introduced collegial decision making in central banking by legally establishing Monetary Policy Committee (MPC) and the Banking Supervision Committee. Members of the MPC are nominated by the parliament economic standing committee and appointed by the parliament. According to the law, the MPC shall discuss and resolve rate of monetary instruments, required reserve and prudential ratios, and decision of the MPC shall be made at majority of the members present at the meeting, and the chair shall have casting vote in the case of tie. Blinder and Morgan (2008) present some experimental evidence showing that groups make decisions as fast or faster than individuals; committee also provide some diversification, a larger and richer knowledge base and a system of checks and balance.
- The following operation is prohibited for the BOM operation: except for those specified in law, making any on or off-balance sheet transactions to create business or commercial advantage for individual, legal entity, specific bank and to support certain economic sector.

- According to the law, the government shall be prohibited from giving instructions to the BOM in any form and conclude agreements and transactions other than those provided by law.
- According to the law, the BOM shall be prohibited from direct and indirect lending to the government, except for approved by the law. The BOM shall also be prohibited from purchases long or short-term government securities on primary or secondary markets or from direct purchase of such securities.

Unfortunately, the effort to clearly state the main objective of monetary policy as maintaining price stability in the central bank law has been unsuccessful. One way to avoid discretionary (and undisciplined) monetary policy is to commit the central bank to a policy rule such as clearly defined objective of the monetary policy in the law. Suppose that parliament passed a law requiring the BOM to set interest rates to target 8 per cent inflation. Such a law would eliminate incompetence and abuse of power on the part of the BOM and it would make the political business cycle impossible. People would now know exactly what the BOM intended to do each month because it would be legally required to pursue a low-inflation monetary policy to achieve the target. With low expected inflation, the economy would face a more favorable short-run trade-off between inflation and unemployment (Gans et al. 2012, p.881). Before the crisis of 2008/09, scholars though that independent central banks targeting inflation targeting were the best solution, which would have eliminated instability, political interference on monetary policy and guaranteed an management of the macroeconomic cycle. However, the crisis has changed some of the thoughts.

When the commodity prices fall and the economy faces with the crisis situation, the BOM must decide how to respond to these shocks. In such case, a policy rule follower may not possibly consider all the contingencies and specify in advance the correct policy response. Therefore it is always better to appoint good people to conduct monetary policy and then give them the freedom to do the best they can. But their policy actions must be permitted by applicable law and in line with fundamental characteristics of the economy.

4. Overview of the BOM’s quasi-fiscal operations

According to the report prepared by the working group of the parliament, under the BOM’s quasi-fiscal operations including PSP and other activities, the BOM injected MNT 6.9 trillion, about 69 percent of the M2 money supply or about 40 percent of GDP over the period 2012-2016 into the economy.

4.1 Price stabilization program (PSP)

The PSP started in October 2012 when the Government of Mongolia and the Bank of Mongolia signed a Memorandum of Understanding on ‘Joint Implementation of Medium-term Program to Stabilize Prices of Key Commodities and Products’. The implementation of the program is approved by the parliament as an action included in monetary policy guideline for 2013 and 2014 and the action plan of the government for 2012-2016. The PSP involves the BOM in supply side measures-government operations in nature. As stated in the PSP document, the program aims to keep inflation at low and stable level by reducing supply driven inflation pressures and to establish a market-based base scheme for securing the long-run supply stability of key commodities and products. In particular, the program addresses structural bottlenecks by addressing supply shortages in select goods that have been viewed as drivers of seasonal price volatility. Under the program, the BOM provides low cost funding to companies whose price-setting behavior has a significant impact on the CPI (e.g. wholesale distributors of meat, flour and imported petroleum products). However, the PSP is an unconventional inflation measure as it provides discounted loans to selected industries through participating commercial banks in return for their promises to keep prices stable. In this context, the PSP has been a major tool of injecting money into the economy while it contains key consumption prices through de-facto price controls. According to the report prepared by the working group of the parliament, under the PSP, the BOM injected MNT 4.17 trillion, about 125 percent of M0 money and about 42 percent of the M2 money supply over the period 2012-2016 into the economy through commercial banks' lending.

The PSP consists of five sub programs: i) price stability of staple food; ii) fuel retail price stability; iii) reducing costs of imported consumption goods; iv) promoting the construction sector and achieving stability of housing prices; and (v) supporting energy sector aimed at stabilizing energy tariffs.

The sub program for stabilizing food price. The sub program consists of meat price stabilization program, flour price stabilization program, and warehousing and intensive farming program. The three sub-program aims to stabilize the prices of meat and flour - that together weigh around 20 percent of total CPI basket and over 60 percent of food CPI basket-through strengthening meat and flour reserves. The program aims to deliver the following results: (i) stabilization of meat and flour retail prices, (ii) encouraging construction of new storages and warehouses, (iii) establishing new warehouse finance instruments, and (iv) companies should be able to borrow working capital loans against wheat or meat in warehouse as collateral. The BOM and ministry of agriculture and light industry started the program in December 2012. Under the program loans at much below market interest rate (3.8 percent per annum, but the policy rate was above 10 percent) was provided to meat and flour producers, and warehouse construction and intensive farmers. Under the flour price stabilization program, a set of measures were implemented to create flour and meat reserves and to control the quality and trading of flour and meet reserves, through the discounted loans. The measures of the program aim to bring down prices of the goods that are directly affected by the increased financing to suppliers or elevated level of reserves. According to the report prepared by the working group of the parliament, the subsidized loan of MNT 194.8 billion, about 5.8 percent of M0 money (at 3.8 percent annual interest rate) were allocated to private companies though banks.

The sub program for stabilizing fuel retail price. Stabilizing fuel retail prices is seen as important for maintaining low and stable inflation. The BOM and the Ministry of Mining jointly launched the program in October 2012. The three-year program intends to smooth domestic retail petroleum prices through subsidies (lowering financial cost of imported retail oil products and minimizing exchange rate risk) to suppliers. Policy objectives were (i) to set fuel import tax based on border price, (ii) to build stock reserving containers of oil products, (iii) to increase reserves if oil products, and (iv) to diversify supply sources of oil products. The subsidized credit has been issued at below market interest rate (3.8 percent per annum) and a forward agreement at favorable terms has been offered to selected oil importers. The purpose of these measures is to delink retail fuel price from wholesale price fluctuations by providing soft financing through commercial banks. As the exchange rate risk is a key factor affecting the fuel prices in the domestic currency, the BOM hedged the risk by making tripartite forward agreements at favorable terms. The BOM opened credit line of MNT 222.5 billion to participating oil import companies. Consequently, local oil importers were able to finance their retail oil products at low interest costs and exchange rate risks. This sub-program does not aim to keep the price fixed over the long-term period but requires firms to delay upward adjustment of retail prices in return for financial support. According to the report prepared by the working group of the parliament, the subsidized loan of MNT 137 billion, about 4.1 percent of M0 money (3.8 percent annual interest rate) were allocated to oil importers though banks. In order to reduce the exchange rate risk, the banks settled down forward contracts worth USD 1.58 billion at the market below exchange rate.

The sub program for trade logistics and facility aimed at lowering costs of the main imported consumption goods. Limited capacity and costly transportation and logistics systems had been known as increasing import prices and eventually inflation. Improving international trade transportation and logistics to ensure stable supply of import and reducing related costs have been seen as important for maintaining domestic price stability. The BOM and the Ministry of Road and Transportation jointly launched the three year sub program in October 2012. The program aims to stabilize prices of imported consumption goods through measures addressing transportation bottleneck. The measures include using special wagons; improving the railway service; better organizing loading brigade work; introducing 'from door to door' service and arranging additional wagons and railway transportation during the peak times and holidays. Under the program, the BOM extends soft loans to banks, and banks on-lend at their own risk to 'Ulaanbaatar railway' Mongolia-Russia joint venture company. The Ministry of Roads and Transportation is in charge of organizational and managements issues of the program and provides the BOM with data on necessary funds. According to the report prepared by the working group of the parliament, the subsidized loan of MNT 34 billion, about 1 percent of M0 money were allocated to the joint venture company though banks.

The sub program for supporting the construction sector and housing price stabilization. The BOM and the Ministry of Construction and Urban Development have launched the program in

January 2013. Overview of the program supports to construction and housing sector. Under the sub program, the BOM has been implementing the comprehensive stimulus measures to the construction and housing sector both in the supply and demand side. The sub program consists of promoting supply of construction materials program and establishing sustainable mortgage financing system program. Supply-side stimulus measures are included in the first program, aiming (i) to increase domestic supply of major construction and building materials prices, (ii) to remove seasonal fluctuation in imports of major construction and building materials (cement and steel), and (iii) promote eco and environment-friendly projects. Under the program, the subsidized loans have been issued to 86 companies that produce construction and building materials and 55 companies to reduce seasonal price volatility of imported prices of construction materials (cement, installed metal). Business entities that were provided financial support by the PSP kept prices in a stable range. However, the contract terms of the PSP have been difficult to observe due to increasing production and import cost with the sliding exchange rate. According to the report prepared by the working group of the parliament, MNT 227.2 billion, about 6.8 percent of M0 money (at up to 7 percent) was allocated to companies though banks.

Along with the supply-side stimulus program, the BoM also launched a housing mortgage lending program to stimulate housing demand that provided cheap mortgage loans to households at a subsidized interest rate of 8 percent (less than half the on-going commercial mortgage lending rates). As the mortgage rate is politically sensitive issue, politicians' interest results in pressure on the central bank to reduce the mortgage interest rate. For instance, in the first half of 2013, an average mortgage interest rate (weighted average rate of market and subsidized interest rates) was 16.6 percent, and after introducing housing mortgage program with 8 percent loans, the average interest rate reduced to 9.2 percent. The objective of the program is to establish sustainable mortgage financing system to reconcile supply and demand of housing, increase housing affordability, and provide people with safe and healthy environment of living. The whole idea of mortgage financing system was based on secondary mortgage market. The housing mortgage program provided central bank credit to commercial banks at 4 percent interest rate which will be on-lent to households at 8 percent interest rate with up to 20 year maturity. Since late 2013, some of the subsidized mortgages have been securitized into residential mortgage backed securities by the Mongolian Ipotek Corporation (MIK) which was purchased by the BOM to refinance banks' funding sources for further housing mortgage loans. Loan eligibility criteria set a limit on the apartment size at 80 m2 and required that loan applicants have more than MNT 1 million of monthly income. There is no ceiling on the maximum eligible income. In November 2014, the central bank announced to loosen the eligibility criteria for the housing mortgage loan applications to purchasing non-apartment housing by citizens in the rural area. The recent announcement seems to consider the slowing construction sector and the moderating mortgage loan growth in recent months. Commercial mortgage businesses were substituted by the subsidized mortgage program. Existing commercial mortgage borrowers switched to the subsidized loan program and new mortgage loan demand was almost fully absorbed by the subsidized program. According to the mortgage loan report (July 2016) prepared by the BOM, MNT 3 trillion, about 690 percent of M0 money (at below market interest rate) were allocated to companies though banks between June 2013 and December 2016.

The sub program for supporting energy sector aimed at stabilizing energy tariffs. The BOM and the Ministry of Energy launched the two year program in July 2013. The program aims to secure the financial viability of state-owned fuel and energy enterprises, ensure adequate reserves of coal available for winter needs, and stabilize prices and tariffs of the energy sector. Under the program, the BOM extends soft loans to banks, and banks on-lend at their own risk to state owned energy companies. According to the report prepared by the working group of the parliament, the subsidized loan of MNT 86.4 billion, about 2.8 percent of M0 money (at up to 4.5 percent) were allocated to state owned energy companies though banks.

Because of the quasi-fiscal operations, the Bank of Mongolia have been criticized by politicians and by scholars for i) using public money to support selected banks and private firms, ii) the protracted periods of high inflation and exchange rate depreciation as well as the increased distributive inequalities which followed, and iii) the increases in public debt and the depletion of foreign exchange reserves.

4.2 BOM's other sort of quasi-fiscal operations

As the PSP opens the window the BOM to pursue the quasi-fiscal operations, the BOM also finances some programs, which are fiscal policy operations in nature. According to the report prepared by the working group of the parliament, under the other quasi-fiscal operations, the BOM injected MNT 2.73 trillion, about 77.4 percent of M0 money and about 26.9 percent of the M2 money supply over the period 2012-2016 into the economy.

Promoting cashmere production and export. Based on the minutes of the National Security Council meeting on 4 March, 2014 and the Government Resolution #87 of 21 March, 2014, the BOM and the Government took actions to promote cashmere production and exports. The actions includes increasing combed and washed cashmere exports, introducing warehouse financing, ensuring stable production and exports of cashmere. To support cashmere production and exports, soft funds were issued through banks to companies to purchase raw cashmere. The BOM and banks will provide 70 percent and 30 percent of funds, respectively. Banks extend loans based on warehouse certificates. The Ministry of Finance guarantees the fulfillment of obligations up to MNT 100 billion for loans extended from the BOM to banks. The guarantee is valid if world cashmere price for 1 kg is lower than MNT 128'000, and borrower is unable to provide full or partial fulfillment of obligations. According to the report prepared by the working group of the parliament, the subsidized loan of MNT 29.7 billion were allocated to companies though banks.

The BOM's deposit in banks. The government issued the sovereign "Chinggis" bond of USD 1.5 billion in the international market in December 2012. However, the government wanted to deposit the proceeds to banks since its plan to use the bond proceeds was not clear. The BOM thought this action may lead to macroeconomic volatility in the economy, and agreed to receive the proceeds as deposits. According to the agreement made among the BOM and Ministry of Finance, the BOM was responsible for paying the bond's interest payment until the government discontinues the deposit. Instead, the BOM provided banks MNT 900 billion in the form of one-year time deposits at 7 percent interest (below market interest rate) to reverse the downward trend in lending growth.

The Government's off budget 'good' programs. The classic political business cycle hypothesis proposes that government manipulate the economy for the purpose of bolstering their election chances. In line with the hypothesis, the government's programs, consisting of four sub programs such as 'good student', 'good herder', 'good share' and 'good backyard', implemented just before the parliamentary election held in June 2016. To finance the programs, the government issued its securities with below market interest rate to banks, which transfers them to the BOM. The maturity of securities for the 'good herder' program was 3 years and their interest rate was 3 percent per annum (which is more than 3 time lower than the policy rate). The maturities of the securities for the 'good student' and 'good share' programs were 1-10 years and 15 years, respectively and their interest rate was 1 percent per annum. Under the operation, the BOM purchased MNT 449.7 billion of the government securities.

The funding for the preparation of 11^{th} Asia-Europe meeting (ACEM) summit. Mongolia invited 11^{th} ACEM summit in July 2016. As preparation for the summit, the government supported to build 'ACEM villa' town and to provide maintenance for hotels where ACEM visitors stayed. In doing so, the government requested the BOM to finance the projects through purchasing bonds issued by Development Bank of Mongolia (DBM). According to the report prepared by the working group of the parliament, the subsidized loan of MNT 125 billion were allocated to companies, built ACEM villa town and MNT 108.4 billion were allocated to participating hotels.

Funding for establishing Deposit Insurance Corporation of Mongolia (DICOM). DICOM is established in 2013 as a state owned company. When it established, the BOM issued MNT 85 billion as financial support. When the Saving bank fails in July 2016, the difference between asset and liability and equity was negative, which has to be covered by DICOM according to applicable law. Thus, as approved by the Central Bank law, the BOM issued subsidized loan of MNT 119.9 billion at the 0.5 percent annual interest rate to DICOM.

Monetization of promissory note issued by the DBM. DBM issued promissory note of MNT 177.4 billion with 1 year maturity for a state owned company in 2014. A bank monetized the promissory note first, and then the bank monetized the note again by transferring it to the BOM.

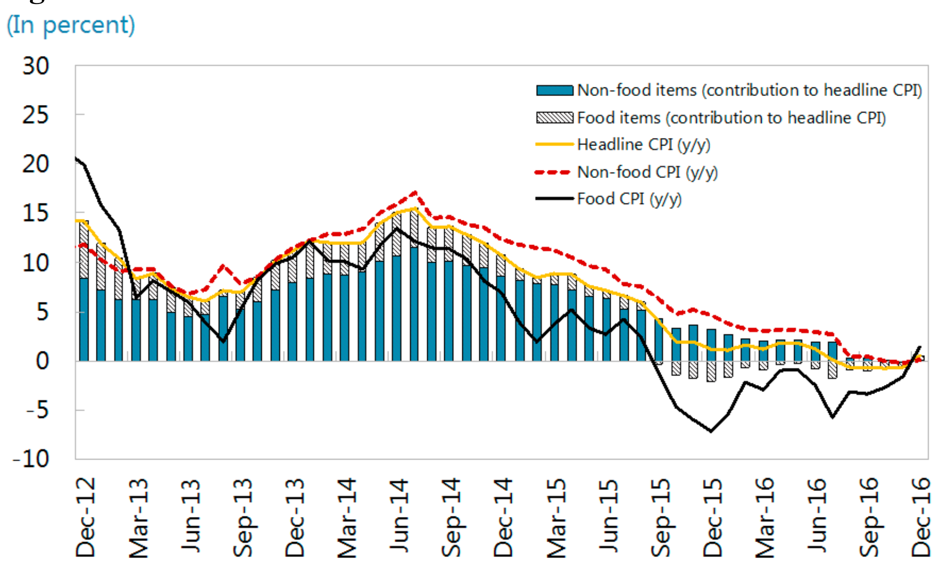
Troubled asset relief measure implemented by the BOM. According to the report prepared by the working group of the parliament, the BOM also implemented the troubled asset relief measure, and the exact amount of the measure was not mentioned. However, the report highlights that the

BOM's claim including claims on the PSP outstanding (MNT 24.3 billion) and DICOM (MNT 119.9 billion) is MNT 966.7 billion as end of 2016. The simple calculation suggests that the remaining MNT 822.5 billion may be attributed to the troubled asset relief measure.

5. The consequences of the BOM's quasi-fiscal operations in Mongolia

Monetary policy turned accommodative in the end of 2012 in the wake of slowdown of economic growth and slower credit growth. The Bank of Mongolia started to inject reserve money into the economy through the PSP and other quasi-fiscal operations. The BOM also reduced its policy interest rate three times to 10.5 percent from 13.25 percent in 2013. The substantial easing of monetary policy contributed to revamping credit growth and maintained double-digit economic growth in 2013 amidst declining foreign investment and weak commodity market through liquidity support to industries and households.

Figure 4. CPI inflation and its contributions



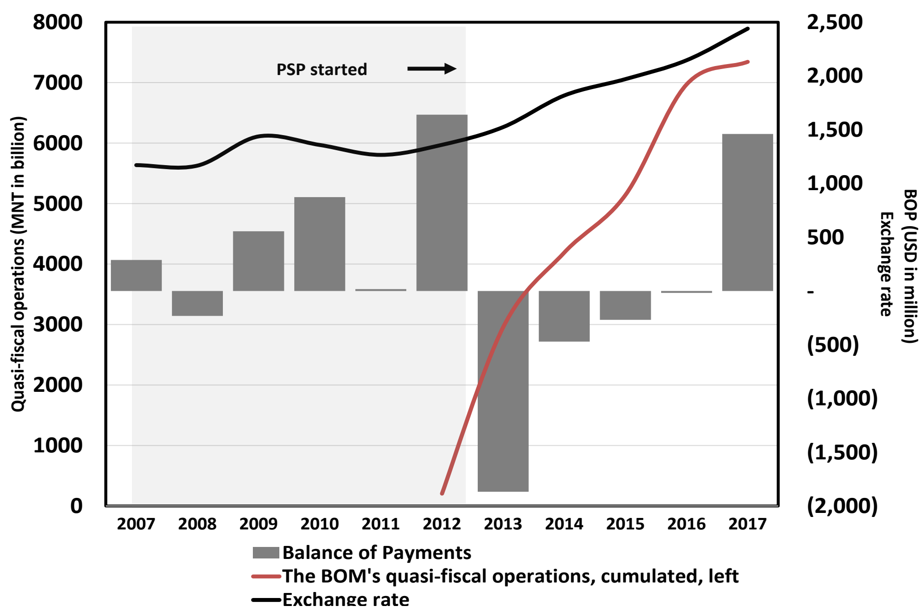
Source: IMF (2017)

Food price inflation decelerated to 9.5 percent (year on year) in March 2013 from over 30 percent of the last year. In 2013, the price of meat and meat product has considerably slowed down from 28.8 percent (year on year) in January to 10.1 percent in March, possibly reflecting the elevated meat reserve level due to the PSP that has been implemented since November 2012. Inflation fell to a two-year low of 7 percent in July 2013 thanks to some effect of the PSP. However, the downward trend in year on year inflation was not continued longer and headline inflation began to pick up again from July 2013 led by accelerating core inflation within growing money supply and escalating currency depreciation. While the quasi-fiscal operations, particularly the PSP intend to address supply side inflation pressures driven by structural bottlenecks, the operations inject new base money to the economy. Given this, money supply through the large scale quasi-fiscal operations adds to demand-side inflationary pressure.

Inflation remained in double digits, reflecting expansionary fiscal and monetary policies. In other word, the quasi-fiscal activities led to a high risk of plunging the economy into higher inflation. However, supply side pressures on meat and fuel prices were mitigated to some extent (Figure 4).

Negative shocks to FDI and coal exports increased BOP pressures from mid-2012 onwards. These pressures have been compounded by highly expansionary fiscal and monetary policies that are boosting the demand for non-mining imports. In particular, the money injection through the BOM's quasi fiscal operations (though sub programs for stabilizing fuel retail price and supporting the construction sector and housing price stabilization) and fiscal expansion increased imports, compounding the BOP pressures. BOP pressures have been absorbed by BOM foreign exchange sales financed from external borrowing and exchange rate depreciation (Figure 5).

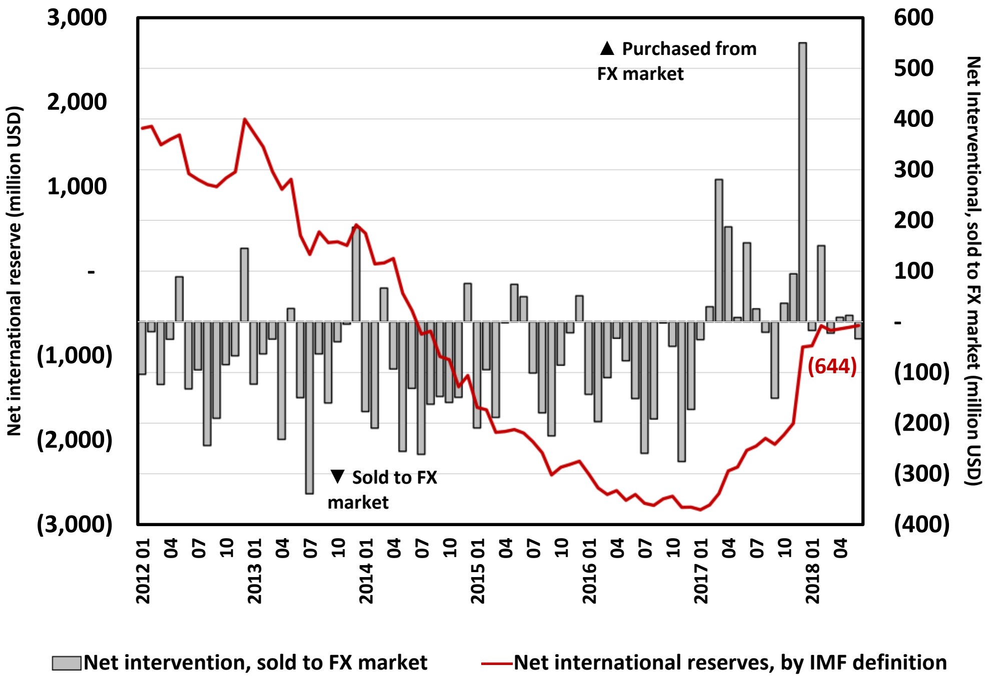
Figure 5. The BOM's quasi-fiscal operations, BOP and exchange rate



Source: The Bank of Mongolia

The BOM's Gross International Reserves (GIR) reached a record USD 4.1 billion at end-2012 after the government issued the sovereign "Chinggis" bond (USD 1.5 billion) in the international market. However, the BOM heavily intervened in FX market using the existing reserve and the borrowed funding as exchange market pressures increased. After the first year of the PSP, the GIR was decreased by USD 1.7 billion in 2013. As the GIR deflated quickly, the BOM started to actively utilize RMB 15 billion local swap line signed with People's Bank of China. As end of 2016, the usage of the BOM amounted to RMB 12 billion. According to the report prepared by the working group of parliament, the BOM also made long-term currency swap agreements with banks (over USD 1 billion) to purchase USD. Using the borrowings, the BOM intervened USD 7 billion in the domestic FX market between 2012 and 2016. In other word, the BOM's money injection through quasi-fiscal operations is sterilized by the intervention. This also partially explains why the impact of the operations on the real activity was short lived. As a result of persistent sales of foreign exchange in the spot and forward market, GIR subsequently fell and net international asset become negative since May 2014 (Figure 6). The government's further external borrowings have also helped keep reserves above USD 1 billion. In July 2016, GIR amounted to USD 1.3 billion, which is twice lower than the level in July 2012. Even with the massive intervention, the exchange rate has depreciated by 54 percent vis-à-vis the U.S. dollar over the period from July 2012 to July 2016. The depreciation pushed up inflation, particularly in the second half of 2013 and 2014. Moreover, as the BOM's debt in foreign currency increases, the exchange rate depression leads to increase of the BOM's balance sheet loss.

Figure 6. The BOM's quasi-fiscal operations, BOP and exchange rate



Source: The Bank of Mongolia

Besides adding to inflationary and BOP pressures, the BOM's quasi-fiscal operations heighten banking sector vulnerabilities. As large monetary easing was implemented through the banking system, reliance of banks on government and central bank funding has been increased. Owing to the lending rate caps set by the BOM and the government (around half the commercial lending rates), the banks cannot adequately price credit risk of the borrowers. The policy loan programs created significant distortion of financial resource allocation across different industries as the programs provided cheap credit to only a few sectors selected by policy considerations. The banking system also became more exposed to higher concentration risks. As over 60 percent of policy loans were supplied to construction and housing sector through the PSP. The program also increased possibility of moral hazard in the banking system and weakened incentives to set aside sufficient capital buffers by allowing prudential regulatory forbearance. The regulatory forbearance allows zero risk weight to policy loans issued under the PSP. Loans to certain sectors (construction, transport and industrial sector) are also allowed to have lower risk weights (70 percent) than loans to other sectors. This substantial liquidity contributed to excessive credit growth during the period 2013-2014, and raised concern on the quality of bank loans that rapidly expanded over the years. Domestic credit growth reached its peak of 75.3 percent on year-on-year basis November 2013. The growth of bank credits to private sector has also peaked at 77.4 percent at the end of November 2013. The policy-led credit boom came with deteriorating quality of bank assets.

The low rate housing mortgage lending program was also implemented by the BOM instead of the budget in order to avoid possible termination of the politically popular program due to budget revenue shortages. While the large scale mortgage lending program has helped many households buy their homes, the program also added to excessive credit growth, inflationary pressure, raised household debt level, and housing prices continued to rise. Since size of the lending program is large, it has been key contributor of excessive credit growth. By stimulating the demand for housing market, the program also contributed to the spike in apartment prices. The number of total mortgage borrowers tripled to 89 thousand borrowers from 32 thousand borrowers. It implies that the demand for eligible apartments almost tripled, inevitably putting significant pressure on housing price inflation. Housing price in Ulaanbaatar rose over 25 percent in twelve months since the program began in May 2013. However, the bursting of the housing bubble started in September 2014 and ended in May 2017. Under the mortgage lending program, credit risk is envisaged to be transferred away from the banking system through mortgage-backed securities (MBSs) issued by the Mongolian Mortgage Corporation (MIK) without recourse to the banks. In view of the subsidized mortgage lending rates, yields on the MBSs may well be too low to attract private investors. Hence, the MBSs remained in the BOM balance sheet.

Starting from early 2014, the BOM faced a difficult policy challenge from high current account deficit, exchange market pressure, high inflation, depleting international reserves and rising non-performing loans. In particular, double-digit inflation and excessive credit boom with weak enforcement of prudential regulation has also led to rising problematic loans and weakening domestic demand. Substituting budget with the central bank's currency issuance power has put the BOM in a difficult position in the face of rising prices and deteriorating banking sector soundness amidst slowing economic growth. Economic indicators were signaling risks underlying the loose monetary policy and contemplating ways to gradually taper the BOM's expanded balance sheet. Moreover, international organizations such as Morgan Stanley and World Bank were recommending that monetary policy should be tightened through phasing out quasi-fiscal programs financed by the BoM and supply-side measures of the program have to be transferred to the government.

In 2014, the BOM took steps to address high inflation and the large BOP pressure by tapering some of policy loan programs. The BOM began to adjust its monetary policy stance to gradually tighten monetary conditions as the credit growth reached over 50 percent and inflation accelerated to over 13 percent: (i) the central bank withdrew MNT 900 billion that were deposited in banks; (ii) the policy rate was raised by 150 basis points to 12 percent in July 2014, the first policy rate increase since April 2012; (iii) about MNT 200 billion of cheap credit extended under the PSP has been withdrawn as they mature in 2014. However, the politically popular mortgage lending program remained providing continuous discounted loans to housing market. The tapering effect was limited as the mortgage lending program is gradually expanding and most of the policy loans under the PSP were expected to mature in 2015. In addition, as discussed in Section 4.2, the BOM also provided some direct liquidity injections through other quasi-fiscal operations starting from 2014.

As a result of tightening of monetary policy, reserve money growth has considerably slowed. The PSP phased out since early 2015, reducing the outstanding BoM credit to PSP to MNT 386 billion in August, from over MNT 700 billion at the end of 2014. The phasing-out of the Price Stabilization Program has slowed the balance sheet expansion, but central bank's domestic assets remain substantial with the growing housing mortgage program. The growth of reserve money or monetary base began to slow in mid-2014 and remained in a negative territory in most of 2015 due to: (i) declines in the net foreign assets of the central bank with continued foreign exchange market interventions; (ii) the phasing-out of the PSP by the BOM; and (iii) the slower reserve money supply from the government sector amid tighter fiscal conditions. As reserve money growth slowed, growths of monetary aggregates and credit growth decreased over time. The Monetary Policy Guideline for 2016 approved by the parliament clearly states that (i) the BOM phases out PSP and transfers the program to the government, and (ii) the BOM implements the housing mortgage program until the government takes over the program. The tightened monetary policy stance since late 2014 has contributed to stabilizing inflation and narrowing the current account deficit. However, credit and economic growths slowed down since adverse external shocks last longer and quality of bank assets deteriorated quickly.

Another adverse consequence of the quasi-fiscal operation was the BOM's losses sourced from long-maturity policy loans at the below market interest rate, negative net international reserves (driven by extensive borrowing from domestic banks and People's Bank of China under swap agreements), and exchange rate deprecation. As end of 2016, the accumulated BOM's loss was equal to MNT 3 trillion, equivalent to 32 percent of budget expenditure.

Overall, politically driven expansionary policies implemented for the period 2012-2016 to buffer the economy from the long-lasted external shocks supported growth for a while, but at the cost of increasing public debt, weakening BOP, and reducing banks' asset quality. As a consequence, Mongolia faced serious economic challenges in end of 2016. Rating agencies were downgrading our sovereign ratings, and investors' confidence was weak. Budget faced a large deficit because of a fiscal consolidation, and BOP pressures and speculative attacks were rapidly depleting international reserves. In addition, the repayments of the large sovereign debts were knocking the door.

In this tough environment, authorities decided to go with the IMF, and on 24 May 2017, The Executive Board of the IMF approved a three-year extended arrangement under Extended Fund Facility (EFF) for Mongolia in a total amount of about US$434.3 million (or 435 percent of quota) to support the country's economic reform program. In a rather short period of time Mongolian authorities, supported by the IMF, implemented a number of policy measures which enabled us to put our economy on the right track. Fiscal consolidation was performed through tax increases and expenditure cuts, large foreign debt payments were refinanced, banking sector reforms were initiated, and flexible exchange rate regime combined with a tight monetary policy enabled us to stabilize the economy and increase our official reserves.

These policy actions combined with benign favorable external conditions led to economic recovery. GDP growth was 5.2 percent in 2017 and the growth for first-half of 2018 has reached 6.3 percent. Investor and business confidences have improved following the approval of the IMF-supported package. Within a year, foreign reserves increased by over 90 percent and reached to USD 3 billion, covering 8 months of imports.

Important structural reforms are formulated to lay the foundations for long-term growth and break the boom-bust cycle. The key near-term focus was to strengthen the banking sector and enhance fiscal policy making. The strengthening of the banking system, crucial part of the program, to ensure that the banks can support sustainable and inclusive economic growth, is underway: The Asset Quality Review on the Mongolian banks was conducted to assess institutions' financial soundness and resilience, and improvements to the regulatory and supervisory framework are being implemented.

The adjustment and structural reform program, supported by the large package of external financing, was expected to stabilize the economy, and lay the basis for sustainable, inclusive, long-run growth. These policies aimed to restore public debt sustainability.

6. Conclusions

This paper has reviewed issues associated with quasi-fiscal operations of the BOM implemented during 2012-2016 in context of political economy. Under the quasi-fiscal operations, the BOM injected about MNT 7 trillion (which is equivalent to 69 percent of the M2 money supply or 40 percent of GDP) into the economy over the period 2012-2016. The foundation of the quasi-fiscal operations is based on public inflation aversion and public demand for affordable housing, prominent political issues for many years in Mongolia. Political demand for higher spending was also high in late 2012 since adverse external shocks (a collapse of FDI and declines in commodity demand and commodity prices) started to hit the Mongolian economy. The new government formed based on the June 2012 parliamentary election was also eager to start big programs having positive effects on social and economic developments. As a solution, authorities launched the policy lending programs - a fiscal policy operation in nature. The BOM has been actively financing the programs by directly injecting liquidity to targeted industries as the budget revenue remained weak.

The politically driven quasi-fiscal operations to buffer the economy from externally shocks supported growth for a while, but at the cost of accumulating public debt, weakening BOP, depleting net international reserves and reducing banks' asset quality. The policy response to adverse external shocks did not solve the underlying economic problems, but only delayed the economic recession. Since the adverse shocks lasted longer, the policy effort failed to buffer the economy from the recession, and as a consequence, the economy faced more serious economic challenges in end of 2016. The only choice left for the new government formed based on June 2016 parliamentary election was to request the support from the IMF in order to stabilize the economy, restore confidence, and pave the way to economic recovery. The consequences imply that the BOM has not been independent from the political pressures in practice while it is legally independent from the government.

Several lessons (and evidence) are learned from the BOM's quasi fiscal operations. First, a central bank needs to avoid quasi-fiscal operations if the share of imported inputs in production is high, exchange rate pass-through is high and international reserve adequacy is low. Large scale quasi-fiscal activities will likely also create additional economic burdens by creating inflation tax and adding balance of payment pressures. Second, quasi-fiscal programs blur the boundary between central bank's balance sheet and the government budget, undermining the role of the central bank as an independent keeper of price stability. Third, the central bank's large scale intervention in FX market to smooth exchange rate volatility (and to sterilize large scale money injected through quasi-fiscal activities) using the borrowed funding results in massive international reserves depletion (i.e., negative net international reserves), leading to huge exchange rate depreciation later. Fourth, the social objectives pursued by the programs (e.g. making housing more affordable) and efforts to address supply bottlenecks to curb inflation would be best pursued through structural reforms and the government budget. Loans should be transparently priced at market interest, with subsidies provided from the budget. Fifth, the central bank financing to quasi-fiscal operations weakens the effectiveness of the Fiscal Stability Law (FSL) and traditional monetary policy measures. Sixth, if needed, policy lending programs to support specific industries (or policy objectives) should be implemented through the government budget, competing with other spending priorities within the fiscal disciplines of the FSL. Seventh, if affordable housing remains an important policy priority, the housing mortgage program should be better targeted toward its objective of affordable housing. Strengthening the eligibility criteria and prudential regulation on the program would help the program serve the objective while reducing its adverse macro-economic impacts. Eighth, central bank's governance and independence should be secured for countries where political pressures on the central bank are high. Central bankers must be accountable for the powers delegated to them and disciplined in their exercise. Finally, quasi fiscal operations lead to a loss-making balance sheet structure, which accumulates the central bank losses over time.

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