# Fiscal Sustainability in Mongolia in 2018

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## Key messages

- In this report, we analyze Mongolia's public finance outlook and risks to the country's economic sustainability using an advanced macro-fiscal model.
- Though Mongolia's fiscal solvency challenges seem resolved for now, the underlying problem of fiscal sustainability remains. The government continues to carry a high level of debt and is very dependent on commodity revenues.
- Until debt stabilizes, the Mongolian government should prioritize debt reduction rather than focus on increasing the balances of the Fiscal Stability Fund and Future Heritage Fund.
- The government should continue with reforms directed at improving fiscal discipline. The government should make budget revenue projections with more caution in order to stabilize expenditure. The government should continue with the current fiscal consolidation model and comply with fiscal rules in order to prepare for negative mining shocks.

### **Executive summary**

In 2017, Mongolia received an extensive bailout package from the International Monetary Fund (IMF) under its Extended Fund Facility (EFF). Since taking the IMF loan, Mongolia has had good economic luck. A record high year of coal production combined with a surge in commodity prices has left the country with a budget revenue windfall. This has allowed gross domestic product (GDP) to grow by 5.3 percent, which was higher than the forecasted 3 percent. Mongolia has reduced its fiscal deficit and public debt is declining. The country's credit rating has improved and it has managed to repay two large foreign currency-denominated bonds. The government has also recently created a Fiscal Stability Council to improve budget oversight.

Though Mongolia's fiscal solvency challenges seem resolved for now, underlying problems of fiscal sustainability remain. The government continues to carry a high level of debt and is very dependent on commodity revenues. While debt reduction should be a priority for the government, it has rolled over some debt, and continues to accumulate high budget deficit. In addition, the accumulations to two sovereign wealth funds, the Fiscal Stability Fund and the Future Heritage Fund may be increased while debt levels still remain high.

The EFF stipulated several requirements intended to improve fiscal discipline such that Mongolia can make the large external bond repayment that comes to from 2021 to 2024 and build itself a sustainable financial future. The government's progress in implementing these reforms has been mixed, and this report, in part, details where the government has succeeded, failed, and the impacts of each action. In short, the government has been mostly successful in implementing reforms related excise taxes on cars, alcohol and tobacco, import duties on tobacco and mandatory social security contributions. However, the government, with the consent of the IMF, has not implemented reforms or has made changes different from the requirements set forth in the EFF program in several areas including income tax, retirement age, government salaries and recruitment policies and excise fuel tax. We recommend that the government continue implementing the actions prescribed by the EFF, and also begin implementing further reforms that will lead to long-term savings and debt sustainability.

Mongolia's economic future is perilous. Our report assess risks the country could face in stabilizing its economy for the future. Key risks we identify include:

- Further delay of production from the Oyu Tolgoi underground mine;
- A decline in global commodity prices;
- Politically-driven off-budget spending in the lead-up to elections;
- Discontinuance or non-implementation of EFF measures;
- Rising global fuel prices;
- And, a trade war between the U.S. and China that could curtail Chinese demand for Mongolian goods.

We used our Mongolian Macro-Fiscal Model to assess several risk scenarios to determine their impact on Mongolia's economic outlook through to 2030.

We make several recommendations, including that the government use more caution in making budget revenue projections in order to stabilize expenditure. Specifically, it should quickly return to the original fiscal rule targets and must stop regularly modifying short-term targets to accommodate slippages and political pressure. Moreover, it should continue with the current fiscal consolidation model and comply with fiscal rules in order to prepare for inevitable negative mining shocks.

While Mongolia is currently enjoying robust budget revenue, we caution the government against thinking that this will last forever. A downturn in commodity prices and the introduction of other negative risks is inevitable. The government must approach its finances shrewdly in order to plan for the country's financial well being.

### Introduction

The Natural Resource Governance Institute (NRGI) and Gerege Partners began publishing an annual "Fiscal Sustainability in Mongolia" in 2017. Our first report projected the impact of the IMF's EFF program on the Mongolian economy and fiscal sustainability until 2030 by using our Mongolian Macro-Fiscal Model. We calculated the impact of possible fiscal sustainability risks.\(^1\)

This year's report is broader in content. Specifically, it includes:

- A more detailed analysis of government expenditure by major activities and regions to identify both common and unusual patterns in budget expenditure;
- A section discussing revenue from mining activities as the main contributor to budget revenue;
- And, an updated review of EFF program implementation.

The current report also includes the latest results generated by our Mongolian Macro-Fiscal Model by updating the data as of 2017 and recalibrating its "base scenario" to align a short-term outlook with the IMF's projections. As in the previous report, we estimate the impact of possible risks to the outlook in an alternative scenario. We evaluate how long-term trends align with fiscal sustainability objectives and compliance with Mongolia's fiscal rules.

<sup>1</sup> Daniel Baska, David Mihalyi and Balazs Romhanyi, Mongolia Macro-Fiscal Model (Natural Resource Governance Institute, 2017).

# Recent developments in fiscal sustainability: challenges we face

In this section, we discuss recent developments related to Mongolia's fiscal sustainability. We focus on budget revenue, budget expenditure, budget deficit and government debt.

#### EQUILIBRATED BUDGET REVENUE: ACTUAL VERSUS PROJECTED

Budget revenue has increased in recent years with an average of 9 percent year-on-year growth between 2012 and 2017. Although growth was positive, from 2012 to 2016, actual budget revenue was on average 15 percent lower than the government projected. However, in 2017, peak coal production (48 million tons) at a high average coal price (over USD 60 per ton) combined with a low budget projection based on poor economic conditions allowed the government to instead exceed its projected amount for the first time. (See Figure 1.) This wide variation demonstrates the difficulty the Mongolia government has in making accurate projections because its resource dependence causes revenues to vary widely with the global commodities market.



Figure 1. Equilibrated budget revenue (billion MNT)<sup>2</sup>

<sup>2</sup> Bank of Mongolia, Database for macroeconomic statistics, www.mongolbank.mn/macrodb.aspx; Ministry of Finance, Budget laws, www.iltod.gov.mn.

#### BUDGET EXPENDITURE: ACTUAL VERSUS PROJECTED

In the two most recent budget years, actual spending has significantly outpaced the projected and approved amount. (See Figure 2.) Politics likely played a significant role in these extravagant expenditures—2016 and 2017 were both election years. In 2017, the parliament amended budget twice in order to finance:

- Projects that were implemented in 2016 that did not receive full financing
- Major renovation projects that began in previous years with state budget investment
- MNT 300,000 bonuses for government employees (with the exception of prosecutors, judges and high-ranking officials)
- The Child Money Program, a monthly allowance of MNT 20,000 for each child aged zero to 17 years old

Because of these unforeseen items, actual expenditure increased by MNT 412 billion over the approved amount. (See Figure 2.)

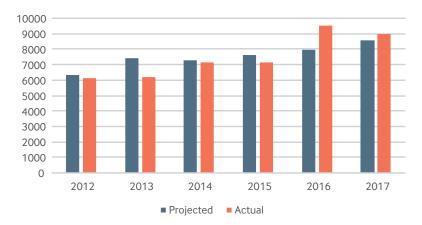


Figure 2. Budget expenditure (billion MNT)<sup>3</sup>

#### **BUDGET BALANCE: ACTUAL VERSUS PROJECTED**

Since 2011, Mongolia has maintained a negative budget balance, which has contributed to the high level of government debt. In almost every year from 2012 to 2016, the actual budget deficit exceeded the approved amount. Fortunately, in 2017, the budget deficit was less than the approved amount. (See Figure 3.)

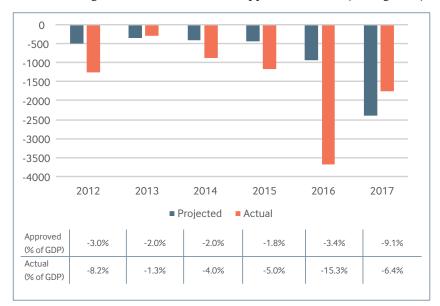


Figure 3. Equilibrated budget balance (billion MNT)<sup>4</sup>

#### **GOVERNMENT DEBT REMAINS HIGH**

In 2017, government debt increased to MNT 22.7 trillion (20.2 trillion at present value). It also decreased to a 74.4 percent share of GDP as compared to 2016. It has continued its downward trend and in the first half of 2018, has decreased slightly to MNT 22.6 trillion (19.4 trillion at present value), or 63.4 percent of GDP. (See Figure 4.) While the debt only decreased slightly in absolute terms, a 13 percent increase in GDP has caused it to decrease as a percentage of GDP.

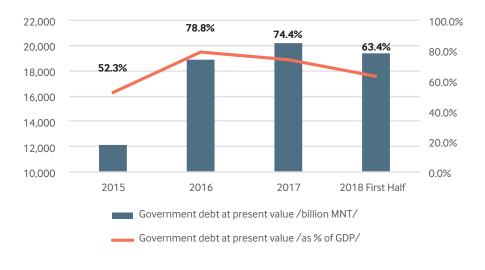


Figure 4A. Government debt (billion MNT)<sup>5</sup>

<sup>4</sup> Ibid.

<sup>5</sup> Bank of Mongolia, Database for macroeconomic statistics.

Figure 4B shows the structure of the government debt. We discuss each component below by dividing them into two main categories—external and domestic debt.



Figure 4B. Government debt (billion MNT)<sup>6</sup>

#### **External debt**

In 2017, the government issued new external bonds of USD 1.4 billion ("Khuraldai" and "Gerege"). In 2018, it paid "Chinggis" and "Dim Sum" bonds. (See Figure 5.) The government intended the "Gerege" bond to finance the principle of its "Chinggis" and "Dim Sum" bonds while the "Khuraldai" bond replaced the Development Bank of Mongolia's "Euro" bond. The government international loan debt increased due to concessional loans from international partners under the EFF program. Government-guaranteed loans decreased in 2017 as the government exchanged the Development Bank of Mongolia's "Euro" bond for the "Khuraldai" bond.

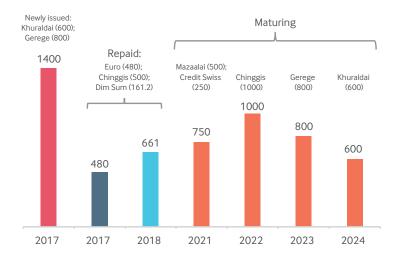


Figure 5. External bonds newly issued in 2017, repaid in 2018 and maturing in 2021-2024 (million USD)<sup>7</sup>

<sup>6</sup> *Ibid.* Note that "Concessional loans" excludes the concessional loans from international partners, which are included in "International loans."

<sup>7</sup> Ministry of Finance, Mongolian Government Debt, mof.gov.mn.

#### Domestic debt

- In 2017, the government issued new domestic bonds of MNT 3.1 trillion, of which MNT 1.5 trillion is due in 2017 and 1.6 trillion in subsequent years. The government repaid bonds of MNT 750 billion on schedule while repurchasing bonds of 370 billion MNT before their maturation.<sup>8</sup>
- Between 2014 and 2017, the government made concession agreements with domestic partners worth MNT 2,356.2 billion, MNT 2,309.9 billion of which it has not repaid. Between 1 January 2017 and 14 April 2017, the government made eight concessional agreements worth MNT 848.3 billion and prohibited any additional "build-transfer" concessional agreements pending approval of the 2018 Budget Law. Despite this prohibition, the concessional agreement balance has increased by 30 percent in the first half of 2018 compared to the end of 2017.
- The Bill of Exchange balance was MNT 307.2 billion at the end of 2016. The government fully repaid those bills in 2017, and has not written new bills since.

#### Interest expenditure

High debt levels are creating pressure for budget service expenditure. This is evidenced by budget interest expenditure, which has risen to over 10 percent of the total budget revenue and expenditure. (See Figure 6.) This is significantly high because the government spends just slightly more on salaries than on its interest expenditure.

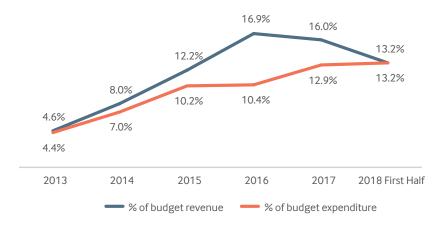


Figure 6. Interest expenditure as percent of budget revenue and expenditure<sup>9</sup>

#### **Fiscal Stability Fund and Future Heritage Fund**

Mongolia has created two sovereign wealth funds to preserve its mineral wealth. The Fiscal Stability Fund is a risk fund created to mitigate revenue fluctuations related to mining. The Future Heritage Fund is a savings fund intended to preserve mineral wealth for future generations.

<sup>8</sup> Ibid

<sup>9</sup> Bank of Mongolia, *Database for macroeconomic statistics*. Note that the value for 2018 is for the first half of the year – i.e., the ratio of half-year interest expenditure to half-year budget revenue and half-year budget expenditure.

#### Fiscal Stability Fund

Mongolia's Fiscal Stability Fund is intended to create medium and long-term stability of the general budget. It's revenue comes from a combination of additional budget revenue caused by higher-than-projected mineral prices, budget surplus, government funds and risk fund surplus, net income from the financial activities of the fund itself, and other income designated by parliament. However, because budget surpluses are rare, the fund's revenue has never been stable and its balance has not risen steadily. Moreover, in 2017, the government amended the Law on Government Special Funds in order to withdraw from the fund to finance budget deficits, subsequently spending over MNT 570 billion. (See Figure 7.) The government has prioritized its goal of reducing government debt over accumulating savings in the fund.

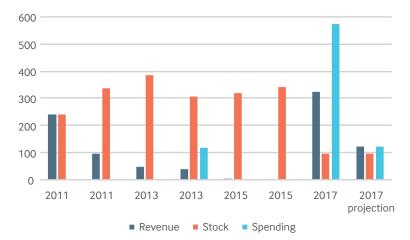


Figure 7. Revenue, spending and balance of the Fiscal Stability Fund (billion MNT)<sup>10</sup>

#### Future Heritage Fund

In 2017, Mongolia established the Future Heritage Fund as a savings fund with the intention of distributing budget revenue from non-renewable minerals to future generations. The fund's revenue was about MNT 358 billion in 2017, and already has revenue of MNT 310 billion in the first half of 2018. The fund's rules dictate that the government can only spend the fund's balance on expenses related to fund administration and independent audit until 2030. However, a recently-passed transitory law made it possible to use the fund to finance the budget deficit until 2022, and the fund will be also used to repay the debt of the Human Development Fund. Because of this prioritization, there is unlikely to be accumulation in the fund in the near future.

Overall, government debt has decreased as share of GDP. However, it is still high in absolute terms, and the government is spending a significant amount on interest expenditure. Furthermore, in the near future, the government is expected to dedicate significant sums towards external bond repayment. The Fiscal Stability Fund and Future Heritage Fund are nearly empty and their creation was perhaps premature and optimistic. However, we believe the government has taken the correct approach in prioritizing payment of its debts before accumulating savings in these funds. <sup>11</sup>

<sup>10</sup> Ibid.

<sup>11</sup> Andrew Bauer and David Mihalyi. *Premature Funds: How Overenthusiasm and Bad Advice Can Leave Countries Poorer.* Natural Resource Governance Institute, 2018.

# Volatility and distributional expenditure patterns

A distinguishing feature of this year's report is that it focuses more on budget expenditure components. Here we intend to identify the sources of budget expenditure instability.

#### EXPENDITURE VOLATILITY IN MONGOLIA VERSUS OTHER COUNTRIES

Government expenditure volatility is a recurrent problem in Mongolia, which has resulted in large, unsustainable fiscal deficits. In Figure 8, we compare Mongolia's government expenditure to that of other developing Asian countries over the last 10 years. Despite its similar status as a developing economy, Mongolia's government expenditure fluctuations are far more pronounced.

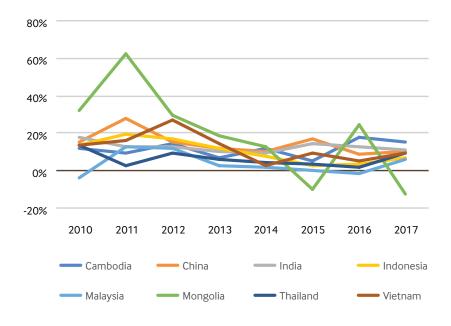


Figure 8. Changes in total government expenditure (percent)<sup>12</sup>

#### CURRENT AND CAPITAL EXPENDITURE: WHICH IS MORE VOLATILE?

Current expenditure includes government spending on goods and services, salaries, interest payments, subsidies and transfers while capital expenditure mainly consists of public investment expenditure. From Figure 9, we can observe that capital expenditure is more volatile than current expenditure. We can also see that the changes in total expenditure nearly follows the changes in capital expenditure. Specifically, the sharp increases in capital expenditure in 2011 and 2016 had the most significant impact on the fluctuations in total expenditure. Investment expenditure is the most critical component of capital expenditure and led to the surge in 2011 and 2016.

<sup>12</sup> International Monetary Fund, World Economic Outlook Database (2018), www.imf.org/external/pubs/ft/weo/2018/02/weodata/index.aspx.

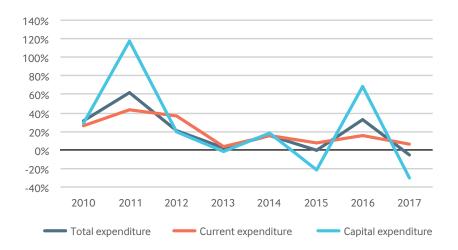


Figure 9. Annual changes in budget expenditure (percent)<sup>13</sup>

## VOLATILITY OF GENERAL BUDGET EXPENDITURE: STATE BUDGET VERSUS LOCAL BUDGET

Currently, the general budget comprises of the state budget, local budget, social insurance fund and health insurance fund.  $^{14}$  However, we analyze only the state and local budgets because they are the most financially significant.

Over the last 10 years, local budget expenditures have been about a third the size of state budget expenditures. (See Figure 10A.) Because state expenditures are the largest budget component, they more or less dictate the trend of general budget expenditure. Local budget expenditure is relatively stable while state budget expenditure fluctuates more. 15

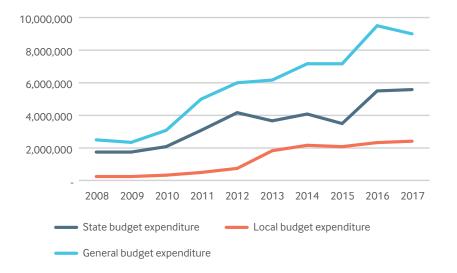


Figure 10A. State, local and general budget expenditure (million MNT)<sup>16</sup>

<sup>13</sup> Mongolian National Statistics Office, Mongolian Statistical Information Service, www.1212.mn.

<sup>14</sup> The Human Development Fund was one component until it was shut down by parliament in 2017, and the Health Insurance Fund has been a separate component since the beginning of 2018.

<sup>15</sup> State budget expenditure is the net of the subsidies to local budget and transfers for special purposes.

<sup>16</sup> Mongolian National Statistics Office, *Mongolian Statistical Information Service*. Note that we do not show other components of the general budget, specifically the Social Insurance Fund and the Human Development Fund, in this graph.

As shown in Figure 10B, state budget expenditure increased at a higher rate than the general budget in 2016 due to the inclusion of the off-budget expenditures from the state-owned Development Bank of Mongolia, which finances development-related megaprojects. In 2013, the rate of change for local budget expenditure vastly exceeded that of the state because that year, government changed the law to make some state expenditure, specifically transfers for special purposes, local expenditure. <sup>17</sup>

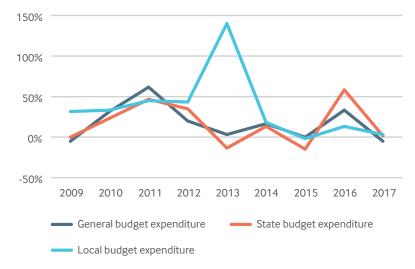


Figure 10B. Changes in state, local and general budget expenditure (percent)<sup>18</sup>

## STATE BUDGET EXPENDITURE BY MAIN FUNCTIONS OF THE GOVERNMENT

Figure 11 shows budget expenditure by functional classification. For the last 10 years, the government has spent the largest share (33 percent on average) of state budget on public services, including health and education expenditures. However, this share has fell by about seven percentage points from 2015 to 2017 (from 35% to 28%). Government spending on infrastructure has fluctuated the most, while social protection and other spending has been relatively stable or has fallen moderately. As the state budget spending on financing, which is spent by the Minister of Finance, has risen significantly from below 10 percent to over 20 percent of state budget expenditure within the last seven years, government spending on its other activities have decreased in terms of the shares in total. This is because government spending on debt repayment has risen significantly, forcing it to reduce its spending in other areas.

<sup>17</sup> The local budgets receive "transfers for special-purposes" from the state budget for implementing some of the government's functions (Budget law). These functions include pre-school education, general education, culture services, primary health care, land relations and register, child development and protection and public sports (Article 61). In addition, a budget governor of each province has local development fund, which receives transfers from the general local development fund according to this law. These funds are intended for providing financial support to local development (Article 60.1). Since these regulations came into effect in 2013, the local budget expenditure surged.

<sup>18</sup> Mongolian National Statistics Office, Mongolian Statistical Information Service.

<sup>19</sup> Spending on infrastructure increased sharply in 2016 as a result of increased spending on the construction of road for the new international airport in "Khushigt" and the investment spending of Ministry of Road and Transportation Development. Spending on social protection increased sharply in 2016 and 2017 mainly due to increased subsidies to the Social Insurance Fund. This occurred because the deficit of the fund increased to MNT 405 billion in 2016 and MNT 347 billion in 2017 from MNT 114 billion in 2015.

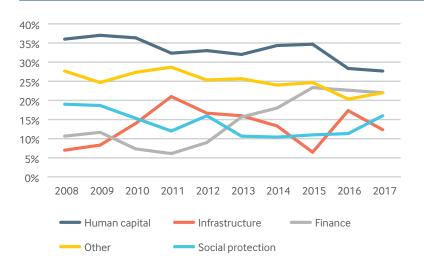


Figure 11. State budget expenditure by main government functions (percent of total)<sup>20</sup>

#### LOCAL BUDGET EXPENDITURE BY REGIONS

From Figure 10A, we know that the local budget is relatively stable and comprises a much smaller share of total budget expenditure. However, looking at the local expenditure line item disaggregated by region provides more information. We divided the local budget into three regions — Ulaanbaatar city ("UB," Mongolia's capital city), mining regions and non-mining regions.

#### Ulaanbaatar

The government has allocated almost a half of the total local budget (41 percent on average over the last 10 years) to Ulaanbaatar, which is roughly in line with its share of population (44 percent). (See Figure 12.)

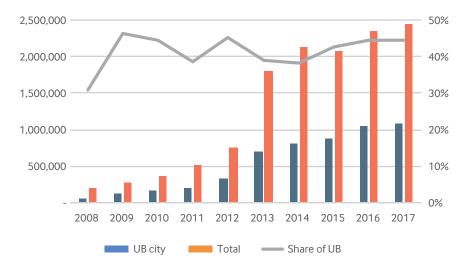


Figure 12. Total local budget expenditure and budget expenditure of Ulaanbaatar (million MNT)<sup>21</sup>

<sup>20</sup> Authors' calculation based on data from the Mongolian National Statistics Office, Mongolian Statistical Information Service.

<sup>21</sup> Ibid.

#### Mining versus non-mining regions

First, we classify provinces as either mining or non-mining. In doing so, we consider a province as "mining" if its share in the national mining GDP is above 4 percent (Orkhon, Umnugovi, Selenge and Dornod provinces are classified as mining) while other provinces are considered as non-mining regions (even if there are mining activities in those provinces). Over the last ten years, per capita budget expenditure of the mining regions was significantly higher than those of the non-mining regions (with the exception of 2013). (See Figure 13.) Specifically, Umnugovi's total and per capita budget expenditure have been significantly higher than those of other provinces. This inequality may reflect the difference between the mining and non-mining regions. Currently, Umnugovi province spends 5 percent of the total local budget (or 10 percent if Ulaanbaatar is excluded). This share was even higher (12 to 20 percent) between 2010 and 2012 (or 21 to 32 percent if Ulaanbaatar is excluded). This implies that the total local budget relies highly on Umnugovi. This may be because many mining industry workers who come to Umnugovi for work are not registered to the region, but use its social services.

Budget expenditure fluctuates more in mining regions. Specifically, the mining regions' expenditures exceeded their revenue in 2012, 2014 and 2016, while the expenditure of non-mining regions has been more in line with revenue. (See Figure 13.) This could have implications for the changes in general budget expenditure, and there may be a need to stabilize budget expenditure even at the provincial level.

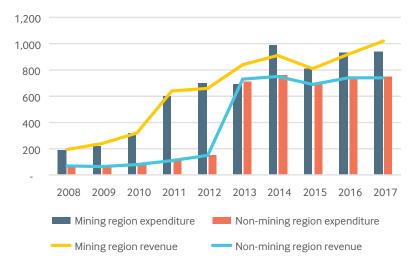


Figure 13. Per-capita local budget revenue and expenditure by region (thousand MNT)<sup>23</sup>

<sup>22</sup> Umnugovi province has the highest budget revenue, expenditure and transfers to state budget as well as the highest per capita expenditure. However, in 2017, the population of this province (65,314) was one of the lowest.

<sup>23</sup> Authors' calculation based on data from the Mongolia National Statistics Office, Mongolian Statistical Information Service.

The base revenue of local budgets include tax revenue and non-tax revenue.<sup>24</sup> The base expenditure includes local administration costs, social care service costs and environmental protection costs.<sup>25</sup> We calculate the difference between total revenue and base revenue, and call the difference "non-base revenue." We make the same calculations for expenditure to find "non-base expenditure." We find that:

- Umnugovi has the highest per-capita base revenue, while others are more or less on the same level.
- Per-capita non-base revenue and expenditure is comparable for all provinces.
- Non-base revenue is more than a half of total revenue for most provinces while non-base expenditure is roughly three times higher than base expenditure.
   Non-base expenditure mainly consists of capital expenditure.
- Umnugovi has the highest per-capita non-base expenditure. (See Figure 14.)

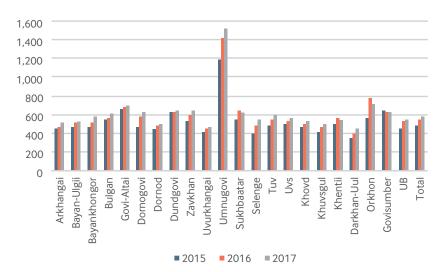


Figure 14. Per capita non-base expenditure (thousand MNT)<sup>26</sup>

Non-base revenue includes capital revenue and transfers from the state budget
and general local development fund. As shown in Figure 15, the per-capita
non-base revenue is relatively even for the provinces in 2015 and 2016 while
Umnugovi and Govisumber received a significantly high level of non-base
revenue in 2017.

<sup>24</sup> As defined in the Article 4.1.29 of Law on Budget.

<sup>25</sup> For more detailed description of the base expenditure at all stages of local budget, see the Article 4.1.30 of the Law on Budget.

<sup>26</sup> Authors' calculation based on data from the Mongolian National Statistics Office, Mongolian Statistical Information Service.

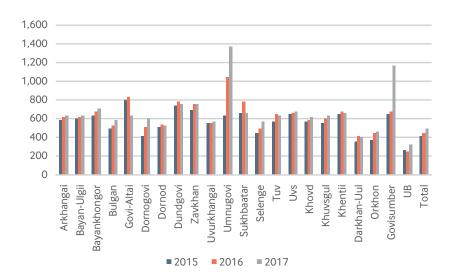


Figure 15. Per capita nonbase revenue (thousand MNT)<sup>27</sup>

Umnugovi and Orkhon provinces have relatively high base revenue due to their higher Personal Income Tax (PIT) revenue. Over the last 10 years, these two provinces have had 18 percent and 35 percent higher average salaries, respectively, compared to other provinces because of major mining operations there. In this sense, mining activities create inequality in budget revenue across provinces.

Figure 16 shows the difference between the base revenue and expenditure for all provinces. With the exception of the major mining regions, the difference is negative. This reveals that mining regions transfers some of their excess base revenue to the state budget while other provinces receive subsidies from the state budget.

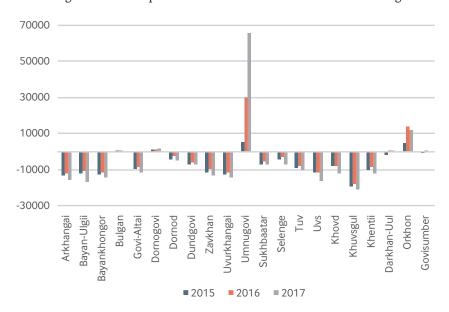


Figure 16. Local – State budget transfers (million MNT)<sup>30</sup>

Umnugovi's large transfers to the state budget, as well as its significant base revenue driven by mining wage taxation may be unsustainable because its prosperity is highly dependent on its mining sector.

<sup>27</sup> Authors' calculation.

<sup>28</sup> See Appendix 1 for the types of revenues belonging to local and state budgets.

<sup>29</sup> National Statistics Office, Mongolian Statistical Information Service.

<sup>30</sup> Ministry of Finance, *Budget laws and Fiscal Framework Statements (2012 to 2018).* Note that the positive values represent transfers while negative values represent subsidies.

## Budget impact of mining revenue

Over the last ten years, Mongolia's mining revenue has contributed, on average, 22 percent of its overall budget revenue. (See Figure 17.) In 2017, the production, export and price of coal surged, contributing to an overall increase in mining revenue.

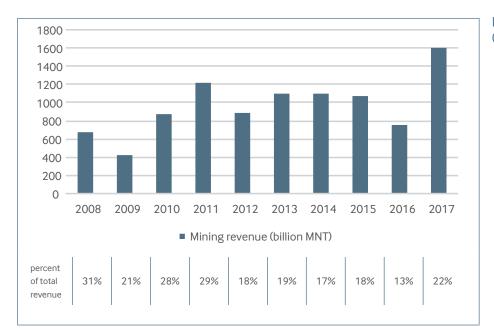


Figure 17. Mining revenue (billion MNT)<sup>31</sup>

As Figure 18 shows, the changes in total budget revenue have followed changes in mining revenue, emphasizing the sector's importance.

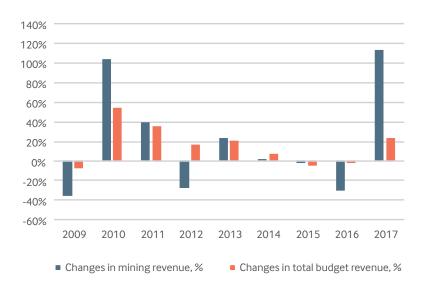


Figure 18. Changes in mining revenue and total budget revenue (percent)<sup>32</sup>

<sup>31</sup> Bank of Mongolia, Database for macroeconomic statistics.

<sup>32</sup> Authors' calculations based on Bank of Mongolia, Database for macroeconomic statistics.

Mining revenue is highly reliant on commodity prices. Figure 19 shows that the price of copper is highly correlated with Mongolia's mining revenue. Heavy reliance on this variable price creates uncertainty in budget revenue.

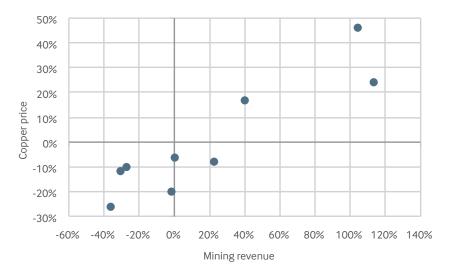


Figure 19. Year-overyear changes in mining revenue and copper price, (percent) (2009-2017)<sup>33</sup>

#### DISTRIBUTION OF MINING REVENUE: IMPLICATIONS FOR VOLATILITY

Table 1 presents the government allocation of mining revenue to different parts of the general budget.<sup>34</sup> Since 2010, the government has allocated on average 9 percent to local budgets, 7 percent to the Social Insurance Fund and 20 percent to the now-defunct Human Development Fund.<sup>35</sup> The government has consistently allocated more than a half of total mining revenue to the state budget.

	2010	2011	2012	2013	2014	2015	2016
State budget	79.3	62.6	61.8	66.3	61.0	54.7	61.8
Local budgets	6.2	12.4	11.9	5.4	7.4	9.6	12.0
Human Development Fund	10.3	19.5	24.6	20.4	23.7	26.8	14.1
Social Insurance Fund	4.2	5.5	1.6	7.8	7.9	9.0	12.1

Table 1. Allocation of mining revenue (percent)<sup>36</sup>

<sup>33</sup> Ibid.

<sup>34</sup> Distribution of all types of revenue can be found in Appendix 1.

<sup>35</sup> Beginning in 2017, some mining revenue has been allocated to the Human Development Fund's successor, the Future Heritage Fund.

<sup>36</sup> Extractive Industries Transparency Initiative, Mongolia eleventh EITI reconciliation report 2016, (2017); Extractive Industries Transparency Initiative, Mongolia tenth EITI report 2015, (2016); Gerege Partners LLC, Extractive Industry Revenue Management System in Mongolia, (2016).

# Policy adjustments: EFF program implementation

As we reported in last year's fiscal sustainability report, the IMF and the Mongolian government agreed to carry out a set of fiscal reforms, including the following:

- Increase excise taxes on fuel, cars, tobacco and cigarettes;
- Increase import duties on tobacco and cigarettes;
- Introduce progressive personal income taxes;
- Increase the social security contribution of both employers and employees;
- Freeze government salaries and hiring;
- Reduce the cost of military personnel accommodation;
- Increase the retirement age for both men and women;
- Introduce income tax on interest earned on savings;
- And establish an independent fiscal council to bolster fiscal discipline.

In this section, we analyze the government's progress on these measures.

#### **Excise taxes on fuel**

The government increased the excise tax on fuel in July 2017 and again in November 2017. As a result, excise tax revenue from fuel doubled in the second half of 2017. (See Figure 20.)

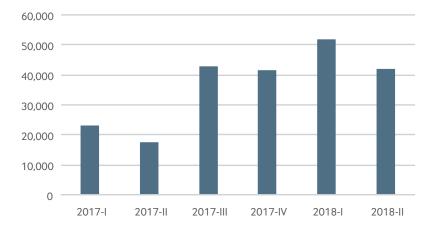


Figure 20. Excise tax on fuel in 2017 (million MNT)<sup>37</sup>

However, in January 2018, the government decreased the excise tax in an effort to stabilize the domestic retail fuel price because the border price started to increase in July 2017. The current retail fuel price mechanism forces the government to adjust the excise tax in order to lessen retail price from the external market. To alleviate this, the government is adopting a new formula that ensures sufficient corporate profits to prevent fuel shortages, increases the flexibility of the consumer price and gradually re-introduces the excise tax. Mongolia will submit a draft of this strategy to the IMF by the end of 2018, and will enact legislation that will take effect by the end of June 2019.<sup>38</sup>

#### **Excise tax on cars**

In the April 2017 amendment of the Law on Excise Taxes, the government increased the excise tax on cars. Starting in July 2017, import of environmentally friendly vehicles (hybrid, electric and LPG engine cars) became subject to excise tax for the first time. While the government taxes them at half the rate of their petrol and diesel engine counterparts, this new excise tax has generated significant government revenue. Between 2016 and 2017, total import of cars increased by 30 percent. In 2017, excise tax revenue increased more than three-fold because of the increase in imports and the implementation of tax on environmentally friendly vehicles. (See Figure 21.)

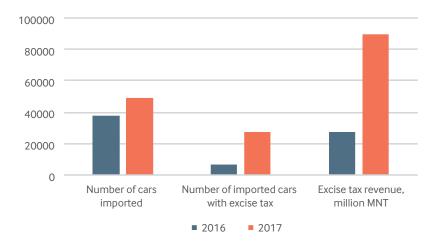


Figure 21. Import of cars and revenue from excise tax on cars<sup>39</sup>

<sup>38</sup> International Monetary Fund, Fifth review under the Extended Fund Facility arrangement and request for modification and waiver of applicability of performance criteria, (2018).

<sup>39</sup> Mongolian Customs, Customs revenue statistics 2017 (2018), customs.gov.mn/2017-10-09-03-00-30/2017-11-08-01-39-59/2018-04-11-06-15-40/969-2-dahi.

#### Excise taxes on alcohol and tobacco

In 2018, the government increased the excise tax on alcohol and tobacco by 10 percent as stated in the April 2017 amendment of Law on Excise Taxes. As a result, excise tax revenue from alcohol slightly increased in the first half of 2018. However, excise tax revenue from tobacco decreased, and this is due to the fall in both imports and domestic supply of tobacco. Thus, the increase in excise tax rates has not had any significant effect on budget revenue yet. (See Figure 22.)

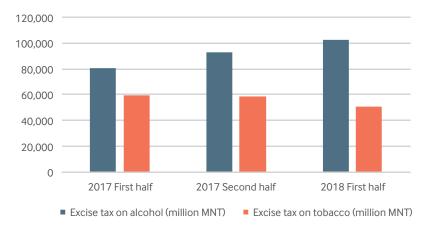


Figure 22. Revenue from excise taxes on alcohol and tobacco

#### **Custom tariffs on tobacco**

The government increased custom tariffs on tobacco from 5 percent to 30 percent, as prescribed by the EFF program. As a result, the revenue from the custom tariffs on tobacco increased four-fold compared to 2016 to a total of MNT 23.1 billion. (See Figure 23.)

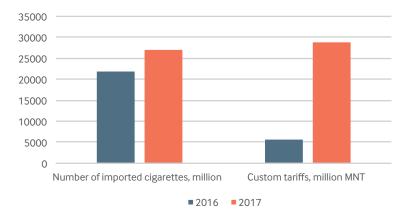


Figure 23. Import of tobacco and revenue from custom tariffs on tobacco

Source: Mongolian Customs

#### Social security contribution

Effective 2018, the government increased the social security contribution rate for employers and employees by one percentage point. This made the social security contribution rate 12 percent for employers and 11 percent for employees, which is consistent with the EFF program recommendations.<sup>40</sup>

#### Personal income tax

In April 2017, the government amended the Law on Personal Income Tax to include the progressive tax rates and credits recommended in the EFF. However, a February 2018 amendment to the same law abolished the progressive rates and introduced a progressive tax credit instead. The government decided to do this because of public resistance, favorable budget revenue performance and stable commodity prices. The government framed its decision as an effort to decrease tax burden and expand the tax base. The government also increased the tax credit thresholds, which the IMF considered would not be as effective as the progressive tax rates in achieving fiscal sustainability.

#### Retirement age

EFF terms recommended that the minimum retirement ages for both men and women increase by six months each year from 2018 until it reaches 65 years old (which will occur in 2027 for men and 2037 for women). However, the government caved to public resistance and instead decided to increase the retirement age by three months in annual increments. The government also extended the wage base interval used to calculate benefits from the five years preceding retirement to seven years preceding retirement. The government intended this change to decrease the wage base for benefits, as it assumed that people were paying a higher contribution only as they approached retirement in order to draw larger pension benefits. The IMF has stated that changing the wage base calculation is not a sufficient substitution for an increase in retirement age. 43

#### Government recruitment and salary

In April 2017, the government approved a freeze on government salaries for 2017 and 2018, a reduction in the overall number of government employees, and a cessation of government promotion. Despite these actions, the number of government employees increased by 3,501 in 2017 and most of them (2,627) were civil servants. The greatest increase was in the health and education sectors – by 2074 and 3845 respectively. These increases resulted from the construction of eight new schools, 24 new kindergartens and 20 new hospitals in 2017. Despite the nominal hiring freeze, the number of political officials and government special employees also increased by 398 and 484 respectively. (See Table 2.)

<sup>40</sup> For more details, please see Appendix 2

<sup>41</sup> For more details, please see Appendix 3.

<sup>42</sup> International Monetary Fund, Staff report for the third review under the Extended Fund Facility (2018).

<sup>43</sup> Ibid.

2016 2017 Change 2016-2017 Division Political officials 3,032 3,430 18,952 Administration workers 18,960 -8 Special workers 36,949 37,433 484 Civil servants 130.033 132.660 2,627 18.077 20.151 2,074 Health 39,535 43,380 3,845 Education 60.947 57,869 General service -3,078 Total 188.974 192,475 3,501

Table 2. Number of government employees<sup>44</sup>

In response to a strike by doctors and teachers demanding a salary increase, the government adjusted salaries after having reached an agreement with the IMF. In September 2018, they implemented a salary increase of 8 percent for teachers, doctors and other low-salaried civil servants and issued some promotions. In 2017, government employees (other than prosecutors and high-ranking officials) received a one-off additional salary of MNT 300,000.

#### Independent fiscal council

In December 2017, the government created the Fiscal Stability Council and parliament subsequently approved its bylaws, formally establishing the council in October 2018. It was an important step towards improving budget oversight. However, the IMF believes that the Fiscal Stability Council does not have sufficient optimism to achieve its aims. <sup>45</sup> In her review for the IMF, B. Munkhsoyol reveals a number of shortcomings in the design of the Fiscal Stability Council and gives recommendations bring the council in line with international leading practices. <sup>46</sup> Her recommendations include:

- The Fiscal Stability Council should have a broader spectrum of roles to strengthen its status;
- The government should allocate sufficient staff and resources to the Fiscal Stability Council (i.e., its capacity should be expanded) so that it is able to be independent and fulfill its mandate;
- The government should have limited power in selecting the members of the council and abolishing its existence;
- And, the selection process for council membership should be both transparent and competitive and involve bipartisan support.

We recommend that the government implement these reforms in order to promote the success of the Fiscal Stability Council.

<sup>44</sup> National Statistics Office, Mongolian Statistical Information Service.

<sup>45</sup> International Monetary Fund, Fifth review under the Extended Fund Facility arrangement.

<sup>46</sup> Munkhsoyol Baatarjay, Can Mongolia's Fiscal Stability Council Improve Fiscal Discipline? (Natural Resource Governance Institute, 2018).

## Fiscal sustainability in Mongolia: macro-fiscal model

This section analyzes the results generated by our Mongolian Macro-Fiscal Model by updating it with the 2017 data and recalibrating the "base scenario" to the IMF's projections. An alternative scenario, on the other hand, considers the impact of possible risks to fiscal sustainability.

## BASE SCENARIO. OUTLOOK OF THE MONGOLIAN ECONOMY 2017 TO 2030

We used data from the IMF to establish our base scenario. We define the main assumptions for the base scenario in each of the three components of the Mongolian Macro-Fiscal Model (macroeconomic, fiscal and mining) as follows.<sup>47</sup>

#### Macroeconomic

We generated macroeconomic results by using a semi-structural dynamic macroeconomic model based on the Mongolian and external sector data from 2005 to 2017. We used the IMF projections for government consumption and gross capital formation from 2018 to 2023 to reflect the short and medium-term impact of the EFF program, which began implementation in the third quarter of 2017. We assumed that government consumption and gross capital formation would have the real annual growth rates shown in Table 3.

	2018	2019	2020	2021	2022	2023
	IMF projection					
Real GDP growth	5.0%	6.0%	4.8%	5.0%	5.2%	5.9%
Nominal value (billion MNT):						
Gross capital formation	11,469	13,941	16,209	18,016	20,682	23,625
Government consumption	3,308	3,604	3,993	4,460	5,010	5,656
Real growth rate:		Calcula	tion: based	on IMF proj	ections	
Gross capital formation	4.7%	13.7%	8.8%	4.5%	7.5%	7.2%
Government consumption	-1.7%	1.9%	3.6%	5.0%	5.2%	5.9%

Table 3. Real growth rates of government consumption and gross capital formation<sup>49</sup>

We assumed that government consumption will be planned under the strict requirements of the EFF program. Additionally, we used the IMF's projection for gross capital formation in the model because we believe that it considers the mining sector, fiscal policy, the financial sector and inflows and outflows of capital consistent with the implementation of the IMF program.

<sup>47</sup> Baska, Mihalyi, and Romhanyi, Mongolia Macro-Fiscal Model.

<sup>48</sup> International Monetary Fund, Fourth review under the extended fund facility arrangement and request for modification of performance criteria, (2018).

<sup>49</sup> Ibid. and authors' calculations.

#### **General budget**

The general budget section computes the budget indicators not included in the macroeconomic model. We generated projections for budget revenue and expenditure by their main elements as well as important indicators such as budget balance and government debt.

We used the IMF's budget projections for 2018 to 2023.<sup>50</sup> Figure 24 shows the projections of capital expenditure, interest payment and government wages and salaries. For the projections of other indicators, see the results section.

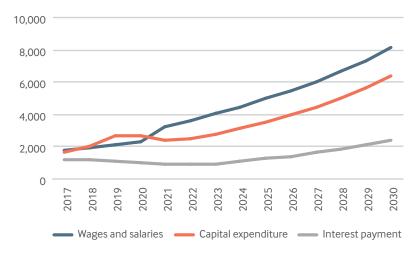


Figure 24. Capital expenditure, salaries and interest payment (billion MNT)

#### Mining section

For the mining section, we use a simple project-level financial model of the six largest mines in Mongolia (Oyu Tolgoi, Erdenet, Tsagaan Suvarga, Gatsuurt, Erdenes Tavan Tolgoi, and Energy Resource). We have compiled financial information on other mining projects under "other mines." In this section, we compute important indicators such as the budget revenue, the growth and the contraction of the mining sector. We make the following assumptions:

- The Oyu Tolgoi underground mine will generate large inflows of foreign direct investment and reach its peak production in 2022.
- Coal export will increase until 2018 and then level off. For example, in 2018, Erdenes Tavan Tolgoi will export 12 million tons of coal and Energy Resource will export 5 million tons.
- The Mongolian extractive industry including Oyu Tolgoi and coal projects will reach its full capacity in 2024, and production will not grow afterwards. More specifically, the mining sector will grow at the rates indicated in Figure 27.
- We use the 2017 average export price of the Mongolian coal as the base price and consider that it will grow moderately following the copper price trend. (See Figure 25.) We project copper price in the macroeconomic section based on the historical trend. (See Figure 26.)

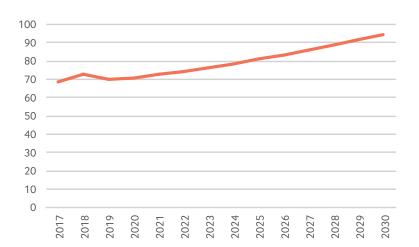


Figure 25. Coal price (USD/ton)<sup>51</sup>



Figure 26. Copper price (USD/ton)<sup>52</sup>

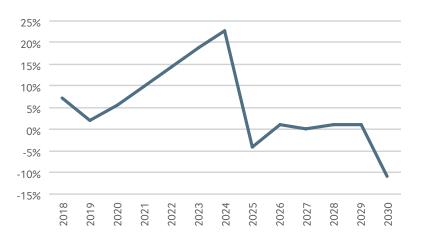


Figure 27. Mining GDP growth rate<sup>53</sup>

<sup>51</sup> Authors' projections.52 *Ibid.*53 *Ibid.* 

#### ALTERNATIVE SCENARIO - RISKS

Several likely shocks would affect the base scenario:

- There is a risk that the launch of the Oyu Tolgoi underground mine will be postponed;<sup>54</sup>
- Issues at the customs entrance border could impact the transportation of coal by truck, as happened in 2017;<sup>55</sup>
- Commodity prices may not be as we predicted (See Figure 25.);
- Politicians may, as they have previously, approve higher budget expenditures than the government can afford by projecting budget revenue too optimistically;
- Politicians may exceed budget expenditure projections leading up to elections, as they have previously;
- Politicians may dramatically increase civil servant salaries soon after completing the EFF program.

Considering these variables, we analyze three possible scenarios that could occur before 2030.

#### Base scenario

This scenario uses the projections of the IMF until 2022. (Please see Section 2.1) We generate the results for the remaining period based on the assumptions detailed in the above section.

#### Scenario 1

Based on the shocks we mentioned above, Scenario 1 considers a situation in which the government suddenly increases budget expenditures after the IMF program. Specifically, we assume that in the period from 2021 to 2030, government wages will be 40 percent higher than those in the base scenario. In addition, the government transfers to households will increase by MNT 400 billion in 2021 and follows the increases in the government wages afterwards.

#### Scenario 2

In addition to the criteria used for Scenario 1, we consider a set of mining-related shocks. In this scenario, we assume that commodity market becomes unfavorable from 2021 with prices decreasing by 15 percent permanently compared to the base scenario. Additionally, we assume that Rio Tinto will postpone production from the Oyu Tolgoi underground mine from 2021 to 2022, delaying the production of an additional 60 tons of copper.

<sup>54</sup> The "2016 Oyu Tolgoi Feasibility Study" reflects the projection of the Oyu Tolgoi underground mine. However, according to an October 2018 Turquoise Hill announcement, underground first production has been delayed by up to nine months and is now expected to occur by the end of third quarter of 2021 instead of the first quarter of 2021.

<sup>55</sup> Coal exports decreased in 2017 due to a bottleneck problem (a queue of trucks about 100 km long) at Gashuunsukhait-Gants mod border (Commodity Market Study, Economic Research Institute, 2018).

#### SIMULATION RESULTS: BASE AND ALTERNATIVE SCENARIOS

Figure 28 shows the GDP growth rates in the three scenarios. As one could expect, the mining sector will play a major role in the Mongolian economy – the average annual growth of GDP would reach 8 percent by 2024 as the production of the Oyu Tolgoi underground mine takes effect. By 2030, however, we project growth to be around 5 percent. The annual GDP growth rates increase from 5.7 percent in 2021 in the base scenario to 7.5 and 6.8 percent respectively due to the shocks in Scenarios 1 and 2.

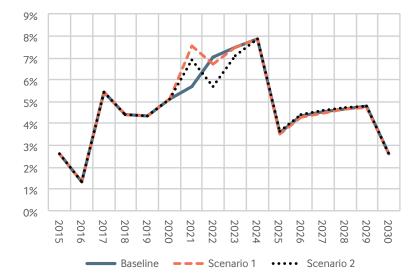


Figure 28. GDP growth rate (percent)

The effect of the increased government spending and the adverse mining shocks on GDP growth would diminish over time and eventually converge to the same outcome as the base scenario.

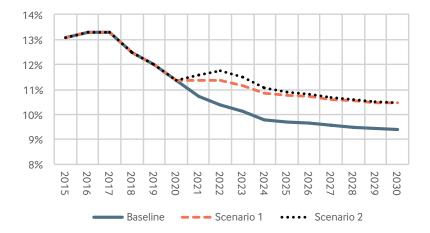


Figure 29. Mongolbank's interbank rate (percent)

In the base scenario, we project that Mongolbank's interbank rate will fall moderately and reach about 9 percent by 2030. (See Figure 29.) In the alternative scenarios, the interest rate would increase in response to the shocks, before leveling off.

We project the inflation rate to be around 5.5 percent in the coming years with small increases in the alternative scenarios in 2021. (See Figure 30.) The price levels in the alternative scenarios will be higher after 2021.

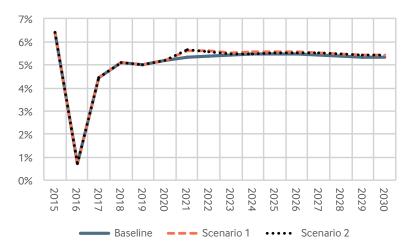


Figure 30. CPI inflation (percent)

We project that budget revenue will be MNT 8.4 trillion in 2018 and MNT 9.8 trillion in 2019. (See Figure 31.) It is roughly equal in the alternative scenarios because the adverse mining shock would decrease revenue while at the same time, the increase in government expenditure would increase the revenue from personal income tax and higher GDP. In other words, the opposite effects cancel each other out in Scenario 2.

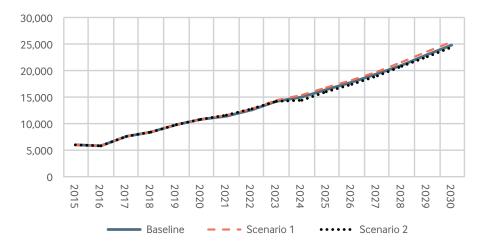


Figure 31. Nominal budget revenue (billion MNT)

We project that the primary budget expenditure (or the budget expenditure excluding interest payments) will grow slowly due to the IMF program in the base scenario. (See Figure 32.) In the alternative scenarios, however, we project it will increase rapidly due to higher government spending.

<sup>56</sup> The Ministry of Finance predicts that in 2019, budget revenue will be MNT 11.1 trillion and budget expenditure will be MNT 11.6 trillion. Ministry of Finance, *Draft budget 2019* (2018).

Figure 32. Primary budget expenditure (billion MNT)

We project that the budget deficit-to-GDP ratio will decrease from 2018 and reach 1 percent in 2021-2023. (See Figure 33.) This is due to the IMF program and fast growth in the mining sector. In the alternative scenarios, the increase in government expenditure and the negative mining shocks would worsen this ratio.

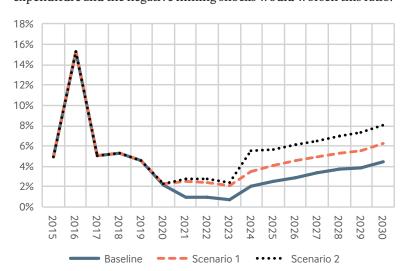


Figure 33. Headline budget deficit-to-GDP ratio

In the base scenario, we project that the government debt-to-GDP ratio will decrease to about 55 percent by 2030. In the alternative scenarios, the ratio becomes unstable due to shocks. (See Figure 34.)

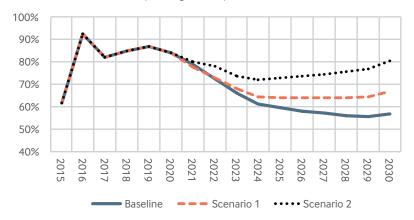


Figure 34. Debt-to-GDP ratio

## Fiscal Stability Law compliance

The Fiscal Stability Law sets out four specific fiscal rules. Rule 1 defines an approach for the calculation of budget revenue. Rules 2-4 set the thresholds for budget balance, government debt and budget expenditure growth, respectively.

#### Rule 1. Equilibrated budget revenue

General budget revenue must be equilibrated, meaning that the net of revenue fluctuations caused by commodity prices are transferred to the Fiscal Stability Fund and Future Heritage Fund. Thus, we calculate revenue based on the commodity price projections in the Medium-term Budget Framework Statement. <sup>57</sup> The government draft budgets must explain in detail how they have calculated equilibrated revenue. We observe from the available budget data that the government has calculated equilibrated revenue as total revenue net of transfers to the Fiscal Stability Fund (since 2011) and Future Heritage Fund (since 2017). Therefore, this rule has been complied with since its introduction.

#### Rule 2. Structural budget balance

The Fiscal Stability Law established the threshold for budget deficit as 2 percent of GDP. In September 2016, the government amended the Fiscal Stability Law to expand the threshold for 2017 to 9.9 percent. In April 2017, the government amended the law again to increase the threshold to 10.4 percent. The final amendment also postponed the time for realization of the original threshold to 2023. Despite repeated amendments, the actual budget deficit for 2017 was 6.4 percent. (See Table 4.) This is far lower than the legal limit, and the budget balance is positive in the first half of 2018. However, the legal limit is still high. Therefore, the government should bring the legal limit back down to the original threshold.

	2013	2014	2015	201658	2017
Initially approved by parliament	2	1.9	1.8	3.4	9.1
Realized	1.3	4	5	15.3	6.4
Legal limit	2	2	5	18.5	10.4

Table 4. Budget deficit-to-GDP ratio (percent)<sup>58</sup>

#### Rule 3. Debt threshold

The Fiscal Stability Law initially set the threshold for the ratio of government debt to GDP as 40. According to the 2015 amendment to the Fiscal Stability Law, the 40 percent threshold would take effect in 2018. However, in 2016, the government amended the law to raise the threshold to 60 percent and postpone implementation

<sup>57</sup> For more details, refer to the Articles 4.1.3, 4.1.4, 4.1.5, 11.1.3 of the Fiscal Sustainability Law.

<sup>58</sup> Bauer, Galindev, Lkhagvajav, Mihalyi and Tuvaan, *Fiscal Sustainability in Mongolia*; Ministry of Finance, *Budget laws and Fiscal Framework Statements (2012 to 2018)*; Fiscal Stability Law, "General system for legal information."

<sup>59</sup> In 2016, the new government moved some previously off-budget expenditure into the budget due to Mongolbank's Development bank loans and price stabilization program. Moreover, 2016 was an election year, which drove up spending.

to 2021. Historically, the realized ratio exceeded the legal threshold until 2015 when the government raised the threshold to accommodate a higher ratio. In 2016 and 2017, the realized ratio was below the approved ratio, but the approved ratio was considerably higher than it had been in previous years. In the years we examined, never has the realized ratio fallen within the bounds of the original 40 percent threshold established in the Fiscal Stability Law. (See Table 5.)

	2013	2014	2015	2016	2017
Initially approved by parliament	46	40	40	55	84
Realized	53	54	52	79	74
Legal limit	50	40	58.3	88	85

Table 5. Government debtto-GDP ratio (percent)<sup>60</sup>

#### Rule 4. Budget expenditure rule

According to the Fiscal Stability Law, the growth of budget expenditure must not exceed either the non-mining GDP growth in the current year or the average non-mining GDP growth in the last 12 years. Parliament broke this rule in 2016, and decided to begin implementing the rule in 2017. Despite this, budget expenditure declined by 5.3 percent in 2017, which was within the legal threshold of 19.5 percent.

	2013	2014	2015	2016	2017
Initially approved by parliament	18.0	10.0	-4.7	9.7	-3.6
Realized	2.4	15.9	-0.1	33.4	-5.3
Legal limit	22.4	22.8	23.1	24.3	19.5

Table 6. Budget expenditure growth (percent)<sup>61</sup>

#### Other rules in the Fiscal Stability Law

Compliance with the Fiscal Stability Law's fiscal framework statement: Article 7.3 of the Fiscal Stability Law states that "formulation and approval of draft budget, amendments and alterations made to the approved budget shall be consistent with the Medium-Term Fiscal Framework Statement." However, in the approved budgets of 2016 and 2018, the budget expenditure and government debt exceeded that allowable under the Fiscal Framework Statement. (See Table 7.) Moreover, the government did not approve the 2017 Fiscal Framework Statement within the period prescribed in the Law on Budget.

	2016	2017	2018
Budget revenue	Yes	Yes	Yes
Budget expenditure	No	Yes	No
Budget balance	Yes	Yes	Yes
Government debt	No	Yes	No

Table 7. Whether the approved budget consistent with Fiscal Framework Statement<sup>62</sup>

<sup>60</sup> Ibid.

<sup>61</sup> Ibia

<sup>62</sup> Ministry of Finance, Budget laws and Fiscal Framework Statements (2012 to 2018).

The government changed the Fiscal Framework Statement every year between 2013 and 2018 by budget approval or amendment. The higher number of changes the government has undertaken in recent years reflects their failure to prepare a reasonable Fiscal Framework Statement. In other words, the Fiscal Framework Statement has been amended too frequently (at least once per year) so that the credibility of its projections are weak. This is inconsistent with Article 4.1 of the Fiscal Sustainability Law, which calls for a fiscal policy document based on an updated macroeconomic outlook and expected and actual fiscal projections for the mediumterm, which it defines at three years. In order for this document to retain any accuracy and be useful for government projections, it cannot be amended frequently.

Figures 34 to 36 show our projections of government compliance with fiscal rules 2, 3 and 4 in the base and alternative scenarios that we consider in the Mongolian Macro-Fiscal Model.

The deficit-to-GDP ratio falls between 2018 and 2023 because we use the IMF projection in the budget section of the Mongolian Macro-Fiscal Model for the base scenario. In other words, the EFF program combined with large windfall revenues from the Oyu Tolgoi underground mine would make it possible to comply with this rule, as it would help to decrease the budget deficit in the next four years. However, in 2025, when the rule is no longer respected, the ratio would exceed the 2 percent threshold in the base scenario. (See Figure 35.) In the alternative scenarios, however, the rule is broken earlier.

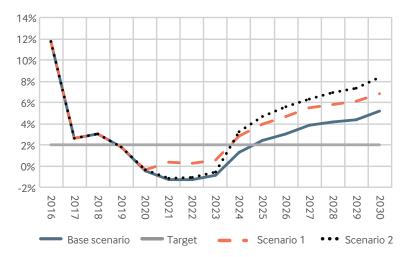


Figure 35. Rule 2. Structural deficit-to-GDP ratio (percent)

It will be exceedingly difficult to decrease the debt-to-GDP ratio down to the Fiscal Stability Law's target level in the next few years even when the Mongolian government is diligently following the IMF program. However, it is possible to decrease the debt-to-GDP ratio steadily leading up to 2030. (See Figure 36.) This would require the government to maintain the 60 percent threshold after 2025 in the base scenario. However, under the alternative scenarios, the increase in government spending and the adverse mining shocks would have negative impacts on the ratio, making the 60 percent target impossible to reach. Instead, the debt would climb back up to levels the levels reached during the recent crisis.

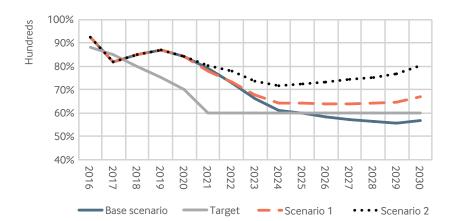


Figure 36. Rule 3. Debt-to-GDP ratio (percent)

In the base scenario, the government respects the budget expenditure rule in all years up until 2024. We assume that the mining sector will reach its full capacity in 2024 and will not grow afterwards. As a result, the contribution of non-mining sectors to GDP growth would fall until 2024 and would start to grow thereafter. This creates changes in the projection in Figure 37.

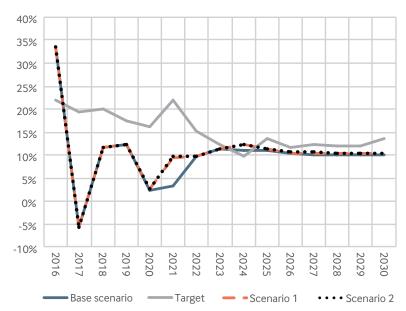


Figure 37. Rule 4. Expenditure growth (percent)

Currently, the government does not comply with the rules for fiscal deficit and government debt set out in the 2010 Fiscal Sustainability Law. In the base scenario, the government only complies with the deficit rule from 2019 to 2024 and then breaks it from 2025 onwards, while it does not comply with the debt rule until 2025. The government currently complies with the rules for equilibrated revenue and expenditure growth, and we project that they will continue to comply with the expenditure rule until 2030, except for in 2024. The government's compliance with the Fiscal Framework Statement has been inadequate, and the Fiscal Framework Statement is lacking stability and credibility as a midterm fiscal outlook document.

## Conclusions and policy recommendations

Despite progress fueled by favorable economic condition and the implementation of EFF measures, there are still risks to Mongolian fiscal sustainability. These risks could be caused by both domestic and external factors. Moreover, the country's success will depend on government's ability to exercise fiscal discipline to address the high level of public debt and implement structural reforms to stabilize budget expenditure. Based on our analysis, we make the following recommendations in order for Mongolia to increase its fiscal sustainability:

#### FISCAL DISCIPLINE

- The government should continue implementing the actions prescribed by the EFF, but also start implementing additional reforms that will lead to long-term savings and debt sustainability.
- The government should quickly return to the original fiscal rule targets adopted in 2010 as part of the Fiscal Stability Law. It needs to stop the practice of regularly modifying short-term targets to accommodate slippages.
- Creating the Fiscal Stability Council was an important step in improving budget oversight, however, the government should seek to improve the Fiscal Stability Council's independence, capacity, transparency and remit.<sup>63</sup>

#### **RISK PREPAREDNESS**

- Short-term economic conditions look favorable and budget revenues are strong, but given the risks discussed, the government should remain prepared for unfavorable economic conditions to return.
- The Mongolian economy and budget revenue are highly dependent on the mining sector. The government, politicians and the public should bear in mind that the improving economic situation is fueled by a strong rebound in commodity prices and mining production, and could therefore experience a negative shock and economic volatility.
- The government should make budget revenue projections more cautiously.

<sup>63</sup> Munkhsoyol Baatarjav, Can Mongolia's Fiscal Stability Council Improve Fiscal Discipline? (Natural Resource Governance Institute, 2018).

#### **EXPENDITURE RESTRAINT**

- The government should keep its budget expenditures within the approved levels without amending the annual budget law. It is crucial to maintain expenditure restraint even if revenue performance remains robust.
- The structure and composition of the government needs to be stable. The
  government should maintain consistency in the number of ministries, their
  organization and responsibilities after an elections. The government should also
  take advantage of the hiring freeze to rationalize civil service functions.
- The government should try to decrease inequality between mining and nonmining regions. We believe that Umnugovi's budget, including its spending efficiency, deserves special attention.

#### **DEBT REDUCTION**

- The government should focus on reducing its debt rather than rolling over the bonds due to mature between 2021 and 2024, even if the current economic condition continues to be favorable.
- The government should prioritize debt reduction over increasing the balance
  of the Fiscal Stability Fund because Mongolia has large amounts of debt that
  accumulate interest at higher rates than the potential return rates on the
  Fiscal Stability Fund. However, the government also needs to replenish the
  Stabilization Fund in order to finance deficits and smooth over unexpected
  revenue under-performance.
- Due to high interest rates and the foreign currency denomination of government debt, we recommend that the government spend the revenue from the Future Heritage Fund on debt reduction until debt reaches a stable level.

### References

Bank of Mongolia. *Database for macroeconomic statistics*. www.mongolbank.mn/macrodb.aspx

Baska, Daniel, David Mihalyi, and Balazs Romhanyi. *Mongolia Macro-Fiscal Model*. Natural Resource Governance Institute, 2017. resourcegovernance.org/analysis-tools/mongolia-macro-fiscal-model

Bauer, Andrew and David Mihalyi. *Premature Funds: How Overenthusiasm and Bad Advice Can Leave Countries Poore*r. Natural Resource Governance Institute, 2018. resourcegovernance.org/analysis-tools/publications/premature-funds

Bauer, Andrew, Ragchaasuren Galindev, Munkh-Orgil Lkhagvajav, David Mihalyi and Nomuuntugs Tuvaan. *Fiscal Sustainability in Mongolia*. Natural Resource Governance Institute, 2017. resourcegovernance.org/sites/default/files/documents/fiscal-sustainability-in-mongolia.pdf

Economic Research Institute. *Commodity market study*. Ulaanbaatar, 2018. www.eri. mn/download/kl67mx1q

Extractive Industries Transparency Initiative. *Mongolia eleventh EITI reconciliation report 2016*. Ulaanbaatar, 2017. www.eitimongolia.mn/sites/default/files/uploads/final-reports/Mongolia\_EITI\_Report\_2016\_English.pdf

Extractive Industries Transparency Initiative. *Mongolia tenth EITI report 2015*. Ulaanbaatar, 2016. www.eitimongolia.mn/sites/default/files/uploads/final-reports/Mongolia\_EITI\_Report\_2015\_English.pdf

General Authority for Social Insurance. "Concept of social insurance." www.ndaat-gal.mn

"General system for legal information." www.legalinfo.mn

Gerege Partners LLC. Extractive Industry Revenue Management System in Mongolia. Ulaanbaatar, 2016.

International Monetary Fund. Fifth review under the Extended Fund Facility arrangement and request for modification and waiver of applicability of performance criteria. Washington, D.C., 2018. www.imf.org/~/media/Files/Publications/CR/2018/cr18303.ashx

International Monetary Fund. Fourth review under the extended fund facility arrangement and request for modification of performance criteria. Washington, D.C., 2018. www.imf.org/~/media/Files/Publications/CR/2018/cr18204.ashx

International Monetary Fund. Staff report for the third review under the Extended Fund Facility. Washington, D.C., 2018. www.imf.org/~/media/Files/Publications/CR/2018/cr1898.ashx

International Monetary Fund. "World Economic Outlook Database." Published October, 2018. www.imf.org/external/pubs/ft/weo/2018/02/weodata/index.aspx

Mining.com. "Rio Tinto delays start of Oyu Tolgoi expansion due to technical issues." Published October 16, 2018. www.mining.com/rio-tinto-delays-start-oyu-tolgoi-expansion-due-technical-issues/

Mongolian Customs. *Customs revenue statistics* 2017. Ulaanbaatar, 2018. customs. gov.mn/2017-10-09-03-00-30/2017-11-08-01-39-59/2018-04-11-06-15-40/969-2-dahi

Mongolian Ministry of Finance. *Budget laws and Fiscal Framework Statements* (2012-2018). www.iltod.gov.mn

Mongolian Ministry of Finance. *Draft budget* 2019. Ulaanbaatar, 2018. www.iltod. gov.mn/wp-content/uploads/2018/10/Bagts-1.pdf

Mongolian Ministry of Finance. "Mongolian Government Debt." mof.gov.mn/

Mongolian National Statistics Office. "Mongolian Statistical Information Service." www.1212.mn

Mongolian National Statistics Office. *Number of Mongolian government employees, structure and changes* 1995-2017. Ulaanbaatar, 2018. 1212.mn/BookLibrary-Download.ashx?url=%D1%82%D3%A9%D1%80%D0%B8%D0%B9%D0%B-D\_%D0%B0%D0%BB%D0%B1%D0%B0%D0%BD\_%D1%85%D0%B0%D0%B0%D0%B3%D1%87\_2017.pdf&ln=Mn

Munkhsoyol Baatarjav. Can Mongolia's Fiscal Stability Council Improve Fiscal Discipline?. Natural Resource Governance Institute, 2018. resourcegovernance.org/sites/default/files/documents/can-mongolia-fiscal-stability-council-improve-fiscal-discipline.pdf

Natural Resource Governance Institute. *Discussion of Mongolia's Draft Future Heritage Fund Law*. Ulaanbaatar, 2015. resourcegovernance.org/sites/default/files/documents/nrgi\_mongoliafutureheritagefund1.pdf

Trading Economics. "Mongolia - Credit Rating." tradingeconomics.com/mongolia/rating

## Appendix 1. Allocation of budget revenue between different levels of budget

	Central Budget Revenues	Aimag/Capital Budget Revenues	Soum/District Budget Revenues
Income and property taxes	Corporate income tax     Value-added tax     Customs duty     Excise tax     Stamp fee for foreign citizens to obtain visa to travel to Mongolia (State stamp tax Article 11.2)	Tax on wage, salary, bonus grant, and similar employment income* Capital city tax (2) Taxes on immovable property Inheritance and gift taxes State stamp tax (other taxes except in Article 11.2)	Income tax of self-employed citizen individual     Personal income taxes other than articulated by provision 8.1.1 of the Law on Personal income tax (for example: capital sell, gambling, rent etc.)     State stamp fee (except those in Article 11.2)
Mineral taxes	Mineral royalty (100%)  Fee on usage of oil petroleum resources (70%)  License fee for exploration and extraction of mineral resources (100%)  License fee for oil petroleum (exploration and extraction) (70%)	License fee for oil petroleum (exploration and extraction) (20%)	License fee for oil petroleum (exploration and extraction) (10%)
Taxes related to other natural resources	Water pollution fee	Water fee for industrial and service purposes	Fee on the household usage of water and spring water      Hunting permission fee      License fee for exploitation of natural resources other than mineral resources      Fee on natural plants      Timber harvesting fee
Taxes related to the environment	Tax on gasoline and diesel fuel     Payment for air pollution	Tax on auto vehicles and self-moving vehicles     Land fees (4)	Service fees on waste     - Firearms

Note: \* Since January 2013, "Personal income tax, Article 8.1.1" has this title.

### Appendix 2. Social security contribution rates

	20	17	20	18	20	19	20	20
Type of insurance	Employer	Employee	Employer	Employee	Employer	Employee	Employer	Employee
Pension	7.0	7.0	8.0	0.1	8.5	8.5	9.5	9.5
Allowance	1.0	0.8	1.0	0.8	1.0	0.8	1.0	0.8
Health	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Unemployment	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Occupational accident and sickness related to job	0.8	-	0.8	-	0.8	-	0.8	-
Total	11.0	10.0	12.0	11.0	12.5	11.5	13.5	12.5

Source: General Authority for Social Insurance (www.ndaatgal.mn)

## Appendix 3. Personal income tax rates and credit thresholds

Annual income subject to	Tax credit /MNT/		Tax rat	tes (%)
PIT/MNT/	2017.04.14	2018.02.02	2017.04.14	2018.02.02
0-6 000 000	120 000	160 000	10	10
6 000 000-12 000 000	120 000	140 000	10	10
12 000 000-18 000 000	120 000	120 000	10	10
18 000 000-24 000 000	120 000	100 000	15	10
24 000 000-30 000 000	120 000	80 000	15	10
30 000 000-36 000 000	120 000	60 000	20	10
36 000 000-42 000 000	120 000	-	20	10
42 000 000 and above	120 000	-	25	10

Source: Law on Personal Income Tax

