



**THE BANK  
OF MONGOLIA**

# **INFLATION REPORT**

**2018**

**Sep**

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## MONETARY POLICY STRATEGY AND DECISION

### *Monetary policy strategy*

According to the Law on Central Bank, it is stated that “**The main objective of Bank of Mongolia is to ensure stability of togrog**”. Within this objective, in the medium run Bank of Mongolia implements monetary policy to stabilize the annual inflation rate measured by the consumer price index around its target rate set by the Monetary Policy Guideline. By stabilizing inflation at a low rate, the Bank intends to safeguard the real income and asset of households, to facilitate an environment conducive to banking and financial system stability and to promote investments and sustainable economic growth in the long run. Thus, based on the international best practice, Bank of Mongolia is gradually adopting inflation targeting framework as a monetary policy strategy.

In carrying out its monetary policy, the Central Bank alters the policy rate in response to changes in aggregate demand. By influencing the market interest rate the Bank affects the output, asset prices, expectations, exchange rate, and domestic demand, thus stabilizes the inflation rate. Coupled with the policy rate, in the international case, it is common to apply macroprudential policy measures such as setting adequacy ratios for the banking sector as a whole to cool down overheating credit market, to curb overcrowding of financial products in certain sectors and to limit financial dollarization.

Successful implementation of the inflation targeting strategy of monetary policy depends on the Central Bank’s ability to sustain market confidence and manage its expectations effectively. To this end, Bank of Mongolia publishes Inflation report each quarter to inform the public on the performance and forecasts of macroeconomic indicators, inflation, near-term economic outlook and factors that influence the overall economic outlook such as external environment, financial sector, aggregate demand, aggregate supply, employment, prices, and costs. Informing the public on monetary policy decisions consistent with the Central Bank’s target and inflation forecasts, and on the decision makers’ objectives, serves the purpose of facilitating the Central Bank transparency, building public confidence in the Bank, and thus supporting the Bank’s policy objective to stabilize inflation around its medium-term target rate by managing the market’s expectations and to facilitate a sustainable economic growth.

### *Monetary policy decision (September 2018)*

The Monetary Policy Committee of Bank of Mongolia upon meeting on September 20, 2018, decided **to keep the policy rate unchanged at 10.0 percent**. Inflation is expected to stabilize around the Central Bank’s target rate of 8 percent. Although supply-side pressure on inflation is expected to dissipate, following economic recovery demand side pressure is building gradually and likely to stabilize. In the first half of the reporting year, price of commodities remained relatively high in the global market leading to greater exports of minerals, investments expanded following economic recovery and thus economic growth accelerated. Considering the momentum of economic growth Bank of Mongolia improved its growth forecasts for 2018, yet expressed its concern over the implication of external conditions on the domestic economy /For details please see the Monetary Policy Statement/. Under such circumstances, the Bank noted the significance of building financial resilience of market agents and maintaining the internal and external balance of the economy.

### *Macroprudential policy decision (September 2018)*

Since rapid growth of consumer credits would add on household debt, prop up imports and pose a risk of financial system instability, under the framework of macroprudential policy the Monetary Policy Committee decided to set a maturity limit of 30 months on non-mortgage consumer credits, effective from January 1, 2019.

Extending foreign currency credit to unhedged borrowers or borrowers with limited income in foreign currency, would create pressure on borrower’s debt and augment the vulnerabilities in the economy and the financial sector. Hence, in order to shield the financial system stability, risk weight on unhedged foreign exchange loans is raised to 150 percent, effective from January 1, 2019.

## EXECUTIVE SUMMARY

Medium-term forecasts remained broadly in line with the previous forecast published in June report, however, uncertainties regarding external conditions are mounting.

**Inflation is expected to stabilize around the target rate.** Impact of one-time price changes and supply factors remains significant. This year summer days arrived later than usual, leading to higher prices of meat and vegetables and thus pushing inflation beyond previous forecasts in the second quarter of 2018. Non-food inflation, on the other hand, increased gradually, which is consistent with previous forecasts. Medium-term forecast for inflation is revised up slightly in this report as economic growth is expected to pick-up, cost effect from rising public sector wages is likely to weigh on inflation, prices of fuel products are expected to climb continuously, and a potential hike in some administered prices are expected in 2018. Nevertheless, inflation is estimated to stabilize around the target rate in the forecasting horizon. According to the baseline estimation, food inflation is expected to increase in 2018 mainly due to non-accommodating weather conditions, and to decline in 2019. As for 2020, food prices in the global market are expected to increase<sup>1</sup>, and the impact of rising wages is expected to weigh on food inflation, resulting in higher food inflation. Demand-pull pressure on inflation is expected to build on slightly and not to accelerate in 2018. However, as the impact of one-time price changes recede, non-food inflation is likely to be lower in 2018 compared to 2017. Following the recovery of non-mining sectors and rising wages, non-food inflation is estimated to increase in 2019 and slide back in 2020. Uncertainties regarding fuel prices, growth of labor productivity and rising labor costs may potentially alter inflation forecasts.

**Economic growth continues to recover yet uncertainties regarding the external sector are building.** In the first half of the reporting year, commodity prices remained relatively stable at the global market leading to greater revenue from exports, major construction activities were undertaken in the mining sector, greater investments were made following economic recovery and thus economic growth is gaining momentum.

In the second quarter of 2018, growth of manufacturing and trade sectors exceeded previous expectations, leading to greater revenue through net taxes. As the economy continues to pick up, employment is increasing and unemployment is declining in the labor market, resulting in greater household income. Growth of household consumption, investments, and sectors that exceeded previous expectations, are likely to keep its momentum, thus forecast of economic growth is upgraded from the previous report. In relation to rising content of gold in copper concentrates and increasing coal exports, production in mining sector is expected to increase in 2018-2019 and lose its steam in 2020. Although investments and construction activities in the mining sector are expected to generate positive spillover effects on the non-mining sectors, since production in agricultural sector is expected to shrink, growth in non-mining sector is estimated to decline in 2018. As investment continues to expand and the agricultural sector reaches its potential growth rate, growth in the non-mining sector is expected to pick up in 2019. Marginal spillover effect from major construction activities in the mining sector is expected to subside and rising wages are likely to push production costs, leading to slower growth of non-mining sector in 2020.

Although domestic economic conditions remain accommodating, potential risks in the external sector, such as geopolitical issues and trade conflicts between major economies pose threat to economic growth and are considered as downside risks. Starting mid-2018, actual price and forecasts of gold and copper declined, while the exchange rate of USD is appreciating against the currencies of developing economies. Price of oil continues to climb at the global market and thus creates a challenge for developing economies.

**Budget revenue overperformed and banks are expanding business loans.** Following economic recovery, budget revenue expanded, and thus fiscal balance reached a surplus. The government bonds at the domestic market are maturing and the government has not issued new debts as budget revenue and external funding are expanding. Following reduction of monetary policy rate, interest rates

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<sup>1</sup> [1] Level of harvest in the Euro area and Russia reached the lowest point in the last 3 years and is expected to remain subdued - "Reuters" agency.

on loans and deposits are declining, thus opportunities to finance domestic investments through bank loans are growing. Although consumer loans continue to grow at a rapid rate, bank credits issued for business purposes are showing signs of expansion starting the second quarter of 2018. When the policy decision to limit debt-to-income ratio on consumer loans comes to effect starting next year, growth of credit for business purposes is expected to accelerate. In addition, since rapid issuance of loans in foreign currency can potentially bring about negative consequences for the quality of loan portfolio, the Monetary Policy Committee of Bank of Mongolia decided to raise risk weights on foreign currency loans issued to unhedged borrowers to 150 percent. The decision comes to effect starting next year.

**Uncertainties in the external sector may affect the export prices and external demand negatively, thus poses downside risk to the growth outlook.** Compared to the previous report, assumptions regarding external demand worsened and is expected to weaken further. High levels of debt in China, its involvement in the trade war with the USA and shrinking investments are likely to reduce its growth during 2018-2019. Growth in Russia, on the other hand, remains stable owing to rising price of oil at the global market, acceleration of industrial production and growing household consumption. According to international analysts, such positive factors are likely to support the economy and growth is expected to accelerate on the back of accommodative economic policies. In case of the Euro area, unconventional expansionary monetary policy and relatively loose fiscal stance are supporting economic growth. However, economic growth in the area is expected to lose its momentum as the economic outlook of its trading partners and labor market conditions remain subdued.

Terms of trade, which is estimated as a difference between price of exports and price of imports, weakened slightly relative to previous estimations in the reporting quarter. Expectations of a declining trend remains unchanged in this report. In the second quarter of 2018, although price of coal climbed from the previous quarter, price of gold and copper declined leading to a weaker price of exports. At the same time, price of oil spiked, leading to rapid growth of import prices and thus weaker terms of trade. In 2019, the terms of trade is expected to weaken further as prices of main exporting commodities such as copper, gold, iron ore and coal are expected to decline, while price of oil is likely to increase. Main factors leading to lower copper and gold prices in the reporting quarter are the Federal Reserve's decision to raise its interest rate as expected thus resulting in appreciation of USD, a weaker outlook of growth in China and rising tension and uncertainty regarding trade conflicts between the USA and China. As for coal and iron ore, Chinese demand and its domestic policy are likely to further stall the prices. According to international analysts, price of oil is expected to climb further in the coming years, boosted by a potential negative shock to oil supply following the sanctions set by the USA on Iran and Venezuela.

Although price outlooks of main exporting commodities are on a declining trend, according to international analysts, it is expected to remain higher than in previous years. Relatively high prices of exporting commodities are leading to greater export revenues and thus supporting foreign trade balance. Yet, the current account and overall balance of payments are worsening due to payments of foreign debts and rising imports following increased investments and economic recovery. Feeding through the balance of payments deficits, factors such as rising tension regarding the trade conflict in the external sector, hike in benchmark risk-free interest rate and spike in oil prices, are pushing USD to appreciate against MNT. In addition, 142 more currencies have depreciated against the USD as of September 2018. Trade sanctions set by the USA on several countries and the trade conflict between the USA and China are likely to reduce foreign demand for Mongolia's exports and price of exporting commodities at the global market, while pushing the price of imports higher. Furthermore, the US policy actions are creating a risk of capital flight from developing countries and thus slower growth in the region.

## I. INFLATION

Inflation in the first 8 months of the year remained consistent with the 8 percent target rate set in the Monetary Policy Guideline for 2018. For instance, in August inflation reached 6.0 percent nationwide and 6.4 percent in Ulaanbaatar, while core inflation reached 6.5 percent.

Contrary to its seasonal trends, prices of meat and vegetables increased in June and July, thus pushing headline inflation in Ulaanbaatar to 8.8 percent in July. According to historical trends, price of meat usually starts to climb from the beginning of a year till mid-June and slides towards the end of a year. Price of vegetables shows a rising trend towards July and declines following the harvest season. However, price of meat did not decline, and prices of meat and vegetables increased, thus pushed headline inflation beyond previous expectations.

In addition, following the spike of oil prices at the global market, customs price of imported fuel products increased, leading to a total of 130 togrog shift in the domestic market through May and July.

Price of agricultural products usually follows its seasonal trends, yet weather conditions lead to sudden fluctuations in the prices. Such fluctuations are often short-lived and thus it is inefficient to take monetary policy actions as a response. In this regard, a core inflation is estimated by removing 41 items with significant price fluctuations such as meat, dairy, and vegetables from the headline inflation. Core inflation is an indicator of demand-pull inflationary pressure and thus can be tackled through monetary policy actions (Figure I.2).

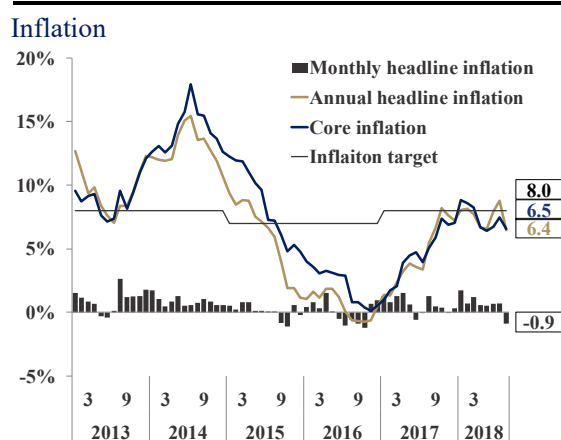
In July, price of meat and vegetables contributed 2.1 percentage points to annual headline inflation. However, the price declined in August, making a contribution of 0.6 percentage points to the headline inflation of 6.4 percent.

Main factor that pushed headline inflation beyond previous estimations was price of meat, vegetables and fuel products, which exceeded previous estimations due to supply side pressure. Compared to previous estimations, headline inflation is forecasted to be higher. Such revision is based on expectations regarding rising wages in the public sector and a potential hike in the prices of fuel products and administered prices.

Nevertheless, in the forecasting horizon inflation is expected to stabilize around the target rate. Since the loss of livestock was high and spring lasted longer than its usual trend, price of meat increased from the previous year and thus is expected to push food inflation up in 2018. As for 2019, weather conditions are expected to return to its historical trend. As such, supply of meat is likely to reach its usual level, price of vegetables to stabilize and thus food inflation is estimated to be lower than in 2018.

In 2020 however, supply of wheat is expected to be squeezed at the global market, potentially leading to higher

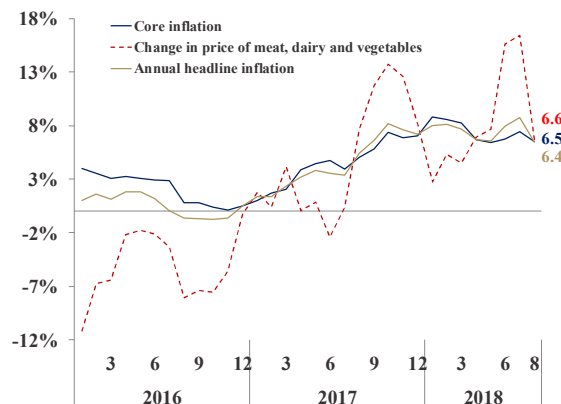
Figure I.1



Source: NSO

Figure I.2

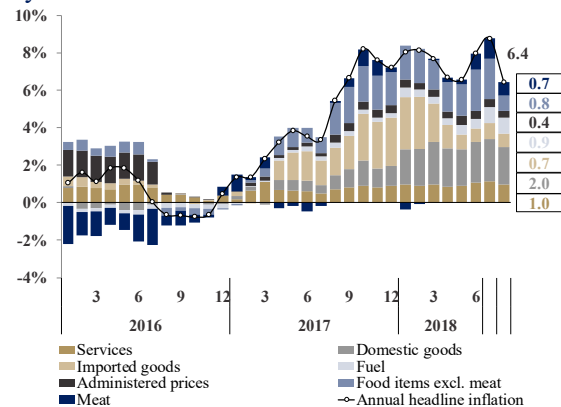
### Headline and core inflation



Source: NSO, Bank of Mongolia

Figure I.3

### Contributions to annual inflation in Ulaanbaatar, by main items



Source: NSO, Bank of Mongolia

food prices. In addition, boosted by rising wages, food inflation is expected to pick up.

Although demand-pull inflationary pressures are estimated to expand slightly, as supply factors with one-off effects (change in consumer basket, tax on automobiles, and a sudden hike of solid fuel price) are expected to subside, nonfood inflation is estimated to decline in 2018 compared to the previous year. In 2019, growth in mining sector and rising wages are likely to push non-food inflation higher, before stabilizing in 2020.

### Uncertainties regarding inflation forecasts

Actual performance may deviate from forecasts or the future forecasts may be adjusted due to potential changes in economic structure and policies, changes in assumptions and their realization, and unforeseeable changes in internal and external factors. Macroeconomic policies and some domestic and external factors that might alter the inflation forecast include:

- Shortage or surplus of supply may change inflation forecasts. For instance, any unannounced or unanticipated changes in administered prices (e.g. fuel prices) or weather conditions during the summer may alter supply of meat and vegetables and inflation forecast.
- Rising wages in public sector may lead to higher wages in private sector, thus rising labor costs may reduce the profitability in the private sector. Income effect of rising wages is expected to be limited since households have accumulated debt in recent years. As such development is inconsistent with its historical trend, impact of wage increase on inflation remains uncertain.
- At the global market, if oil price continues to climb beyond our assumptions, trade balance could worsen further for Mongolia. Such event may materialize if growth forecasts of the global economy remains stable (or demand for oil persists), OPEC and non-OPEC producers extend their agreement to limit production till the end of 2018, Saudi Arabia increases its daily production by a slim margin, and the second phase of trade sanctions on Iran is initiated in November.

Table I.1

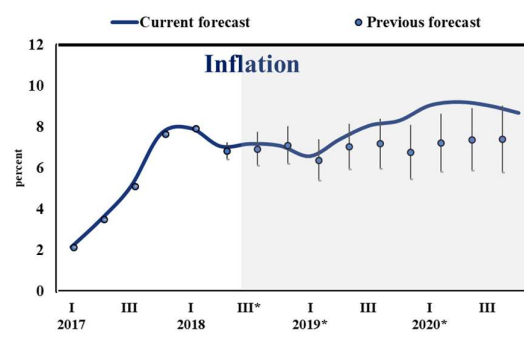
### Changes in inflation outlook

Assumptions regarding inflation forecasts	
Previous forecasts 2018Q2-2019Q1	Current forecasts 2018Q3-2019Q2
<b>Price of vegetables</b> Previously, the price of vegetable was estimated to decline towards the end of 2018 and due to base year effect annual growth was expected to decline.	<b>Forecast is lowered</b> Price of vegetables declined more than previous estimations, thus its negative impact on annual inflation at the year-end is estimated to rise.
<b>Administered prices</b> Price of education was expected to increase in the third quarter of 2018.	<b>Forecast is increased</b> Price of education increased in August 2018. In addition, prices of electricity, hot water and heating utilities, and cost of transportation across the country are expected to increase in September.
<b>Price of fuel</b> As domestic importers of gas and fuel products were running loss, it was assumed that the price of diesel fuel at the domestic market would increase in the second quarter of 2018.	<b>Forecast is increased</b> In the second quarter of 2018, domestic price of fuel increased greater than previous expectations. In addition, as price of fuel products at the border is expected to rise and shift to winter standards, another increase is assumed in October.
<b>Domestic goods</b> Price of solid fuel is expected to rise at the end of 2018, yet by smaller margin from previous year.	<b>Unchanged</b>

Source: Expert's judgement

Figure I.4

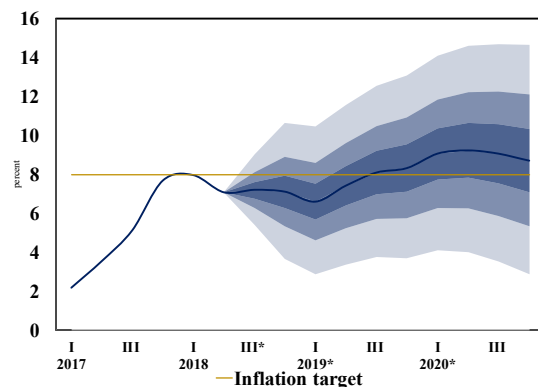
### Inflation forecast



Source: Bank of Mongolia

Figure I.5

### Inflation forecast



Source: Bank of Mongolia

## II. ECONOMIC GROWTH

Economic growth reached 6.4 percent in the second quarter and 6.3 percent in the first half of the year. It is supported by several factors, such as relatively higher prices of commodities, recovery of confidence and sentiment in market participants, acceleration of construction in major mining projects, and gradual expansion of credit supported by expansionary monetary policy.

**Aggregate demand:** Expansion of gross capital formation and accumulation of inventories made the greatest contribution to growth of aggregate demand, while contribution of household consumption was limited. Government expenditure made no significant contributions, while net exports had contractionary effect on aggregate demand (Figure II.1). Although prices of commodities remained high and thus boosted export revenue, payments for imports accelerated more rapidly. Supported by increased capital flow through FDI and export revenue, which exceeded previous estimations, aggregate demand expanded beyond the previous forecast in the second quarter of 2018.

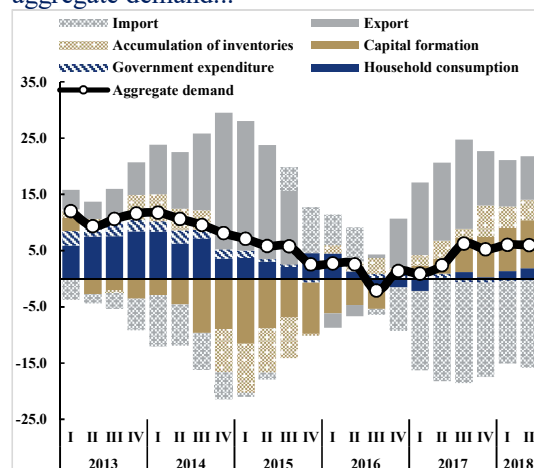
Under the scope of the second phase of Oyu Tolgoi project, capital inflow through FDI increased, other mining companies expanded their investments, investors' sentiment improved (Figure II.3), and inventories and working capital, such as machinery, equipment and non-residential real estate, were accumulated rapidly in the reporting quarter.

In the reporting quarter, investments expanded by 38.8 percent in real terms, from the same period of previous year, thus made a contribution of 13.6 percentage points to the growth of aggregate demand. Mirroring the expansion in investments, imports of machinery, equipment, and construction materials are growing rapidly. Ending the stagnation of past 3 years, credit to business sector, which is a domestic source for financing investments, picked up marginally in the reporting quarter (Figure II.2).

Household income generated through wage, salary, pension, allowances, and revenues from personal businesses has been growing since the beginning of 2017. However, household expenditure constantly exceeded its income, leading to a spike in demand for consumer loans<sup>2</sup> to finance the gap. Such demand for consumer loans is supported by robust labor market indicators<sup>3</sup> and gradual pick up in the index of consumer expectations starting 2016 and index of consumer's

Figure II.1

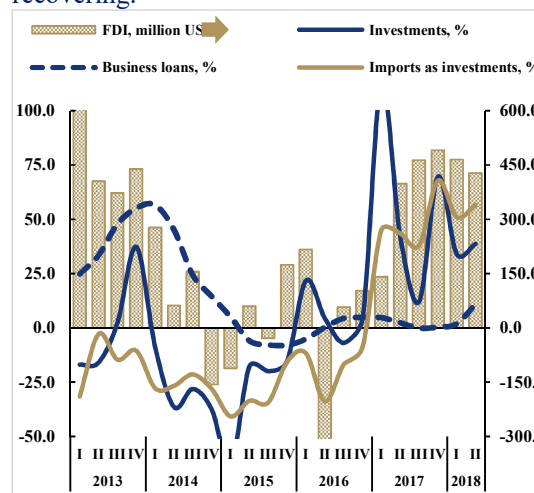
Growing investments and exports are supporting aggregate demand...



Source: NSO

Figure II.2

Imports is accelerating, following increased capital inflow. While, credit for business is recovering.



Source: NSO, Bank of Mongolia

<sup>2</sup> Consumer loans consist of loans collateralizing wage, pension and allowances and other consumer credits. For details, please look at section II.1.4.1 – Monetary and credit indicators.

<sup>3</sup> For details, please look at section II.1.2.3 – Labor market.

confidence in current economic condition starting 2017 (Figure II.5).

Thus, private consumption, which is mainly driven by increasing household income and consumption loans, grew by 3.9 percent y-o-y at the end of the reporting period, and its contribution to aggregate demand stood at 2.1 percentage points. In correlation with private consumption growth, consumption driven imports began to recover in the second half of 2016, and has been gradually speeding up throughout the last 3 quarters.<sup>4</sup> (Figure II.4).

**Budget:** Within the framework of measures implemented for the purpose of facilitating medium and long term debt sustainability of the government, budget expenditure on goods and services, which shrank abruptly last year, is beginning to recover in the reporting year<sup>5</sup>. For instance, government expenditure grew by 2.0 percent in real terms, and accounted for a 0.3 percentage point increase in aggregate demand.

In the reporting year, prices of mineral products persisting at a comparatively high level, improved capacity at the customs to export more coal, and recovery in the metallic content of copper concentrate from the open pit mines of Oyu Tolgoi were the key contributing factors to an increase in export revenues of 9.4 percent in real terms. On the other hand, due to the above-mentioned hikes in investment and consumption, import expenditure grew at a much faster pace than export revenues, at 22.1 percent in real terms, causing the net balance of trades to cut 9.9 percentage points out of aggregate demand growth in the reporting period.

**Aggregate supply:** Non-mining sectors such as trade, manufacturing, and other services<sup>6</sup>, and revenues from taxation levied on goods were the main drivers of economic activity on the supply side. Transportation sector demonstrated a modest positive effect, and contributions of the mining, agriculture, energy, and communication sectors were not significantly large, while the construction sector had slowing effect on aggregate supply (Figure II.6). Main contributing factor underlying the higher than expected growth in aggregate supply in the second quarter of 2018 was that domestic construction materials, textile manufacturing, and revenues from goods' taxes increased beyond previous expectations.

Investment picked up and household income and consumption expanded gradually, leading to growth in domestic production and imports, and a boost in

Figure II.3

Government bond yields are falling on the international capital markets, and investors' expectations are optimistic...

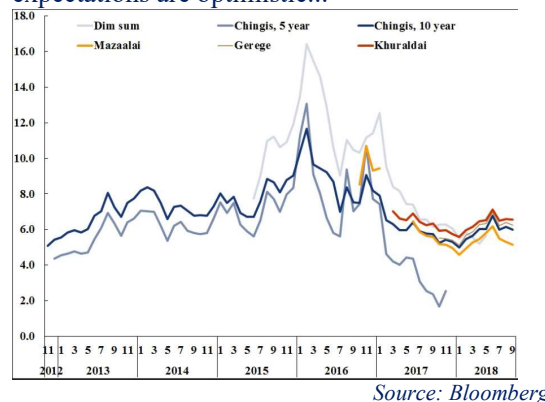
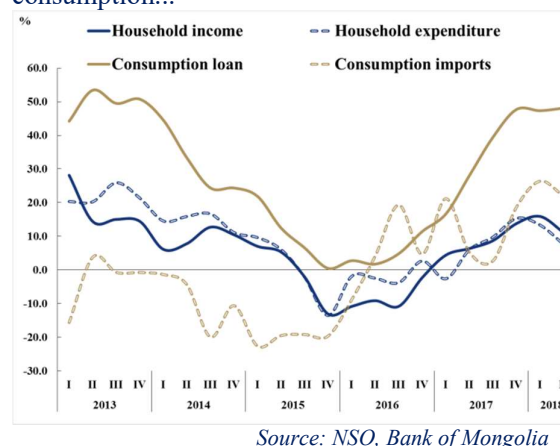


Figure II.4

Household income is on the rise, rising consumption loans is boosting private consumption...



<sup>4</sup> Approximately 40 percent of the consumer basket is comprised of imported goods.

<sup>5</sup> Please refer to Section II.1.3 – Consolidated budget and Government debt of Mongolia for detailed information.

<sup>6</sup> The growth in other services industry is mainly due to financial and insurance intermediation services, and real estate market activities.

purchases of goods and services. Thus, at the end of the reporting period, growth of manufacturing and trade sectors accounted for 1.0 and 1.1 percentage points in growth of aggregate supply, respectively. Net taxation on goods, which has been continuously rising for the last 8 quarters, accounted for a 3.0 percentage point increase in aggregate supply in the reporting period.

Driven by increased economic activities, banks and financial institutions registered a gradual recovery in their intermediation services<sup>7</sup>, such as lending and deposit collection, leading to a contribution of a 1.0 percentage point increase in aggregate supply in the reporting period.

Last year, activities in the mining<sup>8</sup> and transportation sectors expanded consistent with rising export revenues. Yet growth decelerated starting 2018, where each sector registered a contribution of a 0.1-0.2 percentage point to aggregate supply (Figure II.7).

Livestock breeding declined in the agricultural industry, causing birth rate to fall below the long-term average. Coupled with unfavorable weather conditions, it led to a comparatively high rate of livestock loss. Due to these conditions, overall agricultural production growth was weak, making only a 0.1 percentage point contribution to aggregate supply.

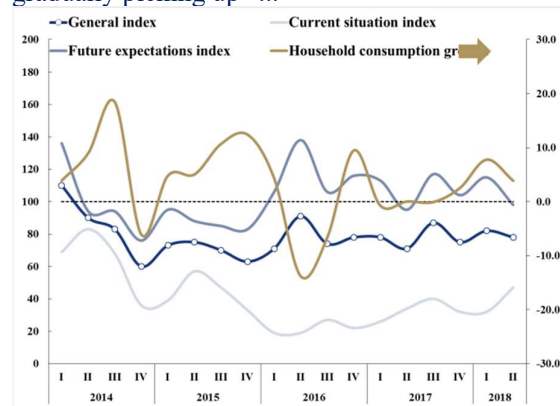
Household expenditure exceeded its income, and their ability to purchase real estate was limited. In addition, housing supply outgrew demand. A combination of such factors caused a sudden slump in real estate market activities and the construction sector in recent years<sup>9</sup>. On the other hand, development and extraction activities intensified in the mining sector, and road, bridge, and energy infrastructure projects financed through the government budget registered a gradual recovery, thus started off supporting the construction sector. Nevertheless, the construction sector had a negative effect of 0.3 percentage points on aggregate supply.

**Economic outlook:** Capital inflow is projected to remain at a high level and overall positive sentiment of entrepreneurs are expected to be sustained; thus, the current economic recovery is expected to remain buoyant (Future II.8).

Rising metallic content of copper concentrate, and significant improvements in coal transportation are expected to support growth in the mining sector in the

Figure II.5

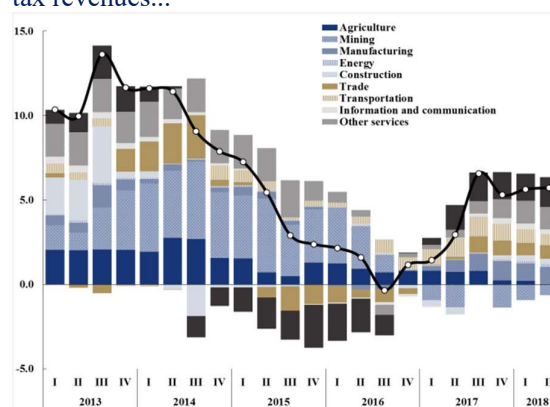
Consumers' confidence for the future is gradually picking up<sup>10</sup>...



Source: National Research and Consulting Center

Figure II.6

Aggregate supply is mainly boosted by manufacturing, trade, and service sectors, and tax revenues...



Source: NSO

<sup>7</sup> Please refer to Section II.1.4.1 – Money and credit indicators for detailed information.

<sup>8</sup> Aggregate mining output was shrank in 2017 due to declines in copper concentrate and metallic content from the Oyu Tolgoi open pit mine, but output of most other goods is increasing.

<sup>9</sup> Please refer to Section II.1.4.4 – Real estate market for detailed information.

<sup>10</sup> If the CCI takes a value above 100, this means that consumers are optimistic; if the index is below 100, this means that consumers are pessimistic, and it is defined by changes in two main parts: the current situation index, and the future expectation index.

latter half of 2018. However, mining sector growth is projected to decelerate in 2019 due to fluctuations in commodity prices in the global market, and expected to pick up again in 2020.

In the second half of 2018, manufacturing, trade, other services, construction, and transportation sectors are expected to be the main source of growth in the non-mining sector. Following such expansion, tax revenues are expected to grow. However, within the context of the measures implemented under Asset Quality Review, banks' profitability and financial intermediation operations are likely to remain weak, and livestock production to continue to decelerate.

It is projected that in 2019, capital inflow remains at a high level, developments in the mining sector continue, and weather conditions remain consistent with its long-term trend, which would entail recovery in the agricultural sector. In addition, supply of business loans is expected to pick up and thus profitability of banks, leading a gradual acceleration of growth in non-mining sector.

Starting 2020, assuming that the effect of large-scale mining projects on economic activity diminishes, and wage hikes push production costs up, acceleration of growth in non-mining sectors is expected to drop back (Figure II.9).

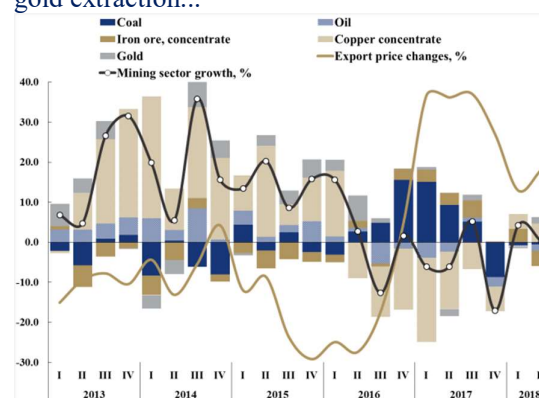
**Uncertainties that may potentially affect the economic outlook:** Current situation in the external environment is considered as the largest source of uncertainty which could potentially affect the economic outlook in the broadest scope possible. More elaborately, as the trade conflict between the USA and China escalates, and if any unanticipated trade policy decisions, such as import tariffs on certain goods is implemented, the global economic outlook, demand and prices of key export commodities are expected to be adversely affected. Furthermore, the scope of such adverse effect remains uncertain and it is difficult to quantify the implications on other economies.

Domestic source of uncertainties rises from the developments regarding mega projects and projects financed with budget investments, infrastructure issues in the mining sector, weather conditions, potential risks in the banking and financial sectors, safety of international financial transactions and payments systems, and favorable investment conditions.

If measures and preparations necessary for the activation of mega projects in the mining and heavy industries are accelerated, and its financing issues are resolved, commencement of such development would have sizable positive impact on economic growth. Of the

Figure II.7

Mining sector growth was defined by expansion of copper concentrate, metallic content, and gold extraction...



Source: NSO, Bank of Mongolia

Table II.1

### Changes in economic growth conditions

Previous projection (2018-2019)	Current projection (2018-2019)
<b>AGGREGATE DEMAND</b>	<b>Increased</b>
<b>Consumption</b>	Expectation remains unchanged.
Consumers' confidence continues to recover, and household income and wages will increase to boost private consumption growth.	
In correlation with measures taken to facilitate fiscal stability, Government expenditure on goods and services will gradually expand.	
<b>Investment</b>	Expectation improved.
FDI inflows will remain at high levels.	
Business owners' and managers' expectations are positive, growth in business loans is gradually increasing, leading to higher private investment in the domestic sector.	
In correlation with measures taken to facilitate fiscal stability, budget investment will gradually expand.	
<b>Foreign trade</b>	Expectation slightly declined.
Although external demand and export commodity prices fell, export conditions improved due to higher passage through customs.	
Investment driven import growth will gradually decelerate.	
<b>AGGREGATE SUPPLY</b>	<b>Increased</b>
<b>Mining</b>	Expectation slightly declined.
Outlook for external demand, commodity prices, and output of iron ore declined.	
Metallic content of copper concentrate will continue to increase.	
<b>Non-mining</b>	Expectation improved.
Confidence of market participants will remain positive, FDI inflows will increase, and mining sector developments will continue.	
Banks' profitability will improve, business loans will increase, thus leading to increased activity in the financial and insurance sectors in 2019.	
Normal weather conditions will aid recovery in the agricultural sector in 2019.	

Source: Expert's judgement

projects to be implemented in the near future, Erdenes-Tavan Tolgoi LLC is expected to commence its mining and infrastructure developments in the second half of the following year, by financing through the capital to be raised from the international stock market. In addition, through the loan extended from the Government of the Republic of India on preferential terms, the government is planning to commence its project on building an oil processing plant, its transmission pipes, and other necessary infrastructures starting next year.

In the event that the implementation and financing of development projects through budget and foreign loans and grants demonstrate a better performance than assumed, the economic growth would also exceed baseline projections.

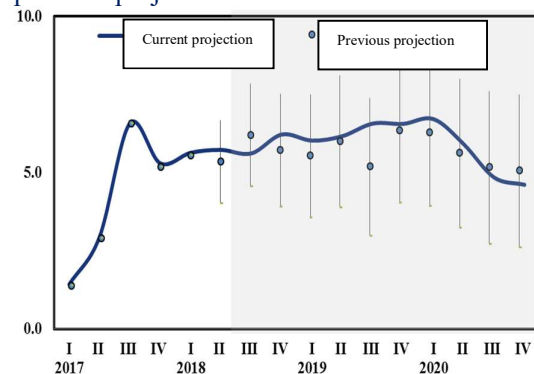
If pressing issues regarding infrastructure in the mining sector are resolved, continuous transportation services are provided, and the capacity of border points is improved, it is possible for the potential output of goods such as copper and iron ore to increase, and for export conditions to improve.

Agricultural sector production fluctuations are highly prone to weather conditions. In addition, uncertainty arises from the potential impact of policy measures directed at improving production efficiency with consideration of grazing capacity over mechanically increasing the headcount of the livestock.

Aside from the trade conflict in the external environment, other factors that could adversely impact economic growth are the accumulation of risk in the banking sector due to increasing dollarization, difficulties in the international transaction and payments systems in case Mongolia is added to the FATF grey list, and the deterioration of investment environment.

Figure II.8

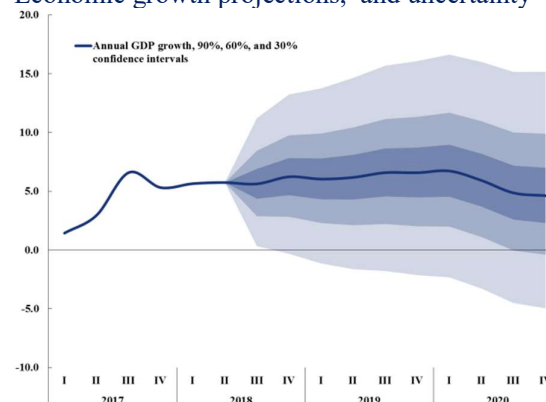
Current economic projection, comparison with previous projection



Source: Bank of Mongolia

Figure II.9

Economic growth projections, and uncertainty



Source: The Bank of Mongolia

Table II.2

Economic growth projections<sup>11</sup>

	2017 <i>actual</i>	2018* <i>projection</i>	2019* <i>projection</i>
GDP growth, %	5.3	5.0 – 7.5	5.0 – 8.5
Mining, %	-5.5	0.5 – 3.5	0.0 – 4.0
Non-mining, %	8.8	5.0 – 9.0	6.0 – 10.0

Source: Bank of Mongolia

<sup>11</sup> 30 percent confidence interval

### III. DOMESTIC ECONOMIC CONDITIONS

#### III.1. Labor market

As of second quarter of 2018, working age population grew by 1.6 percent reaching 2,260 thousand. Such growth is mainly attributed to an increase in the labor force and economically inactive population, and a decline in the number of unemployed people. In other words, number of economically inactive population stood at 881 thousand (3.0 percent y-o-y), economically active population at 1,379 thousand (0.7 percent), of which the labor force was recorded at 1,275 thousand (3.0 percent), and the unemployed population at 104 thousand (-21.0 percent) (Figure III.1.1).

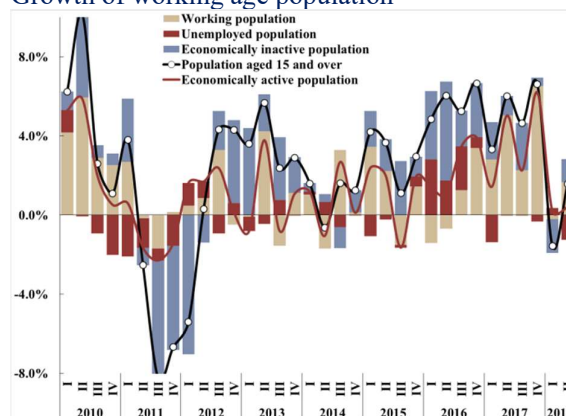
Labor market indicators demonstrated a comparatively strong performance. Although growth of economically active population did not exceed that of economically inactive population, and the labor force participation rate<sup>12</sup> fell by 0.6 percentage points y-o-y down to 61.0 percent, growth of labor force was higher than the growth of working age population, and the employment rate rose by 0.8 percentage points y-o-y to reach 56.4 percent. In the reporting period, number of unemployed people declined, and unemployment rate<sup>13</sup> registered a 2.1 percentage point decline y-o-y, reaching 7.5 percent (Figure III.1.2).

Total number of workers increased by 3.0 percent y-o-y at the end of second quarter, 2018 reaching 1,275 thousand. This can be attributed to a rise in the number of workers in sectors where economic activity is recovering such as mining, manufacturing, and transportation, as well as in public administration, education, and health sectors, while number of workers in the agricultural sector declined (Figure III.1.3). If decomposed by employment status, number of business owners has been on the rise in recent years, but in the reporting period, the number of paid workers increased, and the number of livestock farmers declined.

While there was a reduction in number of people who are not ready for employment and those who are studying, due to rising number of pensioners, people on childcare leave, and disabled citizens, the economically inactive population rose by 3.0 percent y-o-y in the reporting period, and stood at 881 thousand.

Figure III.1.1

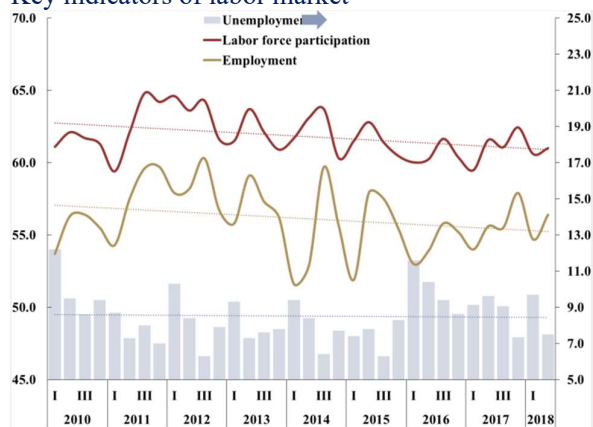
#### Growth of working age population



Source: NSO

Figure III.1.2

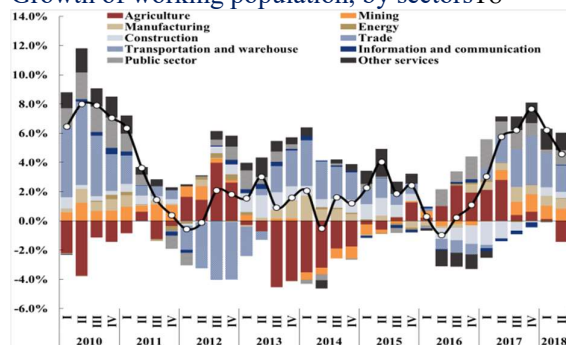
#### Key indicators of labor market



Source: NSO

Figure III.1.3

#### Growth of working population, by sectors<sup>18</sup>



Source: NSO

<sup>12</sup> Share of economically active population in the working age population

<sup>13</sup> Share of unemployed people in the economically active population

If key indicators of household income are considered, national average wage<sup>14</sup> rose by 6.1 percent y-o-y at the end of the second quarter, to reach 1,025.6 thousand togrog, the national median wage increased by 3.6 percent y-o-y, and stood at 725.1 thousand togrog. However, real wage, which is adjusted by the consumer price index and reflects people's purchasing power, fell by 1 percent y-o-y. Average household gross monetary income<sup>15</sup> grew by 11.2 percent y-o-y up to 1,147 thousand togrog; of which salary income expanded by 9.1 percent y-o-y to reach 558 thousand togrog (Figure III.1.4).

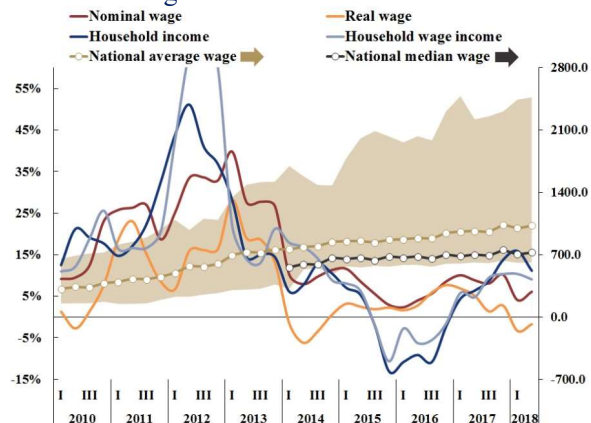
As for the main sectors of economic activity, average wage was between 613 and 2,468 thousand togrog. While average wages are rising rapidly in sectors where economic activity is picking up in recent quarters, namely mining, manufacturing, trade, as well as public administration, education, and health sectors, wages in agricultural sector are on a declining trend.

Labor productivity<sup>16</sup> registered a 3.4 percent increase y-o-y, and measures at 3,607 thousand togrog at the end of second quarter. Average labor productivity has been on a downward trend in recent years. When decomposed by key economic sectors, labor productivity took a sudden dive in the mining sector, remains weak in the trade sector, and unchanged in the agricultural sector, while it is on a rising trend in the transportation, construction, and manufacturing sectors (Figure III.1.5).

Unit labor cost<sup>17</sup> rose by 2.7 percent y-o-y in the reporting period, measuring at 0.28 togrog. Growth of unit labor costs is gradually pacing in recent years. Among key economic sectors, unit labor cost surged in the mining sector, and is anticipated to gradually increase in the manufacturing, construction, other services, agriculture, and trade sectors, while continues to fall in the transportation sector (Figure III.1.6).

Figure III.1.4

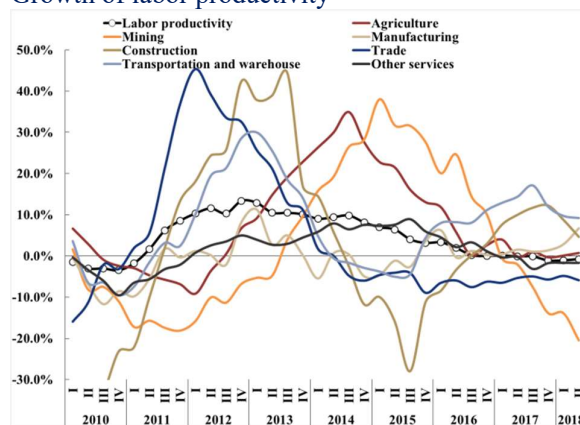
#### Growth of wages and household income



Source: NSO, experts' estimation

Figure III.1.5

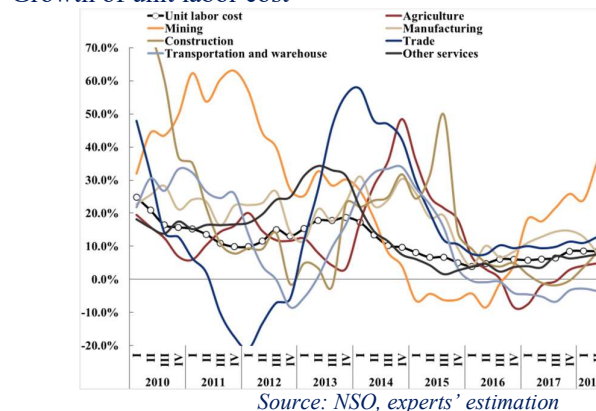
#### Growth of labor productivity<sup>19</sup>



Source: NSO, experts' estimation

Figure III.1.6

#### Growth of unit labor cost



Source: NSO, experts' estimation

<sup>18</sup>Growth of total working population calculated by the moving average of the last 4 quarters

<sup>14</sup> Source: Social security payments report from the General Office for Labor and Welfare Services

<sup>15</sup> Source: Household socio-economic survey of the NSO

<sup>16</sup> Average GDP per worker

<sup>17</sup> Average labor cost or wage cost per unit of GDP

<sup>19</sup> 8 month moving average of labor productivity and unit labor cost

### III.1.2 Potential output and the output gap

While potential output growth was exceeding 10 percent in 2011-2013, it started to decelerate since 2014. Since the last quarter of 2016, activity in non-mining sectors accelerated as a result of indirect effects of large scale development projects in the mining sector, leading to an expansion of potential output, which jumped from 2 percent to 4.7 percent in a span of 2 years (Figure III.1.2.1).

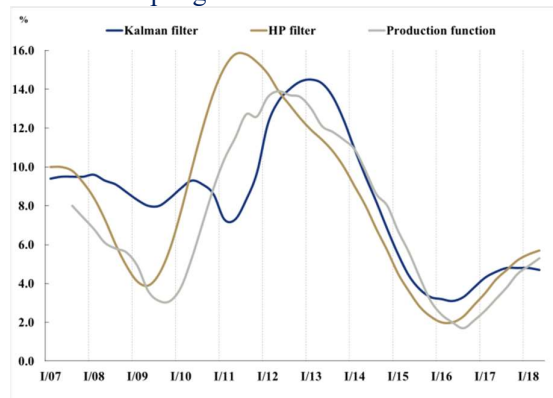
On the back of non-mining sectors, aggregate output was higher than its potential in 2011-2013, and therefore, the output gap was positive. Due to shrinking output in the non-mining sectors, the output gap was negative during 2014-2016, but has since picked up to stabilize around the potential level during the last three quarters (Figure III.1.2.2).

Although the mining sector was growing higher than its potential level since the end of 2013 owing to rising output of copper and gold, it has fallen below its potential because of reduction in the metallic content of copper concentrate since mid-2016. Output of iron ore decelerated in the reporting quarter, entailing a modest shrink in the mining sector output gap compared to the previous quarter.

As for the non-mining sector, the output gap remained negative from 2014 to mid-2017 due to domestic and external economic factors, while recovery in all mining sectors excluding copper concentrate, and investment growth led to a positive output gap starting late-2017. In the second quarter of 2018, non-mining sector output gap registered a modest expansion over the previous quarter as the net taxes on goods increased and activity in the manufacturing and trade sectors recovered.

Figure III.1.2.1

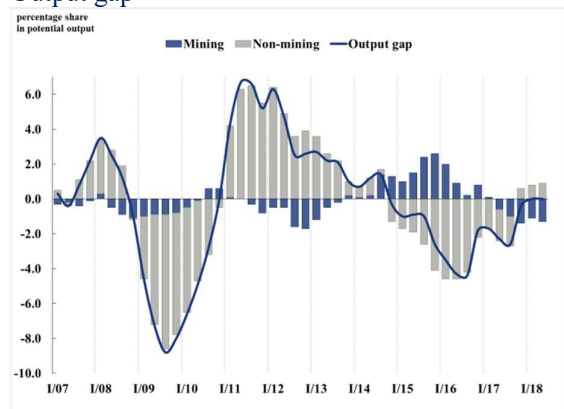
#### Potential output growth



Source: Experts' estimation

Figure III.1.2.2

#### Output gap



Source: Experts' estimation

## III.2 Monetary and financial sector

### III.2.1 Monetary and credit indicators

Growth of monetary indicators are stabilized, and growth of bank lending activities are gradually increasing. Money supply growth is still supported by expansions in net international reserves and loans. Although business loans picked up in the second quarter, growth of consumption loans remain high. In the reporting period, M2 money grew by 28.6 percent y-o-y, and outstanding credit at depository institutions increased by 17.6 percent.

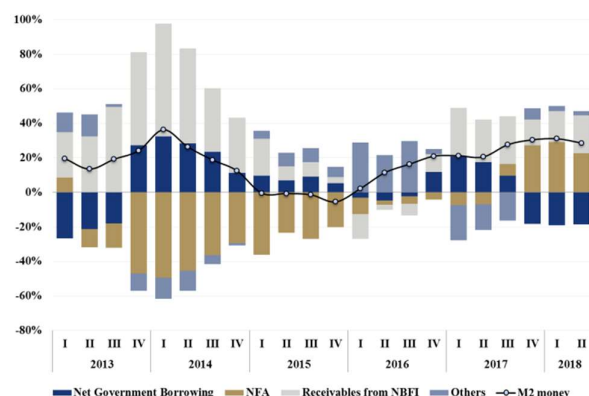
Capital inflow surged, and net foreign reserves demonstrated an increase of USD 1.4 billion, which accounts for 23 percentage points of the increase in money supply. Money supply growth is supported by investments in the Oyu Tolgoi underground project and other types of foreign direct investments, as well as financial support from donor organizations under the “Extended Fund facility” program. However, in recent quarters, growth of import has been soaring, and outstanding debt of the Government declined dramatically since the second half of last year and it is not issuing more debts. As such, a stabilization trend in growth of money supply is observed.

On the domestic economy front, net Government debt and loans by the banking sector are the main drivers of money supply. The budget was in surplus at the end of the first half of 2018, and need for domestic financing for budget deficit has receded. Moreover, the amount of domestic Government bonds owned by banks is rapidly declining as it reaches maturity, thus is expected to free up banks’ financing for credit issuance. As financing for credit expands, lending by depository institutions is increasing. Net Government borrowing reduced the money supply by 19 percentage points, while increases in lending by depository institutions and receivables from other financial institutions boosted money supply by 22 percentage points.

On the banking sector liabilities side, domestic currency deposits were the main factor of money supply growth. Growth of MNT deposits and current accounts made a contribution of 20.6 percentage point, a majority, for money supply growth.

Figure III.2.1.1

Composition of the annual growth of M2 money, asset side



Source: Bank of Mongolia

Table III.2.1.2

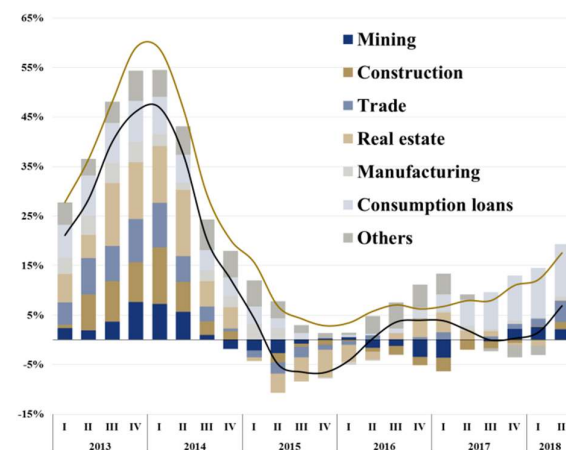
Money supply: assets and liabilities side

in billions of MNT	2014	2015	2016	2017	2018Q2
Net foreign assets	-2009	-4158	-4580	-1252	-1239
Net domestic assets	12643	14207	16723	17114	18582
Money supply /M2/	10634	10049	12143	15861	17343
M1 money	1816	1685	2125	2826	3353
Currency outside of banks	499	459	563	612	642
Deposit accounts, ₮	1317	1227	1562	2214	2711
Quasi money	8818	8364	10018	13035	13990
Savings, ₮	5410	5434	5791	8622	9258
Savings, \$	1969	1948	2790	2532	2499
Deposit accounts, \$	1439	982	1438	1881	2233

Source: Bank of Mongolia

Figure III.2.1.3

Annual growth of loans by depository institutions, by sectors



Source: Bank of Mongolia

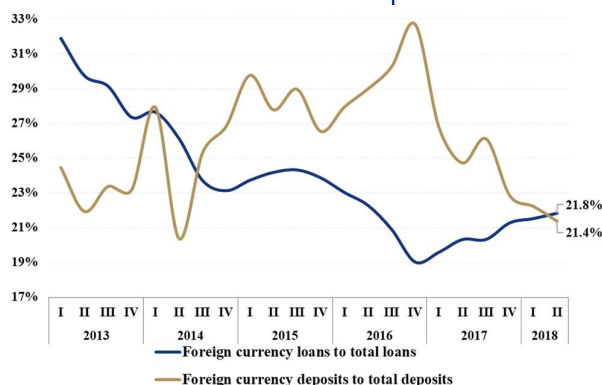
As overall expectations in the economy stabilized and volatility of togrog exchange rate subsided, dollarization of liability in the financial system decreased by 11.0 percent compared to the end of 2016, reaching approximately 22 percent in the reporting quarter.

Total outstanding loans issued by depository institutions including mortgage-backed securities (MBS), increased by 17.6 percent. Of which, the majority is attributed to growth of consumer loans in the past 5 consecutive quarters. On the other hand, growth of business loans, which has been persistently low in past years, started showing gradual recovery in the reporting quarter. Recovery in real economy and business activities encouraged growth of business loans. Among the sectors, trade, mining, construction, and manufacturing loans constituted the majority of growth in business loans. To be exact, 45 percent of newly issued loans and 46 percent of repayment of existing loans were comprised by lending in those 4 sectors. Growth in trade sector, the highest among the sectors, has been increasing over the past 3 quarters, as a result of improved repayment of existing loans and improvements in loan quality compared to other sectors.

A significant portion of the gradual growth of business loan was issued in foreign currency. For example, in the reporting quarter 31 percent of new loans for the trade sector were issued in foreign currency, which is 4 percentage points higher compared to the beginning of the year. Moreover, foreign currency lending for mining and manufacturing sectors is on the rise. One reason for banks to issue more consumer loans over business loans is the lack of improvement in the quality of loans in most sectors of the economy. In the reporting quarter, share of nonperforming and past-due loans in total loans in the banking system decreased by 1.4 percent since the beginning of the year, reaching 14 percent. This development is mostly due to improved quality of loans in trade sector without much upgrade in other sectors.

Figure III.2.1.4

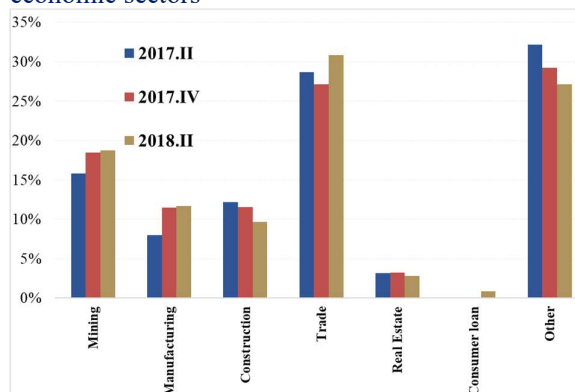
#### Dollarization of bank loans and deposits



Source: Bank of Mongolia

Figure III.2.1.5

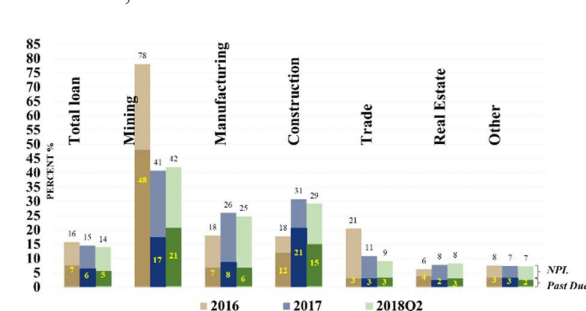
#### Structure of foreign currency loans, in economic sectors



Source: Bank of Mongolia

Figure III.2.1.6

#### Nonperforming and past-due loans, as percent of total loans, in economic sectors



Source: Bank of Mongolia

### III.2.2 Interest rate

The Monetary Policy Committee of Bank of Mongolia decided to keep the Policy rate unchanged at 10 percent at its meeting in June 2018. The interbank market interest rate of repo deals collateralizing central bank bills dropped by 0.66 percentage points to 10 percent; interest rate on direct deals with central bank bills declined by 0.73 percentage points to 10 percent; and interest rate of overnight loans declined by 0.74 percentage points to 9.9 percent, while the interbank deposit rate increased by 1.15 percentage points to 10.97 compared to the previous quarter. Thus, the weighted average of the interbank rate declined by 0.61 percentage points to 10.1 percent.

Government bonds were not offered in the primary market since October 2017. In the secondary market, however, only 2-year government bonds were traded, and its average yield stood at 11 percent.

Interest rates on bank loans and deposits have declined. In particular, the interest rate on MNT loans decreased by 1.1 percentage points q-o-q down to 18 percent, the interest rate on MNT deposits declined by 0.5 percentage points, reaching 12.3 percent. Due to a larger drop in lending rate compared to the deposit rate, interest rate margin narrowed to 5.5 percent. Tapering in interest margin has a positive impact of reducing the cost of business activity and promoting economic recovery.

Interest rates on foreign currency loans decreased by 1.1 percentage points to 10.2 percent while interest rates on foreign currency deposits remained the same as in previous quarter.

In the reporting period, relative yield of togrog decreased by 1.48 percentage points from the previous quarter and reached -0.54 percent, which is the first time turning negative since August 2017. Decline in MNT deposit rate and appreciation of togrog against US dollar, compared to the previous quarter, pushed relative yield of togrog down.

Figure III.2.2.1

Interbank market rates have declined.

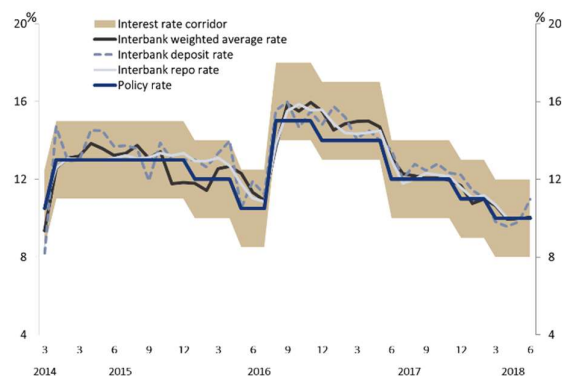


Figure III.2.2.2

Interest margin between loans and deposit narrowed.

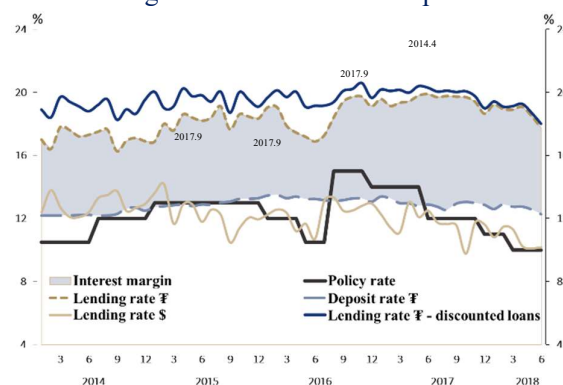
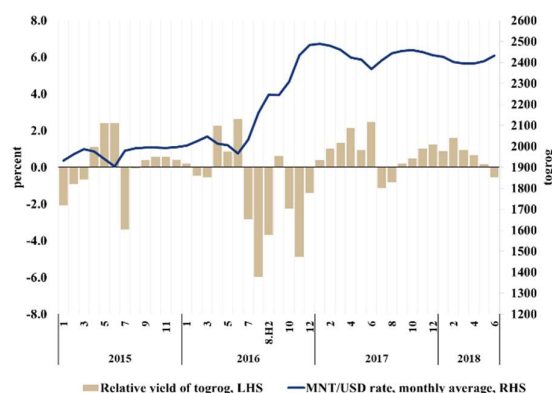


Figure III.2.2.3

Relative yield of togrog declined.



Source: Bank of Mongolia

### III.2.3 Exchange rate

As of June 2018, the average exchange rate of togrog against US dollar appreciated by 36.9 togrogs or 1.5 percent from the previous quarter and by 64.3 togrogs or 2.7 percent y-o-y, reaching 2432.3 togrogs.

A fundamental reasoning of such depreciation can be attributed to 93 million dollars of deficit in the balance of payments which was the result of payments for maturing bonds and increased imports of investment goods and industrial inputs in the reporting quarter.

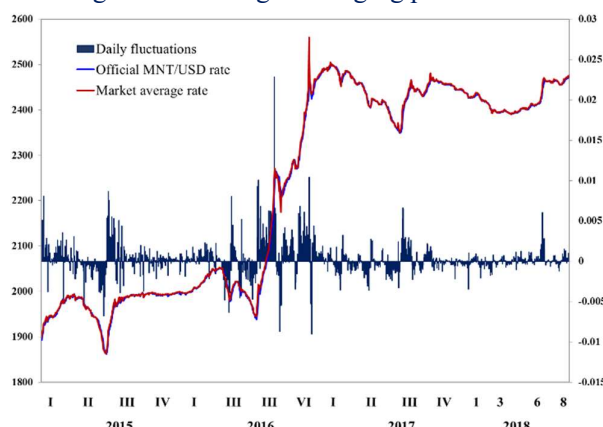
Exchange rate fluctuations have been relatively small<sup>20</sup> from the beginning of second quarter till mid-June. However, the fluctuations were amplified at the end of the quarter and depreciation pressure has risen. /Figure III.2.3.1/. Foreign currency deposits and current accounts held by individuals and companies increased by 6.6 percent from the previous quarter, and by 30.3 percent y-o-y. Although its volatility picked up at the end of the quarter, exchange rate has been relatively stable throughout the year. While exchange rate fluctuation is greater than its historical average by 3.5 percent, it has declined by 36 percent, and 87 percent, respectively from 2015 and 2016.

Nominal effective exchange rate (NEER) of togrog appreciated by 2.2 percent, and the real effective exchange rate (REER) of togrog appreciated by 3.9 percent from previous quarter, and the relative foreign price decreased by 1.7 percent. /Figure III.2.3.2/.

While togrog depreciated against US dollar, it appreciated against major trading currencies, leading to an appreciation of REER. Change in the US trade policy, trade sanction imposed against Russia, the slump of Turkish lira, and restructuring problems of Argentina debts pushed US dollar to appreciate against most currencies. Togrog depreciated against US dollar due to the above mentioned reasons, yet it appreciated by 2.5, 6.5 and 2.9 percent against Chinese yuan, Russian ruble and Euro, respectively /Figure III.2.3.3/.

Figure III.2.3.1

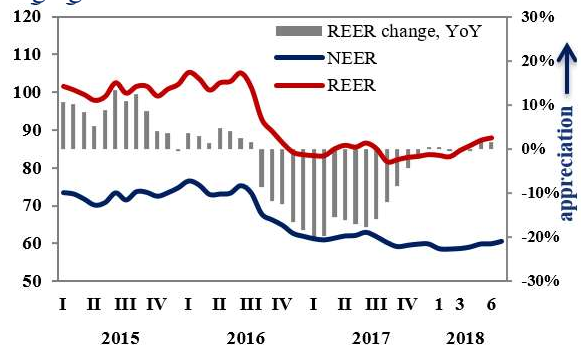
#### Exchange rate of Mongolian togrog per USD



Source: Bank of Mongolia

Figure III.2.3.2

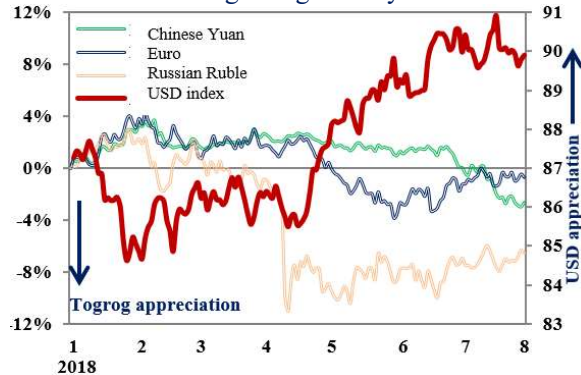
#### Real and Nominal effective exchange rates of togrog



Source: Bank of Mongolia

Figure III.2.3.3

#### Change in spot rate of togrog against main trading currencies /from beginning of the year/



Source: Bank of Mongolia

<sup>20</sup> Daily exchange rate fluctuations were 0.02 on average during April to mid-June, 2018, while the fluctuation at the end of June reached 0.2-0.6.

### III.2.4 Other capital markets

In the reporting quarter, housing price increased marginally. Increasing household income and number of new mortgage borrowers indicate improvement in household purchasing power.

Price of construction materials remained on a rising trend, thus pushing construction cost index to accelerate. Although the market capitalization is lower than that of the previous quarter, main indicators of the stock market and the market capitalization improved from previous year.

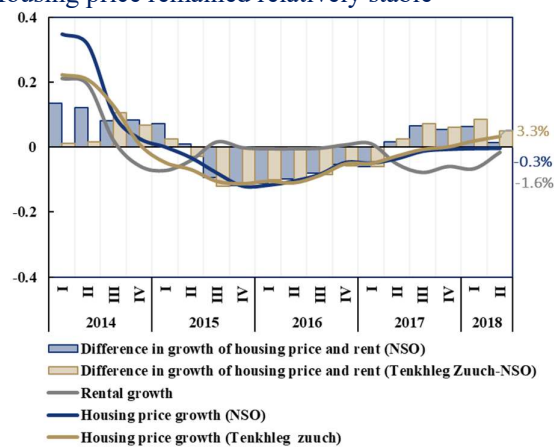
Housing price index reported by the National Statistical Office (NSO) remained stable for the past 3 quarters, while the housing price index estimated and reported by “Tenkhleg Zuuch” company showed slight upswing. In particular, the housing price index reported by the National Statistical Office (NSO) remained stable for past 3 quarters, with annual growth of 0.3 percent. As estimated by “Tenkhleg Zuuch” company, the housing price index grew by 1.6 percent from the previous quarter, and 3.3 percent y-o-y. More specifically, price of old housing increased by 0.8 percent and that of new housing rose by 6.9 percent y-o-y. Housing rent, on the other hand, has been declining throughout the year. Rate of decline, however, slowed down in the second quarter of 2018. Rental price declined by 1.1 percent from previous quarter and by 1.6 percent y-o-y. (Figure III.2.4.1).

Housing price-to-income ratio declined in the reporting quarter following increased household income (Figure III.2.4.2). More specifically, household income rose by 1.3 percent from previous quarter and by 11.2 percent y-o-y. While the number of new borrowers of mortgage loans declined throughout the year, rate of decline decelerated to 9.2 percent y-o-y and the number of new borrowers increased by 80 percent compared to the previous quarter. Increasing number of new borrowers and household income indicate improvement in household purchasing power. As for the price-to-rent ratio, it slightly increased from previous quarter as rents declined. Price-to-rent ratio remained relatively stable throughout the year.

Stock market indicators deteriorated from the previous quarter. For instance, the TOP-20 index reached 19746.7 units in the second quarter, increasing by 54.4 percent y-o-y, but declined by 6.2 percent q-o-q. Market capitalization reached 2.48 trillion togrog, which was an expansion of 66.0 percent y-o-y, yet 1.8 percent decline q-o-q (Figure III.2.4.5). The significant increase in the market capitalization from the previous year is explained by the rising share prices of APU, Gobi, and Mongol Post in the second half of 2017.

Figure III.2.4.1

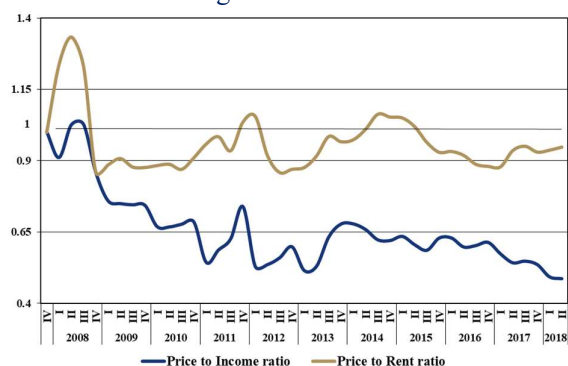
Housing price remained relatively stable



Source: NSO, Tenkhleg-Zuuch

Figure III.2.4.2

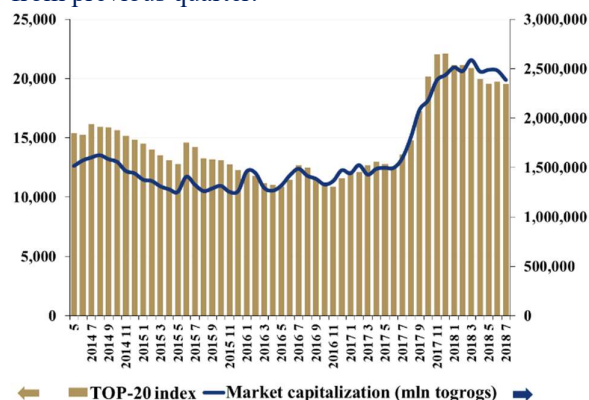
Demand for housing remained low.



Source: NSO, BOM estimation

Figure III.2.4.3

Growth of stock market indicators slowed down from previous quarter.



Source: Mongolian Stock Exchange

### III.3 Consolidated government budget and sovereign debt

**Consolidated budget:** As of July 2018, the overall equilibrated balance is in a surplus (of 291 billion togrogs) for the first time since 2010, as well as the primary balance<sup>21</sup> in a surplus of 871 billion togrogs. As the revenue surpasses its approved level, overall budget deficit is likely to be smaller than expected in 2018. Furthermore, with less financing needs and large payment of domestic government bonds, there is more room for government debt-to-GDP ratio to decline.

**Equilibrated revenue** collection reached 116.7 percent in July 2018. Of total equilibrated revenue, 88.5 percent was collected through taxes, while the rest, 11.5 percent, generated through non-tax revenues.

Revenue collection increased by 29.3 percent y-o-y, or 1153 billion togrogs, reaching 5'052.1 billion togrogs in the first 7 months of 2018. Such over performance in revenue collection was a result of positive developments in the economy and changes in customs duty and excise taxes, along with increased import of goods by 39.9 percent y-o-y in the first 7 months of 2018.

**Total expenditure and net lending:** In the first 7 months of 2018, budget expenditure increased by 6.1 percent y-o-y, reaching 4'761 billion togrogs. According to the approved budget, total expenditures are expected to increase by 7.5 percent y-o-y or 671 billion togrogs in 2018. Majority of such expansion would be allocated to capital expenditure and current transfers. In particular, spending on pension or social security (retirement and pension programs, disability insurance, survivor benefits, and veteran assistance) is planned to increase by 14 percent, or 200 billion togrogs and spending on social welfare programs (monetary and conditional assistance, nutritional assistance programs, elderly care and support, and other various funds for social support) is planned to increase by 240 percent or 120 billion togrogs.

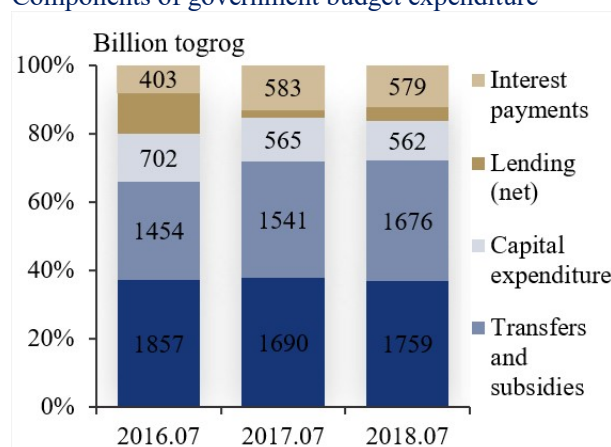
Table III.3.1

billion togrog	2017	2018	3-years average	2018.07	
	Act.	App.	/2015.07-2017.07/	Act.	%
<b>Total revenue and grants</b>	<b>7922</b>	<b>7863</b>	<b>3487</b>	<b>5620</b>	<b>116.7</b>
Future heritage fund	358	509	73	409	144.9
Stabilization fund	326	123	53	158	218.9
Total equilibrated revenue and grants	7239	7231	3361	5052	113.2
Tax revenue	6303	6269	2923	4471	116.5
Import related tax	1860	2114	816	1411	115.3
Value added tax	1032	1095	421	761	121.8
Customs tax	512	537	201	367	124.1
Excise tax	316	482	194	283	93.4
Income tax	1610	1408	678	1159	113.1
Social security contribution	1314	1425	650	854	107.0
Taxes on goods and services	986	823	402	557	119.6
Reimbursement of VAT	-147	-198	-55	-93	63.6
Other taxes	679	698	341	583	114.3
Non-tax revenue	936	962	437	581	93.2
<b>Total expenditure and net lending</b>	<b>8981</b>	<b>9652</b>	<b>4428</b>	<b>4761</b>	<b>75.5</b>
Primary expenditure	7825	8501	4004	4181	74.9
Primary exp. /-interest payment/	5850	6305	3144	3434	87.1
Capital expenditure	1646	1929	616	562	41.0
Net lending	329	267	244	185	68.3
Interest payment	1156	1151	424	579	80.6
<b>Budget balance</b>	<b>-1742</b>	<b>-2420</b>	<b>-1067</b>	<b>291</b>	
in percent of GDP	-6.5%	-8.0%	-3.5%	1.0%	
Primary balance	-586	-1269	-643	871	
in percent of GDP	-2.2%	-4.2%	-2.1%	2.9%	

Source: Ministry of Finance, Bank of Mongolia

Figure III.3.1

#### Components of government budget expenditure



Source: Ministry of Finance

<sup>21</sup> Subtracting interest payment from the overall equilibrated balance.

**Fiscal stance and fiscal impulse:** Mongolia's economic growth and budget revenue collection depend largely on the commodity price fluctuations and mining sector. Therefore, overall structural balance is adjusted by output gap to estimate the fiscal stance (cyclically adjusted fiscal stance).

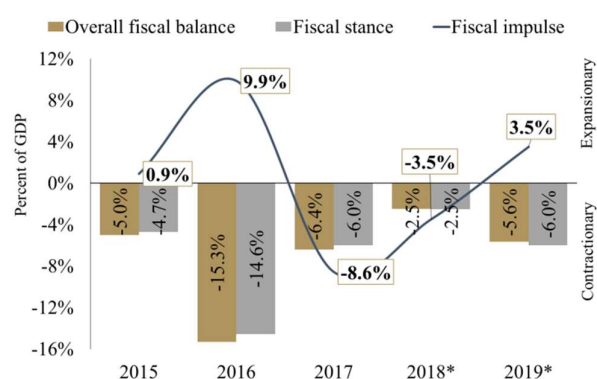
Fiscal impulse is expected to be -3.5 percent in 2018, meaning that the budget deficit in terms of nominal GDP will be lower than in 2017 by such percent, and indicates a contraction of fiscal policy from the previous year (Figure III.3.2).

**Debt repayment and debt roll-over ratio:** The debt roll-over ratio<sup>22</sup> persisted over 100 percent in recent years, a trend indicating build up of government debt in Mongolia. However, in 2018, the ratio is expected to be at 45 percent, as the government is set to pay 3800.2 billion togrogs for its debt principle, loans, and debt service, and to issue bonds and loans worth 1708.1 billion togrogs. (Figure III.3.3). These due payments are expected to be financed through a surplus in primary balance and revenues of the government funds.

**Total government debt at present value:** According to the approved budget, the present value of the government debt in 2018-2020 is projected to be within the legal limits (Table III.3.2). Moreover, given the favorable circumstances, government debt could even decline by an amount which the planned equilibrated revenue and special funds' revenue surpass the initially planned levels.

Figure III.3.2

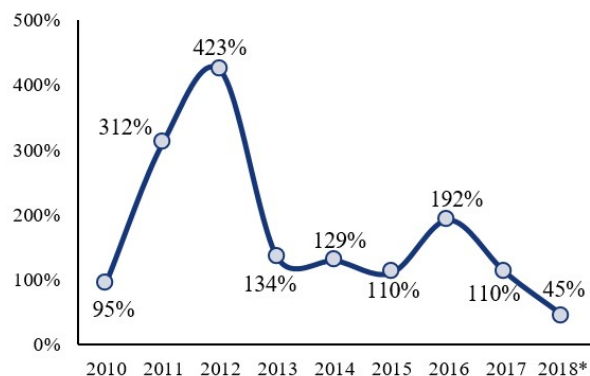
Fiscal stance and fiscal impulse



Source: BOM estimation

Figure III.3.3

Debt roll-over ratio



Source: Bank of Mongolia

Table III.3.2

Government debt and debt service, at present value

	2016	2017	2018	2019*	2020*
billion togrog	Actual	Actual	Approved	Forecast	Forecast
Total government debt	18964	22752	24310	25429	26296
in percent of GDP	79	85	80	75	70
Debt Cap/GDP	88	85	80	75	70
Debt service	988	1156	1151		
in percent of budget revenue	16.9	16.0	15.9		

Source: Ministry of Finance

<sup>22</sup> Ratio of newly issued debt-to-debt repayment

## IV. EXTERNAL CONDITIONS OF THE ECONOMY

### IV.1 Assumptions regarding external conditions<sup>23</sup>

*External demand has been revised down in 2019 due to a reduced forecast of growth in China and the Euro area. Despite the improvement in coal prices, the terms of trade is expected to deteriorate in line with lower copper and gold prices.*

**External demand** outlook for 2018 and 2019 is revised down from previous report, while conducting the macroeconomic analysis and forecasting in the second quarter of 2018. Within the forecasting period, slower growth in China and the Euro area are expected to reduce Mongolia's external demand. As published in external sources, 2018 economic growth forecast of China is revised down to 6.5 from 6.6 percent, that of Euro area is revised down from 2.4 to 1.8 while for Russia it is revised up from 2.1 to 2.3.

Chinese economic growth in the second quarter of 2018 exceeded previous expectations, mainly supported by growth of 6.6 percent in manufacturing and 6.0 percent in real estate investments. Moreover, inflation remained stable and unemployment rate declined to 3.8 percent in the second quarter of 2018, which signal expansion of household consumption. Despite the strong performance, ongoing China-United States trade war and mounting debt are the main factors to pull the growth forecast of China down. The PBOC cut some bank's reserve requirements by 50 basis points which took effect on July 5, and a further cut of 25 basis point is expected in 2019.

The Chinese authority's hesitation to increase the growth target signals its intention to limit risks in the financial sector. Such measures are expected to support economic stability and sustainable growth in the medium to long run.

Table IV.1.1

Changes in Key Judgements of External Environment	
Previous forecast of 2018-2019	Current forecast of 2018-2019
<b>External Demand</b>	Revised down slightly
GDP growth in China to slow down.	GDP growth in China to slow down further due to the ongoing trade war, Moderate recovery in Russian economy
No significant recovery in the Russian economy	
<b>Terms of Trade</b>	Revised down slightly
Commodity prices are relatively stable, Coal, iron ore prices are to decline.	Copper and gold prices are to fall, Oil price to increase, Coal and iron ore prices have downward trends, Import price growth will decline in line with depreciation of RMB and RUB against togtrog.
<b>Foreign Interest Rate</b>	Same as expected
FED rate is expected to increase.	FED rate is expected to increase, likely further appreciation in USD
<b>Foreign Inflation</b>	Revised up slightly
Foreign inflation to increase with higher oil prices.	The growth of trading partner countries surpassed the expectation, Oil price forecast increased

Figure IV.1.1

Forecast of external demand, y-o-y percent



Source: Bloomberg, Roubini, IMF, EIU, BREE

Manufacturing, exports, and consumption growth pushed economic growth in Russia to 1.8 percent in the second quarter of 2018, thus exceeding expectations. Growth forecast for Russian economy was revised up

<sup>23</sup>Forecasts of economic growth and inflation in main trading partner countries and the relevant explanations were compiled from August 2018 edition of Roubini Global Economics, May 2018 edition of EIU Global Forecasting Report, the median of forecasts conducted by Bloomberg analysts, April 2018 edition of the IMF WEO report. The external sector forecasts and their reasoning do not incorporate the views and analysis of Bank of Mongolia.

by 0.2 percent to 2.3 percent for 2018, taking into account the stable condition of factors supporting growth in the medium term, such as a combination of contractionary fiscal policy and expansionary monetary policy during 2018-2019, fiscal reform, positive outlook on oil price, and depreciation of RUB. On the other hand, the growth outlook was revised down by 0.1 percent to 1.6 percent for 2019. As for the Euro area, an unconventional monetary policy of the European Central Bank, and relatively loose fiscal stance have been supporting the economy. However, growth outlook was revised down by 0.6 percent to 1.8 percent for 2018, and by 0.1 percent to 1.9 percent for 2019, as the economic conditions weakened in some of its trading partner countries, while growth in the labor market remains unstable.

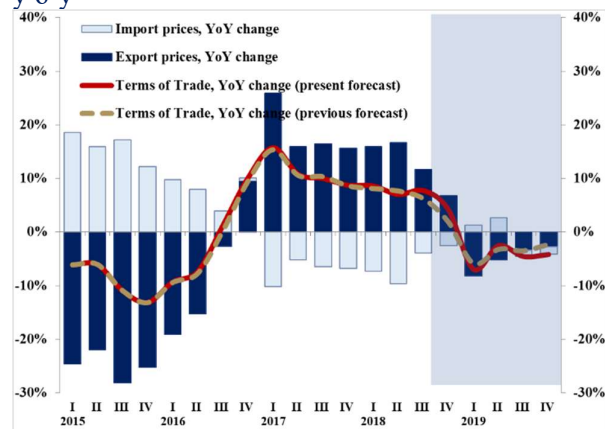
**Terms of trade:** In the upcoming two quarters, terms of trade is projected to improve compared to previous forecast, but the outlook is expected to worsen in the medium term. Export prices did not reach the expectations as copper and coal prices declined in the second quarter of 2018. Furthermore, increase in oil prices to 77 USD per barrel, exceeding the previous expectation of 65 USD per barrel, pushed import prices beyond previous assumptions, thus led to a weaker than expected terms of trade in the second quarter.

In the second half of 2018, growth of export price is expected to slow down due to falling prices of copper and gold, and growth of import prices is expected to decline in line with weaker RMB and RUB against togrog. In 2019, the terms of trade is anticipated to worsen due to likely increase in oil prices, declining prices of copper, gold, coal, and iron ore, and downward trend in coal price forecast though slightly improved.

**Foreign interest rate:** The Federal Reserve increased raised the federal funds rate by 25 basis points thrice in the first 3 quarters of 2018 to 2.25 percent, encouraged by declining unemployment, improved labor market conditions, rising real income and expectations of stabile consumption. The Federal Reserve signaled it would raise rates once more in 2018 and three times in 2019. Moreover, the Federal Reserve is squeezing its balance sheet, resulting in a lower price of long-term assets and higher yield. In August 2018, the yield on 10-year US treasury bond reached 3.0 percent, highest since 2011, while yield of 2-year US treasury bond reached 2.5 percent, highest since 2008.

Figure IV.1.2

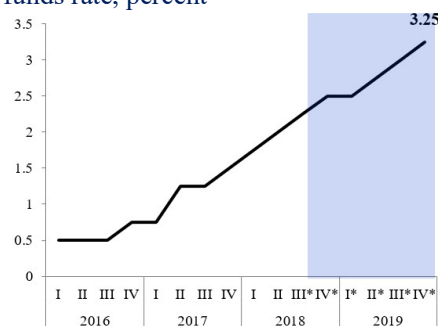
Changes in terms of trade, export, and import prices, y-o-y



Source: BOM estimations

Figure IV.2.5

Federal funds rate, percent



Source: Bloomberg

**Global inflation** Economic growth in main trading partner countries which exceeded the market expectations and rising oil price on the international market remain main factors to revise the global inflation projection up. Domestic demand increased in European developed countries and depreciation pressure on euro looms as the ECB proceeds with its unconventional expansionary monetary policy. As a result, inflation in Euro area is expected to reach 1.7 percent in 2019. Inflation in China increased by 1.8 percent in first half of 2018 as The People's Bank of China (PBOC) lowered its required reserve ratio and expansion of domestic demand is expected to be maintained. While producing its projections, Bank of Mongolia assumed inflation in China to be 2.1 percent in 2018 and 2.3 percent in 2019, expecting the expansion of Chinese domestic demand not to accelerate. Inflation in Russia is expected to reach 2.9 percent by the end of 2018 due to loose monetary policy, high oil price, and buoyant economic growth. Compared to other advanced economies, outlook in the US remains positive. However, appreciation of US dollar, high oil price, and uncertain trade relations are expected to push its inflation up. Thus, the Bank's assumption that the US inflation rate would exceed the 2 percent target remains broadly unchanged. The US unemployment rate is assumed to fall further and private consumption growth is expected to resume. These factors are likely to spur the economic growth, pushing the inflation to rise and hover around 2.3-2.5 percent for 2018-2019.

#### **Uncertainties in external economic conditions**

- The trade conflict between the US and China is expected to escalate and import tariffs come into effect starting in September of this year. It is projected to weigh on exports and economic growth of the two country. Furthermore, uncertainties revolving around the tension between these countries impede not only the Mongolian economy, but also the world economic conditions and prices of key base metals. It is difficult to estimate the impact of such conflict on the world economy. Moreover, there is risk of volatility in prices and demand for export commodities, conditional on unanticipated policy changes. In response to the tariffs imposed by the US, China is projected to loosen its fiscal and monetary policies gradually to enhance its domestic economy and maintain its competitiveness.
- Chinese government is taking multiple measures to create balanced growth based on domestic demand. These measures include reducing air pollution and unemployment, decreasing debt in the medium and long term, implementing policy actions to strengthen financial regulations, and steadily lowering the GDP growth target. The adverse effect of these policy measures on our country's external demand remains. These proposed policy options entail the risk of causing a slowdown in the real estate market, and slumping steel production could eventually lead to shrinking demand for coal and iron ore.
- If oil price exceeds our assumptions Mongolia's external trade balance would be negatively affected, as it is an oil importer. The second phase of the US sanction on Iran is projected to come into effect in November bringing more uncertainty on the global oil market.
- The US foreign policy, Federal reserve's persistence to steadily tighten its monetary policy, and rising bond yields are likely to increase the demand for US dollar, thus to fuel the trend of US dollar appreciation against other currencies. Moreover, internal instability in emerging markets such as depreciation of the Turkish lira, the Argentinian debt crisis, and political unrest in Brazil are dampening investors' confidence. As a result, risk of capital flight arises in these countries.

The above-mentioned risks can potentially lower our country's external demand and adversely affect the prices of commodities and base metals in the following forecasting period. These potential downside risks can diminish Mongolia's export revenues and impair the foreign investment climate.

## IV.2 Global market prices of main exporting commodities of Mongolia

*Gold and copper prices dropped in the reporting quarter mainly due to appreciation of USD, a downward revision of China's growth projections, and uncertainty arising from the trade conflict of the US and China. Coal prices declined as a result of increased coal imports and production in China. On the other hand, price of oil exceeded previous assumptions as expectations regarding the US sanction on Iran mounts and productions by the OPEC countries are expected to decrease.*

**Copper:** Price of copper was 7,075 USD per ton on average in the first quarter of 2018, and 6,747 USD in the second quarter, but it declined to 6,251 USD in July. Improved projections of supply for 2018 by some research agencies and trade conflict between US and China were the underlying cause of 16 percent price decline in the last 2 months. In the coming quarters, copper demand will depend on China's economic growth, macroeconomic policy, and international geopolitical uncertainty. Copper supply is expected to be shaped by several factors including issues of wage and labor conditions of mining workers in Chile<sup>24</sup>, and anticipation of rising production of renewable energy and electric transportation vehicles in the next 2 years. The world copper concentrate output is expected to be 21.4 tons in 2018 and it is projected to increase to 22.3 tons in 2019, thus likely to push the copper price down in the medium term. As a result, the IMF and Bloomberg revised copper price projections down to 6,191 USD per ton for 2018.

**Gold:** Price of an ounce of gold was at 1,311 USD on average in the first quarter of 2018, and 1,314 USD in the second, but declined to 1,286 USD in July. On gold market, expectations of policy hike by the US Federal Reserve, and appreciation of USD weakened demand for gold, thus led to a drop in price. Although demand for gold as jewelry is increasing, US unemployment is projected to decline, a series of hike in federal funds rate is expected, and inflation in advanced economies is forecasted remain at moderate level, causing relative yield of USD to soar and pushing gold prices down in 2018-2019. Based on these assumptions, Bloomberg's analysts revised the gold price forecast down to 1,201 USD for 2018.

**Thermal coal:** Price of thermal coal was 76 USD per ton on average in the first quarter of 2018, and 89 USD in the second, but declined to 87 USD in July. Although Chinese imports of thermal coal increased to 19.22 tons by June 2018, expectations of greater supply led to lower prices in July. China is expected to maintain its imports of thermal coal at a stable level for this year, while the US and some countries in the Euro area are planning to reduce their coal usage to address environmental pollutions. On the other hand, relatively high price of crude oil is deterring the possibility to substitute coal with cheaper alternatives. Therefore, the IMF, World Bank, Australian Department of Industry, Innovation and Science, and Bloomberg revised coal price projections down to 96 USD. Moreover, according to the "Resources and Energy Quarterly" report by the Australian Government, under the price stabilization program the Chinese authorities might increase production of thermal coal in its leading coal producing regions, Shanxi and Inner Mongolia, by 250 million tons. Such measures may have unfavorable consequences on Mongolian coal exports.

**Coking coal:** According to the contract between Japan and Australia, benchmark price of coking coal increased to 219 USD per ton in the first quarter of 2018, while it decreased to 199 USD in the second and 185 USD in August. In February 2018, coking coal imports in China declined to 2.9 million tons - the lowest in the last two years, while it picked up to 7.4 million tons in July, which is a 33 percent growth y-o-y. Assuming the coking coal production to reach 1 million tons in 2018 and demand and production of steel not to slide, analysts at the IMF, World Bank, Australian Department of Industry, Innovation and Science, and Bloomberg kept its coking coal price forecasts stable at 202 USD per ton on average for 2018. As Chinese authorities are aiming to substitute coal usage with natural gas and utilize solar and wind power more intensely in the following 5 years, price of coking coal is expected to slide in the medium term.

**Iron ore:** In the first quarter of 2018, price of iron ore reached 69 USD per ton on average, and 63 USD in the second, but increased to 65 USD in August. China's manufacturing PMI increased to 51.3 in August 2018 and steel production in China expanded by 7.2 percent y-o-y in the second quarter of 2018, leading to higher iron ore prices. In the following quarters, main exporters of iron ore such as Australia and Brazil, are

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<sup>24</sup> Negotiation to make labor contract is not finalized yet- 84 percent of Worker's Union members rejected the last quote on the wage offered by "BHP" Ltd.

expected to increase their supplies. Considering such expectations, the IMF, World Bank, Australian Department of Industry, Innovation and Science, and Bloomberg kept their price forecasts intact around 62 USD, which is a slight decline from current levels.

**Crude oil:** A barrel of Brent oil was sold at 67 USD in the second quarter 2018 and increased to 76 USD in the second quarter and August. Higher price was supported by expectations of negative shocks to oil supply following potential sanctions on Iran and Venezuela by the US. The crude oil price projection remains uncertain. Nevertheless, OPEC and non-OPEC countries reached a consensus to extend their agreement on cutting their supplies until the end of 2018, but decided to increase their daily production by 0.5 million barrels, while production in the USA is expected to increase. Consequently, the IMF, World Bank, Australian Department of Industry, Innovation and Science, and Bloomberg revised their price projection up to 73 USD per barrel for 2018.

### IV.3 Balance of Payment

As of the first half of 2018, balance of payment was in a deficit of 135.2 million USD, which is an increase of 61 million USD y-o-y. For the second quarter only, balance of payment recorded a deficit of 92.9 million USD, which is a widening of 50.9 million USD q-o-q and 182.6 million USD y-o-y. A surplus of 376.6 million USD in the financial account financed a deficit of 292.9 million USD in current and capital accounts. But the overall balance reached a deficit of 92.9 million USD<sup>25</sup> or 0.8 percent of GDP<sup>26</sup>.

Deficit in overall balance can be mainly broken down to (i) the government's payment of 1 billion CNY for the remainder of "Dim sum" bond which was issued on the international market in 2015 and (ii) imports.

**Current account deficit** widened to 2.6 percent of GDP in the second quarter of 2018, while it was 1.1 percent of GDP in the second quarter of 2017 (Figure IV.3.2). Although increased export revenues and slightly reduced deficit in income account supported the current account, it was negatively affected by widening deficit in transportation and business services, and a growth of 41 percent y-o-y in imports, which was triggered by the development of Oyu Tolgoi underground project, rising FDI and economic recovery. In the second quarter, export revenue increased by 293 million USD (16.2 percent y-o-y), of which 14.6 percentage points can be attributed to rising prices and 1.6 percentage points to expansion of volume. Prices of copper, coal, crude oil, and cashmere are at higher levels compared to last year, thus supporting export revenue y-o-y; yet prices of copper, gold and iron ore have been falling since the beginning of this year. (please refer to the terms of trade section for the details). Exporting volume of copper, coal, and iron ore contributed significantly to the overall exports volume, while a reduction of 2.9 tons y-o-y in gold volume was the main factor of slightly lower growth of exporting volume y-o-y (Table IV.3.2).

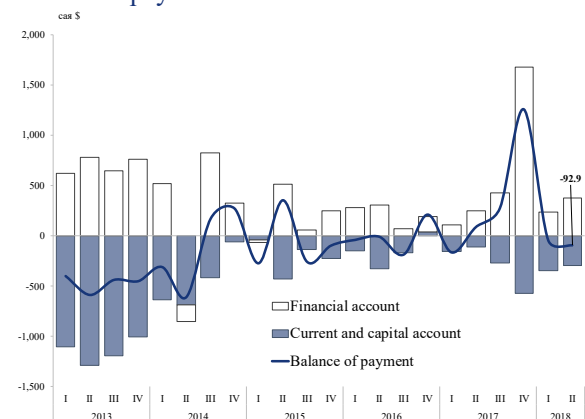
In mining and construction sectors, machinery and technological upgrades that were not carried out last year were completed this year, with the development of the Oyu Tolgoi underground project and economic recovery. Consequently, imports of capital goods, constructions materials, and fuels expanded rapidly, pushing total imports to grow by 41 percent y-o-y. For instance, the majority or over 70 percent of overall growth in imports can be attributed to imports of capital goods (of which 8 percent is of construction imports), while 5.3 percent is composed of oil imports. Imports of consumer goods increased by 22 percent, constituting 6.6 percent of total

Table IV.3.1

BOP projection assumptions	
Previous projection in 2018Q1	Current projection in 2018Q2
<b>Export</b>	Revised up slightly
Customs' capacity for coal export is constrained	Customs' capacity for coal export improved, Coal and crude oil prices will increase slightly, but copper and gold prices will fall.
<b>Import</b>	Revised up
Machinery and equipment imports will reach potential level beginning in 2018Q3	Machinery and equipment imports will continue to increase (however the acceleration will slow down) Fuel imports will increase
<b>Foreign direct investment</b>	Revised up
FDI is to increase	FDI is to increase: Investor's loan repayment will decrease
<b>Portfolio investment</b>	Broadly unchanged

Figure IV.3.1

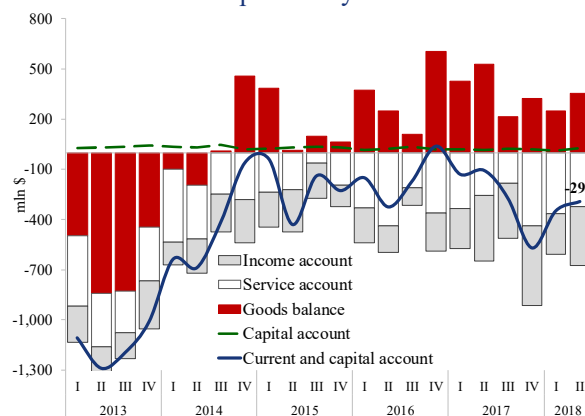
Financial account surplus increased, while current account deficit widened resulting in a deficit of balance of payment.



Source: Bank of Mongolia

Figure IV.3.2

Trade surplus declined, resulting in a wider current account deficit from previous year.



Source: Bank of Mongolia

<sup>25</sup> Errors and omissions of USD -176.7 million in the reporting quarter was reflected in the overall balance.

<sup>26</sup> Cumulative of nominal GDP in the last four quarters.

y-o-y growth in imports (Table IV.3.2).

In the reporting quarter, rising cost of transportation services in foreign trade widened the deficit in business services account, leading to greater deficit in overall services account, while the deficit in construction services narrowed marginally. In the second quarter, deficit in services account reached 2.6 percent of GDP, which continues to drag the current account balance.

Deficit in income account was maintained in the reporting quarter, totaling to 414 million USD, which demonstrates a 16 million USD reduction from previous year. This was partially due to a slight decrease in interest payments on external loans. Although deficit in income account narrowed slightly from previous year, it continues to impose substantial pressure on the overall balance. For example, deficit in the primary income account was equivalent to 20 percent of GDP in 2012, but increased to 135 percent in 2017 as external liabilities increased every year. However, this ratio declined to 130 percent in the second quarter of 2018, as interest payments by banks and enterprises diminished (Figure IV.3.3).

**Financial account surplus** totaled to 377.0 million USD in the second quarter of 2018, which is a 52 percent or 129.6 million USD increase, y-o-y. It can be mainly attributed to an expansion of 314 million USD in external loans, a total increment of 122.0 million USD in trade credit, and increase of 69.1 million USD in FDI (Figure IV.3.4).

In the second quarter of 2018, expansion of FDI induced a net inflow of 424.0 million USD or 19 percent growth y-o-y, external loans by 98.0 million USD or 145 percent y-o-y growth, and trade credits by 23.0 million USD or 123 percent y-o-y growth. Majority of external loans can be attributed to a disbursement of 100 million USD by the ADB to the Government of Mongolia in May 2018, under the Extended Fund Facility Program and some decline in banks' debt service. In addition, rising investments to the Oyu Tolgoi underground project comprised majority of the overall expansion in FDI.

**Gross international reserve (GIR)** stands at 2,989 million USD as of June 2018. It is an adequate level to cover imports of 6.1 months, calculated by the average of the last three months (Figure IV.3.5). Although the GIR is maintained at a stable level, GIR adequacy for imports coverage has been deteriorating as the imports surged in the last several months.

On the contrary, net international reserve (NIR) increased by 60 million USD, q-o-q. The Central bank's gold purchases contributed positively on the asset side, while on the liability side, liabilities to the government declined.

Table IV.3.2

Rising revenue from coal and copper exports boosted total exports.

	2017 II	2018 II	Y-o-y	Contri- bution %
<b>Total export</b>	<b>1,806</b>	<b>2,099</b>	<b>16%</b>	<b>16%</b>
Coal	739	895	21%	9%
Copper concentrate	384	551	43%	9%
Gold	137	20	-85%	-6%
Crude oil	89	111	25%	1%
Iron ore concentrate	89	92	4%	0%
Cashmere	175	205	17%	2%
Others	193	223	16%	2%

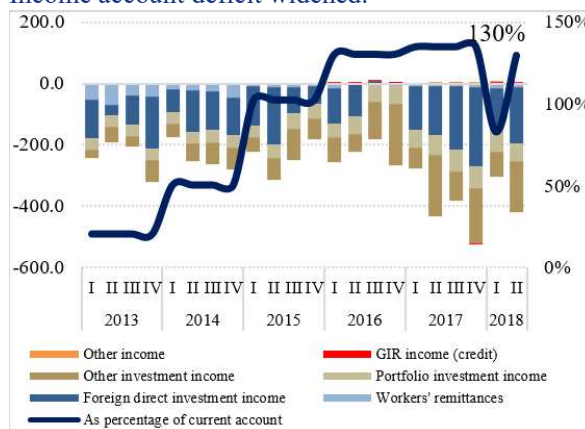
Imports is expanding rapidly...

	2017 II	2018 II	Y-o-y	Contri- bution %
<b>Total import</b>	<b>1,154</b>	<b>1,629</b>	<b>41%</b>	<b>41%</b>
Capital goods	457	755	65%	26%
Fuels	196	257	31%	5.3%
Consumer goods	347	424	22%	6.6%
Intermediary goods	152	191	26%	3.4%
Others	2	2	-	0%

Source: Bank of Mongolia

Figure IV.3.3

Income account deficit widened.



Source: Bank of Mongolia

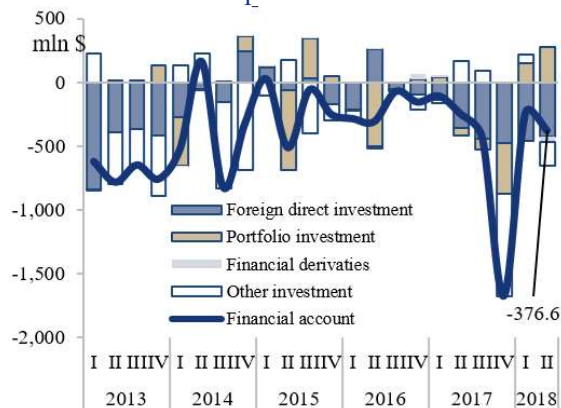
**Terms of Trade** improved by 24 percent y-o-y in July, 2018, as price of exports increased rapidly compared to the price of imports. (Figure IV.3.6).

Although prices of copper and gold has been declining since the beginning of this year, as of July customs price of copper concentrate, coal, crude oil, gold, and cashmere were 33, 16.4, 34, 4.5, and 52 percent higher than the same time of previous year, respectively. These favorable changes contributed to a 31 percent y-o-y growth in overall price of export. Although, export prices stood at a higher level than the last year, and a declining trend is observed starting May 2018.

Price of imports increased by 6.1 percent y-o-y, mainly triggered by importing price of consumer goods, capital goods, and fuels. More specifically, customs price of fuel products soared by 28 percent y-o-y as of July, 2018.

Figure IV.3.4

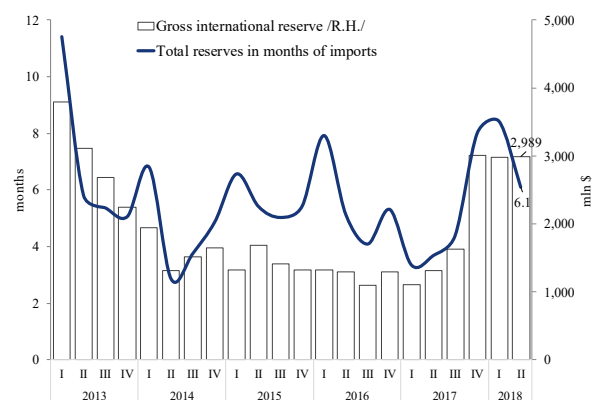
Financial account surplus widened.



Source: Bank of Mongolia

Figure IV.3.5

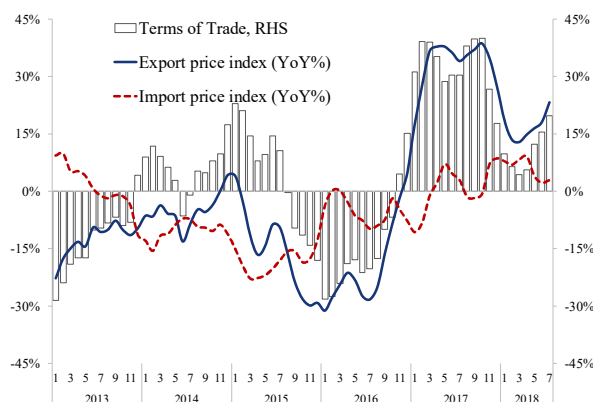
Gross international reserve is at a stable level.



Source: Bank of Mongolia

Figure IV.3.6

Terms of trade (TOT) improved, but the projection was revised down.



Sources: Bank of Mongolia and Customs General Administration



**THE BANK OF  
MONGOLIA**