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South-South Cooperation: How Mongolia Learned from Chile on Managing a Mineral-Rich Economy

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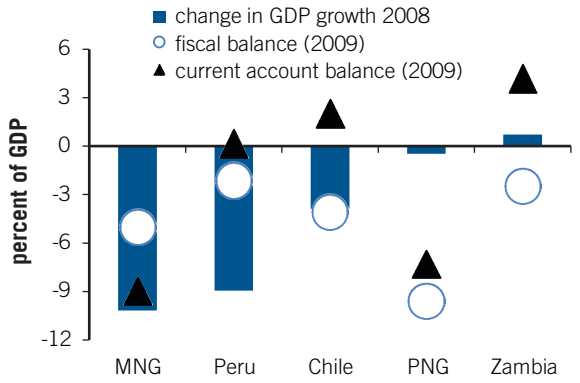
Mongolia's mineral-rich economy was hit extremely hard by the global downturn during 2008–9, when copper prices plunged, external demand fell, and growth collapsed. The shock exposed serious underlying weaknesses in the management of the country's natural resource wealth, particularly the lack of policies to insulate the economy from commodity cycles and real exchange rate appreciation pressures, an inadequate safety net, and poor public investment planning. These issues gained further urgency with the signing of a major copper mining deal in 2009 that further increased the country's mineral dependence. As part of its reform efforts and with the assistance of the World Bank and the International Monetary Fund (IMF), the government began an intensive south-south exchange, notably with Chile, another major copper producer, on strengthening the policy environment. The dialogue proved critical in the passage of several landmark laws within the space of a few years, including a fiscal stability law modeled after Chile, and the accompanying integrated budget and procurement and social welfare laws. These reforms will be crucial in managing the boom-bust cycle of mineral prices and mitigating Dutch disease effects by anchoring a prudent countercyclical fiscal policy, strengthening public financial management, increasing savings, and providing a fiscally sustainable social safety net targeted to the poor.

The Mongolian economy is currently on the brink of huge economic expansion as a result of the exploitation of its vast mineral assets. As the development of the Oyu Tolgoi (OT) copper-gold mine—one of the five largest in the world[1]—comes closer to completion, and as output from other deposits is scaled up, gross domestic product (GDP) is expected to more than treble within the space of a few years. Large knock-on effects on other parts of the economy are also expected, notably those related to transport, infrastructure and utilities, because these sectors also contribute to getting the minerals out of the ground and to market.

However, these ostensibly positive developments also pose risks associated with volatility in commodity prices and carry challenges of Dutch disease, whereby the nonmineral traded sectors of the economy lose competitiveness from large mineral sector export and revenue inflows.

Mongolia has faced some of these risks, having suffered from overheating pressures when global commodity prices boomed during 2005–8 and subsequently plunged in 2008–9 when the commodity price cycle turned. In a comparison with other major copper producers, Mongolia was one of the hardest hit in 2008–9 (figure 1). With mineral revenues accounting for one-third of fiscal revenues and almost 80 percent of exports, collapsing global commodity prices and demand led to a sharp deterioration in fiscal and current account balances (table 1 overleaf). The economy,

Figure 1. Mongolia's GDP Growth Declined More Than Other Major Copper Producers in 2008–9



Source: IMF and World Bank.
Note: MNG = Mongolia; PNG = Papua New Guinea.

which had registered growth of above 9 percent on average between 2004 to 2008, contracted by 1.3 percent in 2009, in turn triggering a crisis of confidence in a banking sector that had substantially overheated in the preceding boom years.

The shock exposed serious structural weaknesses in the policy environment. In particular, the country's fiscal position was highly reliant on mineral revenues. During the boom years (2005–7), the government shifted the fiscal burden away from the nonmining sector, leaving the budget increasingly dependent on mining revenues. And while the government did save part of its mining windfall during the boom years, it also funded large increases in untargeted social expenditures, which proved unsustainable during the bust, the time when they were needed the most, as well as in wages, salaries, and poorly screened investment projects. Public investment in particular suffered from extremely poor capital budgeting and planning, was burdened by excessive powers of Parliament to insert projects, and suffered from insufficient spending on priority areas and extreme neglect of infrastructure maintenance.[2]

With growth collapsing and beset by a financial sector crisis, the government turned to the World Bank, the IMF, the Asian Development Bank (ADB), and other donors in late 2008. The World Bank pledged US$60 million in early 2009 (later raised to US$70 million) for budgetary support in partnership with the ADB (US$60 million), Japan (US$50 million) and Australia (US$3.5 million), while the IMF agreed to an 18-month standby arrangement worth about US$235 million for balance of payments support. The IMF would disburse about US$165 million during 2009. Out of the US$180 million budget support pledges, US$130 million alone was disbursed in 2009. Helped by strong policy action by the government and the donor support programs, the economy turned the corner in 2010. The economic outlook also improved in line with the rebound in commodity prices and with the signing of the OT mining investment deal.

However, the need for medium-term reforms to enhance the recovery and better manage a mineral-dependent economy remained. In the fiscal sector, the objective was to isolate the budget from mineral price fluctuations, avoid excessive real appreciation of the currency, minimize "pork barrel" public spending, and raise the quality of public investment planning and management. In the social sector, policy makers aimed to provide a fiscally sustainable social safety net to ensure the poor were protected from the inevitable boom-and-bust cycles associated with mining economies.

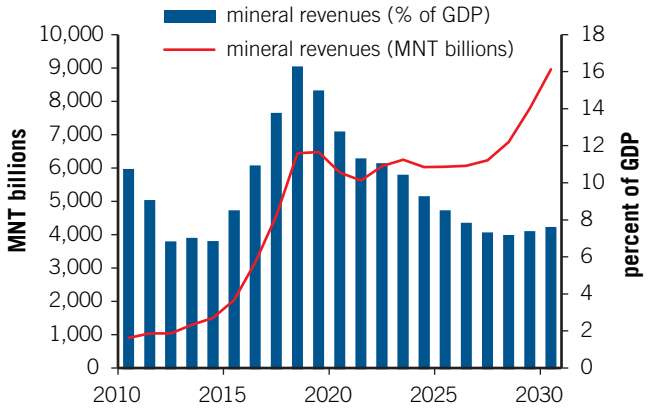
These reforms were made all the more urgent by the OT deal and other major mining projects on the horizon. While the development of the OT mine significantly transformed the country's medium- and long-term growth prospects, it further increased the country's dependence on mineral resources. Moreover, although the sheer scale of revenue inflows—for example, fiscal revenues are expected to rise sixfold

Table 1. Mongolia: Selected Economic Indicators

Indicators	2004	2005	2006	2007	2008	2009	2010
GDP growth (%)	10.6	7.3	8.6	10.2	8.9	-1.3	6.4
Consumer price index (eop % yoy change)	10.9	9.6	5.9	14.1	23.2	1.9	14.3
Government balance (% of GDP)	-1.8	2.6	3.1	2.7	-4.5	-5.0	0.0
Total expenditures (% of GDP)	33.5	27.2	30.7	35.3	37.6	35.2	36.6
Total revenues and grants (% of GDP)	31.8	29.9	33.8	37.9	33.1	30.2	36.6
Nonmining fiscal balance (% of GDP)		-1.3	-7.3	-13.4	-14.1	-12.4	-10.5
Current account balance (% of GDP)	1.3	1.3	6.5	6.3	-12.3	-12.9	-14.3
Gross foreign exchange reserves (months of imports)	1.8	2.5	4.3	3.8	3.7	4.2	5.1
Exchange rate (MNT/US$, eop)	1,209	1,221	1,165	1,170	1,267	1,443	1,257

Sources: Mongolia National Statistical Office, IMF, and World Bank.
Notes: yoy = year-on-year; eop = end of period; MNT= Mongolian togrog

Figure 2. Mineral Revenues Are Expected to Rise Sixfold by 2020 as the Mining Sector Expands



Source: IMF and World Bank staff estimates.
Notes: MNT = Mongolian togrog.

by 2020 (figure 2)—presented a major opportunity to build the country's human and physical infrastructure and capacities, they also carried all the attendant risks of Dutch disease. These risks were further heightened by the planned development of other major mines, including Tavan Tolgoi, one of the world's largest, undeveloped coal deposits, with an expected life of 200 years.

South-South Exchange: World Bank and IMF Roles

Assisted by the World Bank and the IMF, the government embarked on a sustained dialogue with other countries, notably Chile, to learn best practices employed in natural resource–rich economies. The cooperation between the two countries was aimed at increasing understanding of, building support for, and disseminating information among key stakeholders—notably Mongolia's powerful parliament—on the complex and politically sensitive reforms required to implement these best practices.

Fiscal reforms were already a key part of the World Bank's budget support operations. The two Development Policy Credit (DPC) operations in 2009 and 2010 both targeted public investment planning and management with the objective of increasing the efficiency with which future increases in mineral revenues were invested. The related prior actions also complemented other fiscal measures, notably the passage of a fiscal stability law (FSL) targeted by the IMF in its lending operations.

The IMF also provided extensive technical assistance from its Fiscal Affairs Department. This included multiple visits by teams of experts to discuss the FSL, the integrated budget law (IBL), and fiscal decentralization. A resident advisor on budget planning was also stationed in Mongolia for two years.

However, political commitment to the fiscal reforms was greatly facilitated and deepened by the south-south exchange. Looking back, this stands out as a critical component of the budget support operations. To achieve the south-south exchange, the World Bank acted as a key convening platform for dialogue with other governments, notably Chile, but also to Eastern Europe (Estonia, Poland, Latvia), Africa (South Africa and Botswana), and Canada. The World Bank worked to build a political consensus among stakeholders across the political spectrum and in civil society in Mongolia.

For this purpose, the World Bank helped organize a series of annual economic policy conferences centered on the economic challenges facing Mongolia, as well as study tours to different countries that provided examples of good international practice. Three such study trips were organized to Washington, DC (jointly with the IMF), two to Chile, and one each to Canada, Botswana, Estonia, Poland, and Slovenia. To fund these activities, the Bank mobilized substantial resources, from its own budget, the Governance Partnership Facility, and by reallocating expenditures from the ongoing Economic Capacity and Technical Assistance Credit Project.

Why Chile?

Because Chile has a small, open economy and is the world's largest producer of copper,[3] it is vulnerable to the same shocks as Mongolia, especially volatility in copper prices, and subject to similar Dutch disease pressures arising from a booming minerals sector. In Chile, the share of copper revenues in total fiscal revenues rose from about 5 percent of the total (or 1 percent of GDP in the early 2000s) to about 24 percent in the late 2000s (or roughly 6 percent of GDP), so the fiscal management of mining revenues was particularly important. If these had been spent in real time, they would have significantly added to absorptive capacity pressures in the economy and resulted in an appreciation of the real exchange rate to the detriment of the nonmining traded sectors.

But unlike Mongolia, Chile had in place stringent fiscal rules and institutional frameworks. In 2001, Chile adopted a structural balance rule that was eventually enshrined in legislation in a fiscal responsibility law in 2006.[4] The rule built on the Copper Stabilization Fund adopted in the late 1980s, which enabled government outlays to move in line with sustainable copper revenues, valued at the long-term copper price. This was adjusted in 2001 to incorporate the business cycle so that the structural balance was defined not only in terms of long-term mineral revenues, but also potential output. Another significant innovation was the establishment of a committee of experts in 2002, who were tasked with providing independent technical estimates of long-term copper prices and of potential output.

The long-term savings provided by the structural balance rule also helped cover Chile's contingent liabilities through

transfers to two sovereign wealth funds: the Pension Reserve Fund[5] and an Economic and Social Stabilization Fund.[6] The latter was the rainy day fund to support continued spending in periods of slow growth and/or low mineral prices.

These fiscal rules prevented the Chilean economy from overheating during the commodity boom and allowed it to efficiently respond during the bust. Thus in the copper boom of 2003–8, the surge in copper prices was deemed temporary by the panel of experts, therefore most of the revenue windfalls had to be saved. With a structural balance surplus target of 1 percent, overall budget surpluses reached close to 9 percent (figure 3). By the end of 2008, the central government's financial assets equaled 20 percent of GDP. This in turn allowed the government to significantly ease fiscal policy during the bust. Not only did Chile weather the storm better than others, but its fiscal support package (of about 3 percent of GDP) was entirely domestically financed.

South-South Exchange in Practice

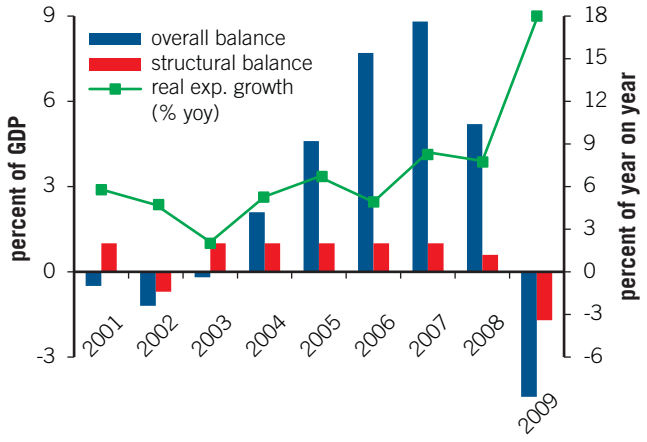
South-south exchange between Mongolia and Chile began in earnest with a study tour of Chile in September 2009 by six Mongolian parliamentarians, including the leaders of the two coalition parties, the Deputy Minister of Finance, and the World Bank's lead economist. This was immediately followed by a visit to Washington, DC, for a series of workshops jointly organized by the IMF and World Bank. Eduardo Aninat—formerly Minister of Finance of Chile and Deputy Managing Director of the IMF—organized the Chilean leg of the tour. The Chileans provided the Mongolian delegation their expertise on their own political economy and excellent fiscal framework.

The study tour was designed to provide key Mongolian policy makers and legislators with cross-country, cross-institutional, cross-regional, and cross-sectoral knowledge on how best to manage a mineral-dependent economy. It provided ample opportunities for in-depth discussions on (but not limited to, see box 1) fiscal rules, the rationale for stability and pension funds, estimating long-run copper prices, and how the Chilean model on fiscal policy could translate to Mongolia. The Chilean part was highly effective because it allowed the Mongolians to get information directly from the source, including from fellow parliamentarians and government officials. The Washington, DC, leg of the tour enabled the participants to then set the Chile case into its international context, while discussing the concrete fiscal rule options for Mongolia.

Upon return, there was a daylong workshop with Mongolian members of Parliament (MPs) on October 31, 2009, in Ulaanbaatar. The meeting was organized by the parliamentary leaders of the two main political parties and the Minister of Finance to include other MPs on the key presentations and discussions of the September study tour. The workshop was attended by 35 MPs, roughly half of all MPs. It turned out to be an intense question and answer session, involving the government, the World Bank, and the IMF on the full range of economic problems facing Mongolia.

The final key part of south-south exchange was the 2009 Economic Policy Conference held in late October, representing another important opportunity for cross-country knowl-

Figure 3. Chile's Fiscal Rules Allowed It To Accumulate Large Surpluses, Enabling Policy Easing during the 2008-9 Global Crisis



Source: Daban 2011.

Box 1. Topics Discussed during September 2009 Study Tour of Chile

1. Role of the Congress in the budget process; legal environment; role and responsibility of Congress for improving fiscal sustainability environment.
2. Fiscal rules and budget and fiscal sustainability laws.
3. Fiscal audit process.
4. Intergovernmental fiscal regulations and related law and procedures.
5. Features of budgeting in case of natural force majeure and others, including in the economic crisis.
6. Copper price estimation and Chilean Copper Stabilization Fund.
7. Pension reforms and Chilean pension fund.
8. General review of budget procedures: budget expenditure ceilings, how enforced for different spending units, and violations.
9. Program budgeting: (i) types of budget classification—if program classification is used in budget process and how it is used in making appropriations and controlling expenditures; (ii) nonfinancial indicators and how they are used for funding different levels of line ministries, how collected, and by whom; and (iii) how performance management works.
10. Investment budgeting.
11. Medium-term budgeting and macroeconomic and fiscal projections: how are macroeconomic and fiscal projections estimated?
12. Budget execution controls.

Source: World Bank.

edge transfer, but now to a wider audience. The conference—a public economic forum organized jointly by the government and the World Bank to bring international knowledge to bear on Mongolia's economic challenges—was opened by the president of Mongolia. Its objective was to widen and extend the policy debate to other stakeholders, including the general public. Discussions were led by representatives from the World Bank, the Ministry of Finance of Chile, the Netherlands Ministry of Finance (on Dutch disease, naturally), the Bank of Mongolia, and the IMF. This annual conference has since continued to provide an important avenue for the government of Mongolia and representatives of Mongolian society to learn from local and international experts and policy makers.

A second tour for MPs was held in March 2010, but the visit was limited to Washington, DC, on account of an earthquake that occurred at the time in Chile. The delegation included six MPs, including the chairman of the Budget Committee, and three members of government including the director of the Debt Management Division in the Ministry of Finance. Over a three-day period, senior economists and experts from the IMF and the World Bank debated and discussed a comprehensive range of issues with the Mongolian delegation, including developing a fiscal rules' framework, diversification challenges posed by rising mineral dependence, and the operational aspects of fiscal decentralization and debt management.

Finally, during 2010 and 2011, other groups of parliamentarians and government officials went on study tours to Chile, Canada, and Washington, DC: Botswana to study mining policies; Estonia, Poland, and Slovenia to study organic budget laws; and the Philippines to study conditional cash transfers. The study tours provided opportunities to discuss key policy reforms relating to social welfare; fiscal decentralization; public investment planning and management; investment strategies for stabilization funds; and development strategies for natural resource–based economies. These study tours increased the understanding of, and reinforced the commitment to, the government's policy reforms among key parliamentarians.

Key Reforms

This intensive collaboration yielded major reforms in fiscal management, public investment planning, fiscal decentralization, and social protection. First, a landmark ***Fiscal Stability Law*** (FSL) was passed by a bipartisan majority of Parliament in June 2010. There were three fiscal rules legislated (box 2); one adopted a structural balance similar to the Chile example. The rule committed the government to using long-term copper and coal prices as the basis for the mining revenues beginning in 2011 and specified ceilings on government structural deficits (2 percent of GDP, binding in 2013). Structural balances were to be defined using the long-term price of copper derived from publicly available IMF forecasts and from an independent, internationally reputable financial institution. The second rule set a ceiling of 40 percent of GDP on the net present value of public debt, and the third rule restrained annual increases in public expenditures to a sustainable level. In addition, the FSL required that annual budgets be consistent with medium-term budget frameworks.

The new law also mandated saving excess structural revenues in a Fiscal Stability Fund. A portion of these funds were to be invested overseas, helping to reduce Dutch disease pressures on the economy. The remaining mining sector revenues would be invested in domestic infrastructure to meet the substantial infrastructure needs of the economy. These rules will be key to Mongolia's efforts in constraining fiscal spending to prudent and sustainable levels.

Since 2011, as required by the FSL, the budget has been based on estimates of structural mineral revenues, with the difference between actual revenues and structural revenues (Tog. 241billion in 2011, or around 2.2 percent of GDP) saved so far in a Fiscal Stability Fund. The expenditure and debt ceilings act as circuit breakers, first by limiting absorption and overheating pressures in the economy when structural revenues are rising fast (as would happen when the OT

Box 2. Key Provisions of the Fiscal Stability Law

1. A ceiling on the structural deficit of 2 percent of GDP. The structural deficit is defined as total expenditures minus structural revenues, with the latter calculated by using the moving average price of major minerals—currently copper and coal—over 16 years (past 12 years, current year, and future three years). This helps to insulate the budget from commodity price volatility and prevents fiscal policy from transmitting the shocks to the rest of the economy. The provision takes effect in 2013.
2. A cap on expenditure growth based on the nonmineral GDP growth rate and determined as the greater between its 12-year moving average value and the budget year's GDP growth rate. Spending growth that is too fast can have negative consequences in terms of overheating and inflation, and is also difficult to manage without reductions in quality and efficiency. This provision is meant to prevent excessive spending growth when structural revenue is growing fast, and also takes effect in 2013.
3. Net present value of public debt cannot exceed 40 percent of GDP. The provision takes effect starting in 2014, with a transition period specified for the preceding years, and is meant to safeguard against the government borrowing excessively against future wealth.

Sources: Law of Mongolia on Fiscal Stability (passed June 24, 2010), and World Bank, EASPR.

mines starts to produce), and second by ensuring that the government does not borrow excessively against future mineral wealth.

Second, Parliament passed the ***Integrated Budget Law*** (IBL) in December 2011. This is a comprehensive law that significantly strengthens budget processes; improves the comprehensiveness of the budget; strengthens the public investment planning and capital budgeting process; and ensures efficient financial management. The law contains a range of measures and penalties to support fiscal sustainability, and in particular, the successful implementation of the FSL. It strengthens the public investment framework by requiring appropriate feasibility studies and alignment with national priorities for all public investment projects. The law is therefore an important step in permanently locking in prudent countercyclical fiscal policies and mechanisms in the future alongside the FSL, as well as addressing long-standing structural weaknesses in the execution of the capital budget.

The IBL also set in motion major fiscal decentralization reforms by significantly increasing the authority and financial resources of local governments, and strengthening accountability through participatory budgeting. In particular, the authority of local governments has been significantly enhanced, with the capital city and *aimag* governments responsible for key public services such as basic education; primary health care; urban planning and construction; social welfare services; water supply and sewerage; public transport; urban roads and bridges; and municipal services. These functions will be financed through local taxes and fiscal transfers (an equalization grant) from shared taxes from the central government, with the transfer formula based on factors such as population; population density; remoteness and size of the local government; and level of local development. Only the capital city government is allowed, with the approval of the Ministry of Finance, to borrow from capital markets to finance public investment projects, with the debt limited to the previous year's revenue and debt service limited to 15 percent of the previous year's revenue.

In addition, the ***Public Procurement Law of Mongolia*** (PPLM) was passed in January 2011. The PPLM, which will go into effect January 2013, introduces radical changes in the public procurement system in Mongolia. It takes procurement responsibility away from line ministries and gives it to a new Central Procurement Agency (CPA) for national-level projects and to local governments for local-level projects. The CPA will be responsible for all procurements for large projects—inter-regional roads, power plants, and so forth—as well as for establishing framework agreements for common-use items (such as office supplies) that will then be purchased by line ministries. Local governments will be responsible for all procurement of works, goods, and services to be financed from the local budget, as well as for local projects (for example, schools and hospitals) financed from the national budget.

The most novel aspect of the revised law is the new role for civil society organizations in both bid evaluation and contract monitoring, with the latter potentially including both monitoring the implementation of ongoing contracts as well as gauging end-users' satisfaction with completed contracts. If implemented effectively, these provisions will make Mongolia unique among developing countries in institutionalizing civil society oversight over government public expenditure management.

The passage of the ***Social Welfare Law*** in January 2012 was also a major accomplishment: it laid the foundation for a more efficient, cost-effective social welfare system in Mongolia that better protects the poor and is more fiscally sustainable. The law includes three key features: (i) substantial consolidation of categorical benefit programs; (ii) introduction of the poverty-targeted benefit based on proxy means testing targeting; and (iii) longer-term fiscal sustainability of social welfare. The program is likely to cover the population in the bottom 20 to 30 percent of income distribution. This will mean a more streamlined and rational system of social transfers that target the poor. The reformed system will be more coherent in terms of its design and structure and more effective in protecting the poor at a lower cost to the budget.

Finally, the challenge of implementation looms large. One of the key lessons emanating from Chile, and also from the Netherlands since it found the cure for Dutch disease, was that political commitment to sound fiscal management between the main economic stakeholders was of paramount importance. Recall that Chile implemented the structural balance rule long before there was specific legislation in place. And in the Netherlands, the economic cure for Dutch disease, the 1983 political Wassenaar pact between government, labor and business on fiscal and wage restraint, proved to be more important than the legislative enactment of a set of fiscal rules (Khan and van den Brink, 2009). In Mongolia, the implementation of the new laws is already being severely tested by politicians' attempts to spend the mining revenues off budget through special funds and new development financing institutions. Time will tell whether the new legislative framework is underpinned by the type of political commitment that is able to enforce the rules during the boom period—when they are actually most needed—to ensure the sustainability of public expenditures during the bust.

Conclusion

Mongolia's mineral wealth is an economic blessing, which if managed well has the potential to lead to lasting prosperity. The extensive, wide-ranging dialogue with their Chilean counterparts, facilitated by a strong IMF and World Bank partnership, significantly helped Mongolian policy makers

understand the challenges posed by Mongolia's mineral wealth, learn from Chile's success, and move decisively to enact appropriate reforms. Between June 2010 and January 2012, four major laws were passed that overhauled and replaced existing fiscal and public sector management laws and set the basis for a comprehensive strengthening of fiscal management and policy frameworks, fiscal decentralization, and social welfare.

The dialogue with Chile was also critical in building domestic political appreciation for the merits of the proposed reforms and enhancing the likelihood that the associated legislation, notably the FSL and IBL, would be passed. Although these laws are in the process of being implemented, they represent an extraordinary opportunity for Mongolia to ensure that the economy is better able to cope with risks and challenges posed by rising mineral dependence through prudent fiscal policy. The FSL and IBL will also ensure that Mongolia's mineral wealth is invested prudently and that these investments are productive, efficient, and aligned with national priorities and that the poorest people in the country are protected from commodity boom-bust cycles in a fiscally sustainable manner.

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Notes

1. When commercial production begins at OT in 2013, it is expected to produce 0.5 million tons of copper, 0.65 million ounces of gold, and 3 million ounces of silver per year, on average, during its first 10 years. In comparison, Escondida, the world's largest copper mine located in Chile, produced 0.82 million tons of copper in 2011 and 1.09 million tons in 2010.
2. The crisis also exposed weaknesses in other reform areas including the banking sector, social welfare, and mining.
3. Chile accounts for some 35 percent of global copper output and 40 percent of global reserves.
4. The existing fiscal legislation prevented parliament from adding expenditures to the government's budget proposals without identifying off-setting revenues. This simple but effective rule empowered government to start the implementation of the structural balance rule without having to initiate new legislation.
5. Funded through minimum annual contributions of 0.2 percent of GDP (to be made even if the government was running an overall deficit), which can be raised to 0.5 percent if there is a fiscal surplus of at least 0.5 percent.
6. This replaced the Copper Stabilization Fund set up in the 1980s. It was funded by the structural surpluses left over after the necessary transfers had been made to the Pension Reserve Fund and to recapitalize the Central Bank.

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