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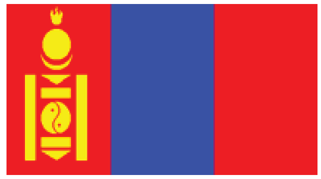

# MONGOLIA MONTHLY ECONOMIC UPDATE

**WORLD BANK**



## September 2009

The World Bank's *Mongolia Monthly Economic Update* provides an update on recent economic and social developments and policies in Mongolia. It also presents findings of ongoing World Bank work in Mongolia. The *Mongolia Monthly* is produced by a team from the World Bank's Poverty Reduction and Economic Management (PREM) Sector Unit in the East Asia and Pacific Region Vice-Presidency, with key inputs from other members of the Mongolia country team. Questions and feedback can be addressed to Altantsetseg Shiilegmaa (ashiilegmaa@worldbank.org). Copies can be downloaded from http://www.worldbank.org.mn.

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**Executive Summary**

International economic developments since the last Monthly Update were supportive for Mongolia. Mineral prices continued to rise and the industrial production of Mongolia's major trading partners, including China, showed signs of a turnaround.

However, developments in Mongolia are mixed. Compared to August 2008, the trade deficit narrowed further (on a 12-month rolling basis), but this merely pointed to a continued slowdown in the economy, as the contraction in imports continued to outpace that of exports. Prices, rather than volume, were the main cause of the drop in exports. And even though some gold exports were recorded in August, the performance of this sector was disappointing, despite the directed credit accorded to it earlier in the year.

Welcome exceptions to the declining export trend were the increased exports of coal and greasy cashmere. The positive development in the cashmere market, which is important for Mongolia's rural population, was caused by the timely removal of the export tax on unprocessed cashmere[1] and the opening up of more border crossings for cashmere trade.

The continued narrowing of the trade deficit, combined with monetary tightening and the introduction of a transparent foreign exchange auctioning mechanism by the Bank of Mongolia (BoM), kept the exchange rate stable. This situation has also allowed the BoM to continue to accumulate international reserves.

The overall consumer price index decreased by 0.9 percent in August (year-on-year), i.e., the economy is in deflation, driven by price decreases in food and fuel products, while core inflation[2] fell to single digits.

In response to lower inflation, the BoM cut its policy rate by one and a half percent and commercial banks reduced their nominal interest rates on MNT deposits. Even though real interest rates dropped, MNT savings continued to grow. While this points to restored confidence in the local currency, the banking sector continues to pose significant risk. NPLs and loans with principal in arrears continued to rise—a worrisome trend which is now almost ten months old.

Hardest hit by the economic downturn during the last year were the poor. The World Bank commissioned two special surveys to get a snapshot of the daily wage of unskilled workers in key informal labor markets in Ulaanbaatar in April and September, 2009. While the April survey showed real income collapses by about 60 percent compared to a year earlier, the results of the September survey suggest a modest

[1] The Mongolian Government officially cancelled the export duty of MNT 4000 on greasy and scoured cashmere on May, 2009.

[2] Core inflation excludes volatile items such as meat, milk and cheese, and energy and fuels, and is a proxy for domestic activity.

improvement between April and September. Disappearing inflation and slightly increased job demand seem to have been the contributing factors.

Although stabilizing, industrial production continues to contract, particularly in the manufacturing sector, with Mongolia facing a sharp GDP growth slow down for 2009 as a whole. And the IMF recently lowered its growth forecasts for 2009 and 2010 to 0.5 and 3.0 percent, respectively. Company tax returns confirm these negative trends. Comparing the second quarters of 2008 and 2009, company income before tax fell by 28.1 percent, and taxes paid fell by 51.9 percent, with mining, and gas, fuel and coal wholesale sectors being hit the hardest.

The fiscal balance remains under pressure: falling revenues contributed to a continued deterioration in the 12-month rolling fiscal balance through August. The deterioration of the deficit has been mostly due to falling mining revenues as expenditures remain relatively stable.

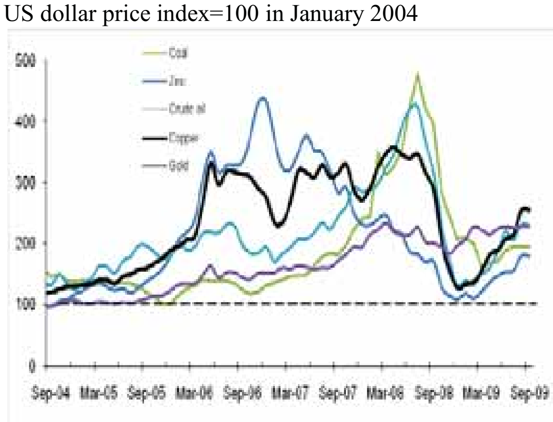
Using the crisis as an opportunity to improve the legal framework for fiscal management, the government now intends to submit two pieces of new fiscal management legislation to parliament. These are a new organic budget law and a new fiscal stability law. These two bills are designed to bring more stability and sustainability to the budget. A team from the Ministry of Finance and Parliament recently visited Chile to get a firsthand account of that country's highly successful management of its mining revenues during the recent boom and bust period. These improvements in fiscal management come at a highly opportune time, as the government concluded the negotiations on the OT mining development on October 6.

**External sector developments are supportive, as mineral prices rise and industrial production of major trading partners shows signs of recovery…**

The prices of major exports rose or remained stable over August (Figure 1). The copper price in September 2009 averaged $6195/tonne, after having fallen by as much as 70 percent from a high of $8900/tonne in April 2008 to $2600/tonne in December 2009. The international prices of Mongolia's other main export commodities (coal, zinc, cashmere, and crude oil) also show signs of improvement. However, mineral industry analysts differ in their views on the sustainability of the current recovery in copper prices. Some argue that the strong price rises of recent months are only temporary, caused mainly by increased demand from China's one-off stimulus plan and speculative stockpiling to take advantage of the previous fall in prices. Other analysts argue that the price increases can be sustained for some time to come, due to the global recovery, restocking outside of China and impending labor negotiations at a number of large mines, including in Chile. The consensus forecast seems a slow, gradual recovery in prices.

**Figure 1. Mineral prices are picking up slowly**

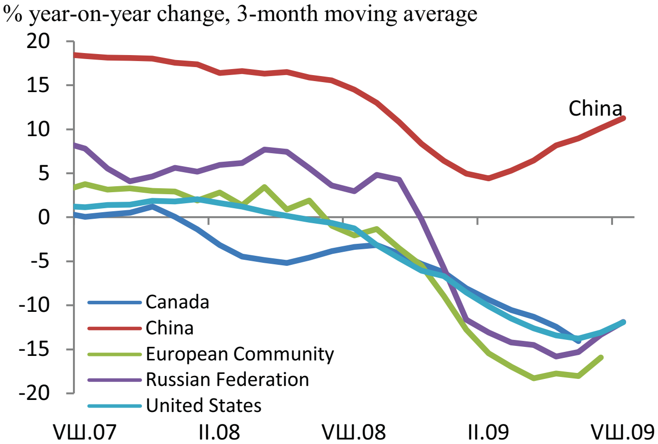
US dollar price index=100 in January 2004




Source: World Bank

**Figure 2. Major trading partners' industrial production also showing signs of recovery**

% year-on-year change, 3-month moving average




Source: World Bank

Mongolia's main trading partners (accounting for over 95 percent of export revenues) are showing signs of a slow turnaround (Figure 2). The growth in industrial production in China, which accounts for about three quarters of Mongolia's exports, has risen from about 10 percent year-on-year (on a three-month average basis) at the beginning of 2009 to about 12.3 percent in August 2009, up from 10.8 percent in July[3]. Industrial production in Mongolia's other major partners also showed improvements in recent months.

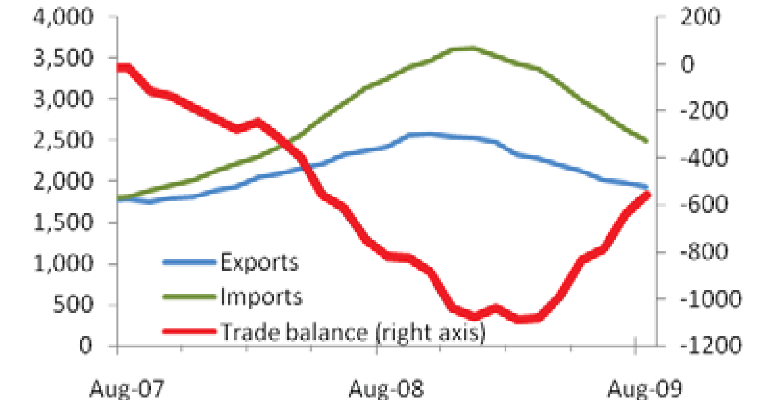
[3] Based on the recently issued World Bank China Monthly Update, September 2009.

**The goods trade deficit narrows further as the contraction in imports continues to outpace that of exports.**

The goods trade deficit narrowed to \$0.56 billion on a 12-month rolling basis by August from a recent peak of \$1.1 billion in February. Imports have contracted much more sharply than exports (Figure 3), pointing to a continued slowdown in domestic spending.

**Figure 3. The trade balance narrowed as imports have fallen faster than exports[4]**

$ mn (12-month rolling sum)




Source: National Statistical Office, World Bank

**Prices, rather than volume, are the main cause of the drop in exports.**

Goods exports over January-August are down 35.6 percent in dollar terms from a year earlier with declines across most commodities (Figure 4). Lower prices for the exports, not lower export volumes, are the main cause of the drop in exports. The dollar value of copper exports fell 55 percent in the first eight months of the year due entirely to the decline in copper prices—the export volume was unchanged compared to the corresponding period in 2008. Similarly, zinc exports fell mostly in line with prices, rather volume. Exports of crude oil and combed goat down (a cashmere-related product) were down over this period as well, with price declines exceeding the reduction in volumes exported.

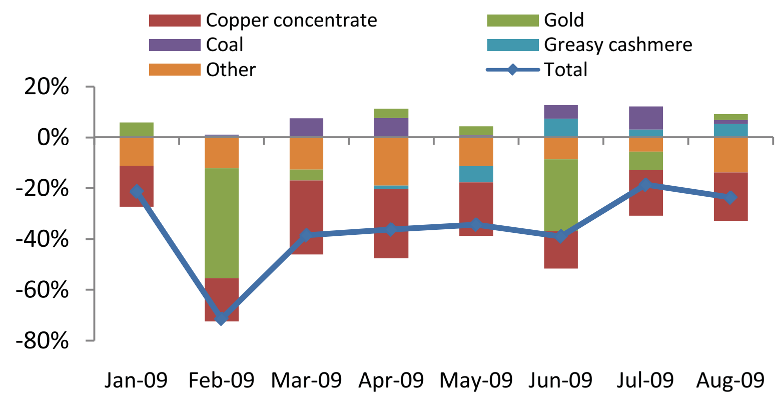
However, there are exceptions to this trend. Exports of coal and greasy cashmere have risen on an annual basis in recent months due to large increases in export volumes, partly offsetting the declines for other commodities. In the case of greasy cashmere, this more than offset the large price drop. The positive development in the cashmere market (important for Mongolia's rural population) is linked to Chinese traders taking advantage of the low prices in Mongolia while benefiting from a reduction in earlier trade barriers: the lifting of quality restrictions and the opening of more border posts authorized to trade cashmere with China. This is a good example of a timely trade liberalization which helped manage the downturn, in particular for the rural population.

[4] Monthly trade data is strongly affected by the seasons in Mongolia, and has strong month-to-month fluctuations. For this reason, we used a 12-month rolling sum.

In August, gold exports resumed, after inactivity in June and July. However, gold exports are still 55 percent lower than in August 2008[5]. Several explanations have been put forward to explain the low gold exports during the recent period of favorable prices. These include working capital shortages, disruptions of production and the disincentives of the Windfall Profits Tax (WPT). The government had issued a special gold bond earlier in the year to alleviate this financing constraint. However, industry insiders argue that this special credit window came too late and was not sufficiently targeted to gold producers to be effective. Another reason for the drop in gold export volumes was the shutdown of a major gold producer following a labor dispute and a revoked mining license. Finally, some gold exporters may have tried to evade the WPT by smuggling gold out of the country leading to underreporting of the actual export volume. Others may be holding on to their gold stock, rather than exporting it, correctly anticipating that the WPT would be abolished in 2011.

**Figure 4. Monthly decomposition by commodity of the year-on-year changes in the total value of exports**

Contributions to monthly year-on-year growth



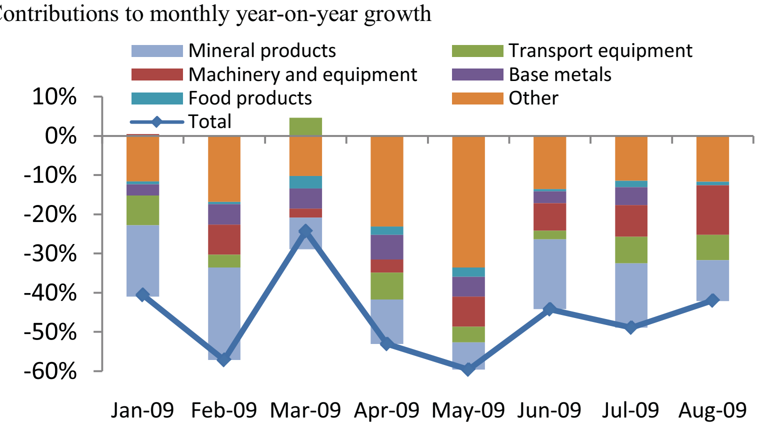

Note: Gold: unwrought or in semi-manufactured forms. Combed goat down and greasy cashmere are intermediate cashmere products.
Source: National Statistics Office, World Bank

**Goods imports remain sharply down on 2008 with declines focused on products affected by the slowdown in domestic industrial production.**

Goods imports over January to August were down by 39.8 percent in dollar terms from the corresponding period in 2008. Imports of industrial goods, such as base metals, mineral products, machinery and equipment, have fallen the most in the year to date, reflecting the slowdown in industrial

**Figure 5. Monthly decomposition by commodity of the year-on-year changes in the total value of imports**

Contributions to monthly year-on-year growth




Source: National Statistics Office, World Bank

[5] Most of the gold exports are destined for the European Union and Canada.

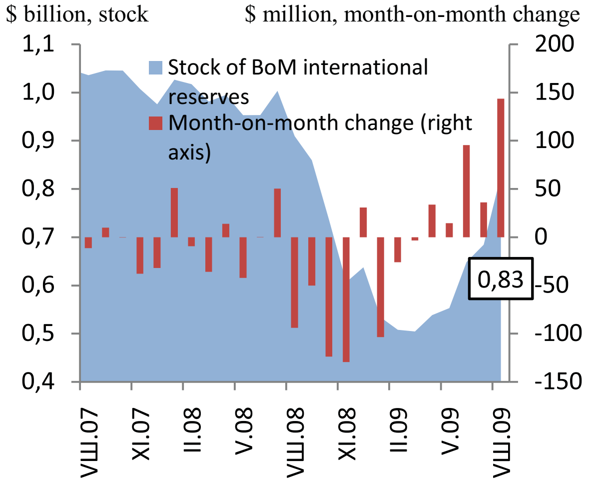
production in Mongolia (Figure 5). Imports of food products have fallen by less, because food import demand is less dependent on the domestic slowdown and responsive to exchange rate depreciation than the other types of imports.

**The US dollar exchange rate remains stable with some minor appreciation**

The narrowing of the trade deficit, combined with monetary tightening and the introduction of a transparent foreign exchange auctioning mechanism by the Bank of Mongolia (BoM), has resulted in a relatively stable exchange rate during the last six months and the accumulation of international reserves (Figure 6a). In September, the average monthly exchange rate against the USD appreciated by 2 percent compared with August. This period of stability from May 2009 follows the sharp MNT depreciation against the USD from October 2008 to mid-March 2009 and its subsequent partial recovery (Figure 6b).

**Figure 6a. BoM is accumulating its international reserves via FX auctioning**

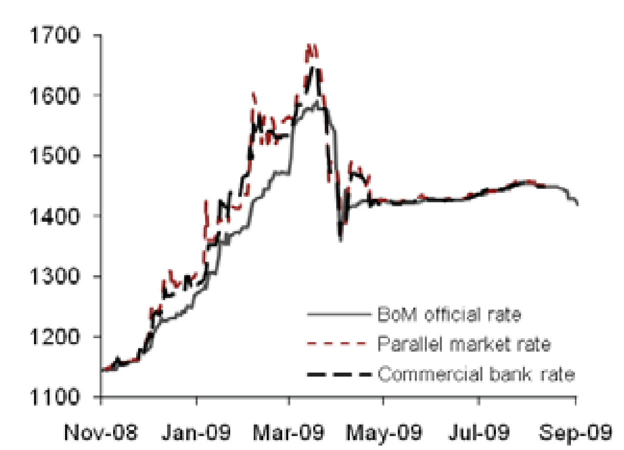
$ billion, stock $ million, month-on-month change




Note: Number in box is end-August stock of BoM international reserves in $ million.
Source: Bank of Mongolia, World Bank

**Figure 6b. Exchange rate stable, with some minor appreciation between August and September 2009**

MNT per USD



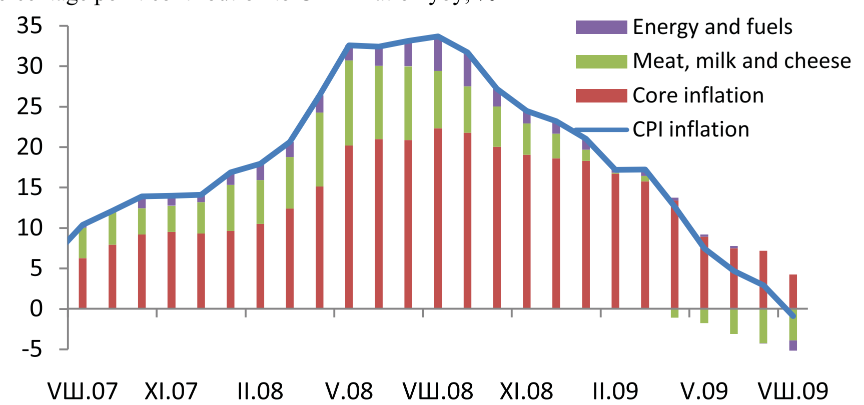

Last observation: October 1, 2009.
Source: Mongolian Financial Association, World Bank

**Inflation has fallen rapidly over 2009 with core inflation now in single digits and the overall price level in August lower than in the same month in 2008**

Core inflation fell to 6.2 percent year-on-year (yoy) in August, from over 25 percent at the beginning of the year. Overall CPI inflation has also fallen rapidly over 2009, reaching deflation of 0.9 percent yoy August 2009 (Figure 7). This is down from a peak of 33.7 percent yoy in August 2008 which was driven mostly by overheating due to strong domestic demand growth (evidenced by the large contribution of core inflation).

**Figure 7. Inflation has fallen rapidly from its peak, mainly because of the domestic slowdown**

Percentage point contribution to CPI inflation yoy, %

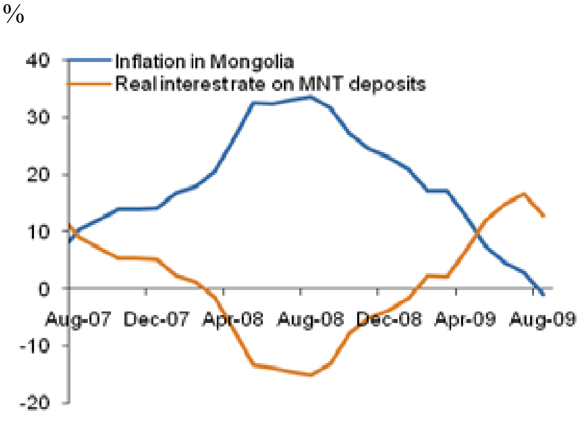



Note: This is the UB city CPI.
Source: National Statistical Office, World Bank

**In response to lower inflation, the BoM cut its policy rate and commercial banks reduced their interest rates on MNT deposits**

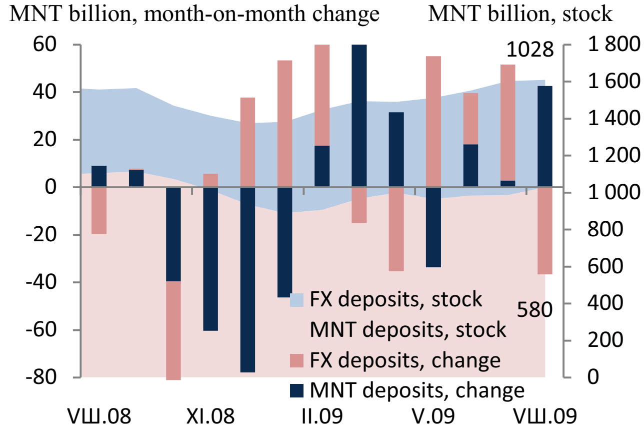
On September 29, the BoM lowered the 7-day bill central bank rate by 150 basis points to 10 percent. This follows two previous reductions, after a sharp rise in March, as inflation fell, global food and fuel prices eased, and the domestic economy slowed down. The real interest rate on local currency deposits fell to 12.9 percent in August from 16.6 percent in July (Figure 8a). Even so, MNT deposits grew to MNT 1,028 billion in August 2009. This is MNT 140 billion higher than the level at the height of the deposit outflow crisis in January 2009, but still lower (by MNT 121 billion) than in March 2008, when MNT deposits peaked. The August increase in MNT deposits mirrored a decrease in foreign exchange (FX) deposits to MNT 580 billion. However, FX deposits remain higher overall than the pre-crisis level (Figure 8b).

**Figure 8a. High positive real interest rates pressures banks to lower nominal rates on MNT deposits …**




Note: Interest rate deflated by CPI inflation.
Source: Bank of Mongolia, National Statistical Office, World Bank

**Figure 8b. … leading to large MNT deposit increase**

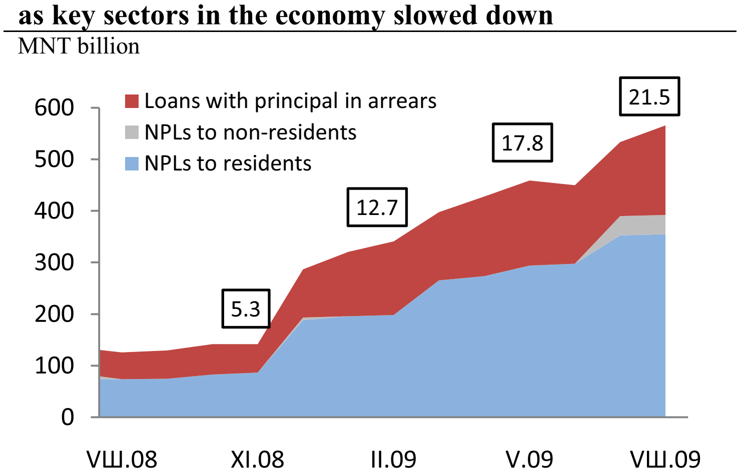



Note: Numbers are the end-August stocks of MNT and FX deposits in MNT billion.
Source: Bank of Mongolia, World Bank

**In the financial sector, banking sector balance sheets have weakened further, with NPLs and loans with principals in arrears continuing to increase…**[6]

Loan quality continues to deteriorate, reflecting portfolios that are exposed to the sectors that are experiencing a strong slowdown. Non-performing loans (NPLs) to residents reached MNT 355 billion or 13.7 percent of outstanding loans in August, as they continued to increase strongly from MNT 87 billion in November 2008. NPLs to non-residents amounted to MNT 37 billion at the end of August (96 percent of loans outstanding to non-residents), stayed the same as in July. Loans with principal in arrears[7] reached

**Figure 9. NPLs and loans in arrears have risen strongly, as key sectors in the economy slowed down**




Note: The numbers in boxes are the sums of NPLs to residents and non-residents and loans with principal in arrears as a percent of total loans outstanding.
Source: Bank of Mongolia, World Bank

[6] The numbers in the remainder of this section have been provided by the Bank of Mongolia. They include Anod Bank, the bank that was taken under conservatorship by the Bank of Mongolia in December 2008. Its failure caused the discrete jump in NPLs from November to December 2008.
[7] These loans are between 1 and 90 days in arrears but have not reached the over 90 day arrears defining NPLs.

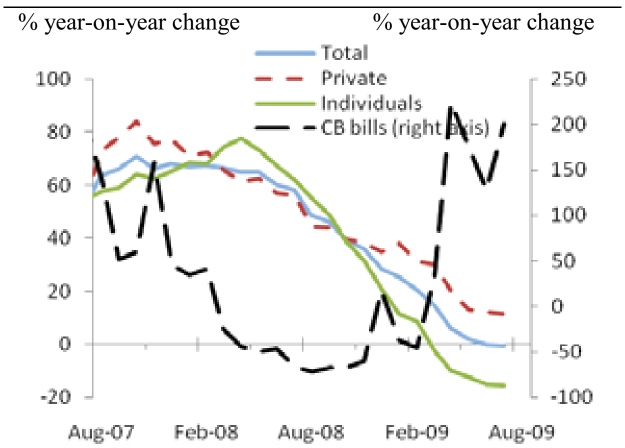
MNT 173 billion in August (6.7 percent of outstanding loans). This marked a recent high for formerly performing loans going into in arrears.

As a result, total NPLs (to residents and non-residents) and loans with principal in arrears amounted to MNT 566 billion at the end of August or 21.5 percent of loans outstanding to residents and non-residents. This is a large deterioration in the health of the loan portfolio compared to August 2008, when total loans outstanding were about the same, MNT 2.6 trillion, but NPLs and loans in arrears only made up 4.7 percent (Figure 9).

**With banks remaining cautious, their lending to the private sector has slowed to a standstill as they continue to purchase less risky central bank bills**

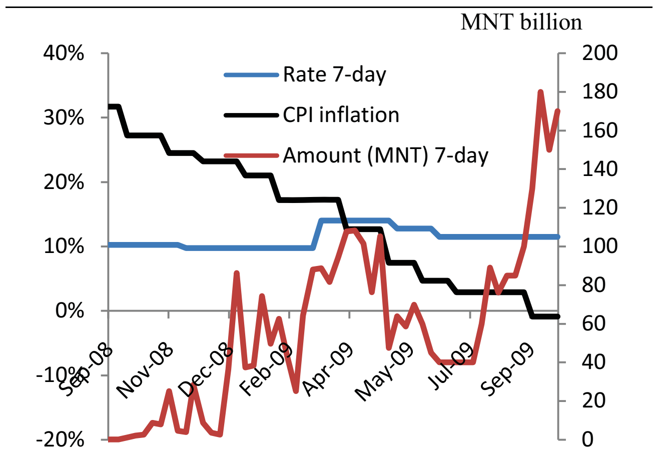
Banks have reduced lending and are continuing to buy less risky central bank bills instead, making it very difficult for companies and individuals to obtain loans. With the fall in inflation the real return on central bank bills, which currently have an annualized 10 percent nominal interest rate, has become increasingly attractive relative to the higher risk of lending to the private sector. Total nominal loan growth has come to a standstill, with loans outstanding to individuals contracting by 15.6 percent yoy in August 2009, and growth in loans to the private sector slowing down to 11 percent yoy (Figures 10a,10b)

**Figure 10a. Total loan growth has fallen to a standstill**




Source: Bank of Mongolia, World Bank

**Figure10b. … As banks prefer safe CB bills**



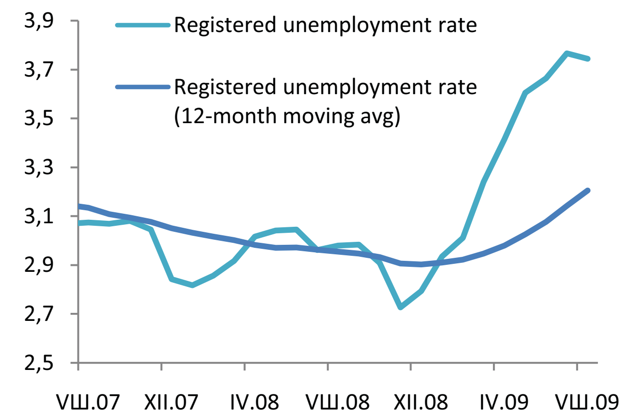

Source: Bank of Mongolia

**Registered unemployment decreased marginally in August…**

Registered unemployment decreased slightly from 3.8 to 3.7 percent of the labor force in August 2009 although continued to rise on a 12-month moving average basis (Figure 11). However, the officially registered unemployment figures grossly underestimate actual unemployment, which according to plausible, **unofficial** estimates could be a much higher percentage of the labor force.[8]

**Figure 11. Registered unemployment* slightly down**

% of labor force




* Defined as working-age population currently not working in a paid job and not self-employed, actively looking for job and registered at the Employment Office.
Source: National Statistical Office, World Bank

**…while informal wages seem to have improved slightly in recent months.**

The World Bank commissioned two special surveys to get a snapshot of the daily workers' wages in several major unskilled labor markets in Ulaanbaatar in April and September, 2009 (Table 1). Recall that the April survey indicated how badly the working poor had been affected by the economic crisis: real incomes were down by about 60 percent compared to April 2008[9]. The results of the September survey suggest a slight improvement between April and September. In the markets surveyed, it seems that, first, the number of workers increased by about 25 percent compared to April, 2009. Second, on average workers' real wages have increased by about 12 percent from April 2009 to September 2009. The average increase in wages would have been higher but for the negative impact of the standstill in cement loading due to the decline in activity in the construction sector. The wage recovery in the informal sectors between April and September 2009 reflects a combination of rising nominal incomes in some markets along with some deflation in the consumer price index, as discussed above.

[8] For the method used to arrive at this estimate, see the August 2009 Update.
[9] Box 2 in World Bank (2009), *Mongolia May Monthly Economic Update*.

**Table 1: Daily wages of unskilled workers in selected informal labor markets in UB**

| Informal labor market | Total number of workers in the market (estimated) | | Daily wages (MNT thous.) | | Average real wage per hour (MNT thous.) | | Change in average real wages per hour | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | (vs. Apr-08) | (vs Apr-09) |
| | Apr-09 | Sep-09 | Apr-09 | Sep-09 | Apr-09 | Sep-09 | Apr-09 | Sep-09 |
| Railway cargo unloading in UB "44" area: Triangle bridge district | 500 | 700 | 3.0-7.0 | 4.0-5.0 | 0.4 | 0.43 | -73 | 2 |
| Container loading and unloading for freight companies | 200 | 300 | 8.0 | 8.0-9.0 | 0.9 | 1.1 | -64 | 21 |
| Cement loading at “Botanic” market at Amgalan district | 100 | 20 | 8.0-30.0 | 2.7-2.9 | 1.3 | 0.4 | -56 | -73 |
| Supermarket shipments loading and unloading at “Bars” market | 25 | 100 | 5.0-10.0 | 6.0-10.0 | 0.8 | 0.9 | -56 | 8 |
| Merchandise carter Narantuul “Black market” in UB | 400 | 400 | 5.0-6.0 | 7.0-8.0 | 0.4 | 0.6 | -47 | 43 |
| Construction materials delivery “100 family” district | 30 | 50 | 5.0-10.0 | 10.0-15.0 | 0.7 | 1.3 | -56 | 70 |
| **Total (estimated)** | **1255** | **1570** | | | | **Average** | **-59** | **12** |

Notes: Data from special surveys conducted in April and September, 2009.

**Industrial production continues to contract, particularly in the manufacturing sector, with Mongolia facing a sharp GDP growth slow down for 2009 as a whole.**

The IMF recently lowered its growth forecasts for 2009 and 2010 to 0.5 and 3.0 percent, respectively, which are sharply down on the growth outturn of almost 9 percent in 2008. Industrial production (on a three-month moving average basis to smooth fluctuations) contracted by 11.9 percent yoy in August 2009. Manufacturing activity was hit especially hard, with two key activities (manufacturing of textiles and basic metals) contracting by 30 to 60 percent yoy. After a brief rebound, mining and quarrying fell slightly, mainly due to the decrease in the mining of gold (Figure 12).

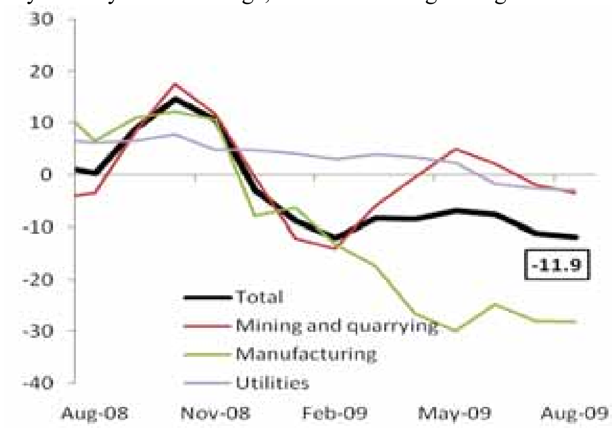
Detailed firm-level data confirms this trend.[10] Comparing the second quarters of 2008 and 2009 for a large sample of firms,[11] sales revenue declined by 16.0 percent, and expenses fell by 10.8 percent. As a result, company income before tax fell by 28.1 percent, and taxes paid by 51.9 percent. Mining, and gas, fuel and coal wholesale firms suffered particularly large drops in revenue (Figure 13).

[10] National Tax Administration, World Bank (2009), *Mongolia June Monthly Economic Update,*

[11] National Tax Administration consolidates income statements of the top 180 enterprises, whose paid taxes contribute 80 percent of corporate revenues to the state budget.

**Figure 12. Industrial production contracted**

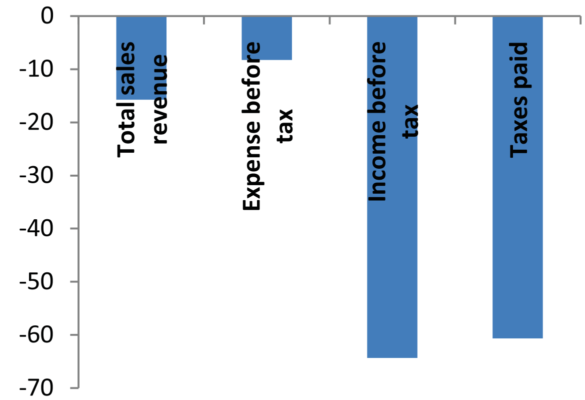
% year-on-year real change, 3-month moving average




Note: Number in box is August growth.
Source: National Statistical Office, World Bank

**Figure 13. Firms' sales revenue, expenses before tax, income before tax and taxes paid declined**

% change Q2 2008 to Q2 2009



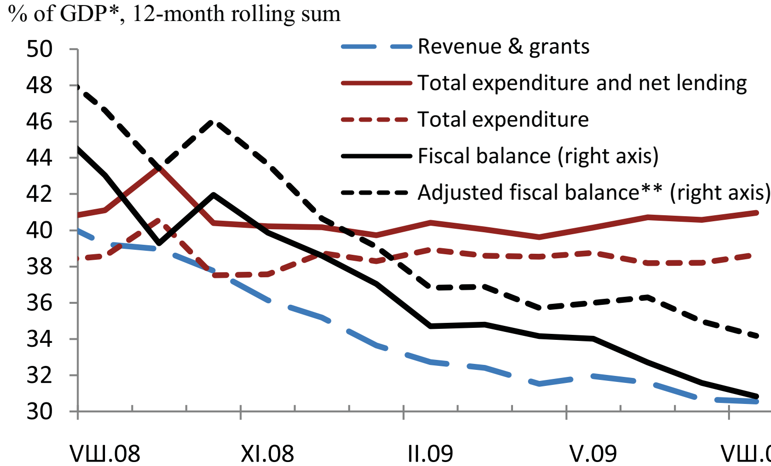

Source: Top 180 companies financial statements, National Tax Administration, World Bank

**The fiscal balance remains under pressure: falling revenues contribute to a continued deterioration in the 12-month rolling fiscal balance through August**

On a 12-month rolling basis the fiscal deficit reached 10.4 percent of GDP in August, after a protracted decline since early 2008 and a brief slowdown around April. The deterioration of the deficit has been mostly due to falling mining revenues whereas expenditure has been slowly increasing as a share of GDP (Figure 14).

**Figure 14. The 12-month rolling fiscal deficit continues to widen, as revenue has been falling, compared to expenditure**

% of GDP*, 12-month rolling sum




* GDP interpolated using actual 2008 GDP (MNT 6,130 billion) and projected 2009 GDP (MNT 6,209 billion). ** Adjusted fiscal balance excludes net lending from expenditure, leaving current and capital expenditure only.
Source: Ministry of Finance, World Bank

Total revenue and grants collected from January to August 2009 fell by 19 percent in nominal terms and 26 percent in real terms,[12] compared to a year ago. Corporate income tax and the Windfall Profit Tax fell by 38 percent and 80 percent respectively in real terms compared with a year ago. This was mainly caused by the downturn in

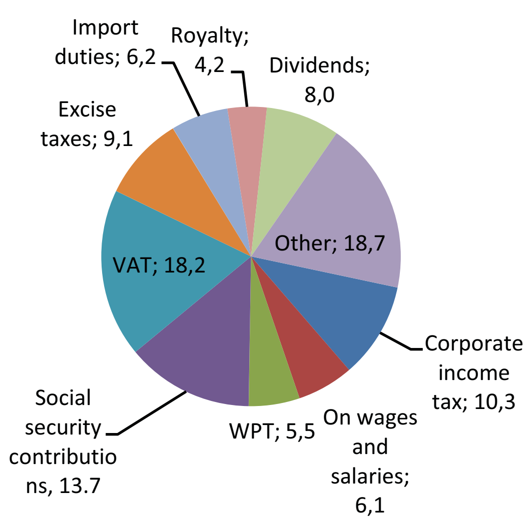
[12] In order to calculate the change in real terms, the revenue and expenditure items have been deflated by the consumer price index (CPI).

the mining sector; for instance, in 2008 the mining sector was responsible for an estimated 42 percent of corporate income tax and 89 percent of dividends. VAT, excise tax, export and import duties and royalties were lower due to the slowdown in growth, consumption, imports and commodity prices. In contrast, personal income tax receipts, and taxes on wages and salaries were up by 17 percent and 7 percent in nominal and real terms for the period January to August, 2009, against the same period of 2008. Finally, dividends were higher by 206.7 percent in real terms, because planned dividend payments a year ago were not received fully.

Total expenditure and net lending from January to August 2009 were up by 5 percent in nominal terms and down by 4 percent in real terms, compared to a year ago. Wages and salaries were relatively stable in real terms (up by 1.3 percent).

**Figure 15a. Shares in revenue**

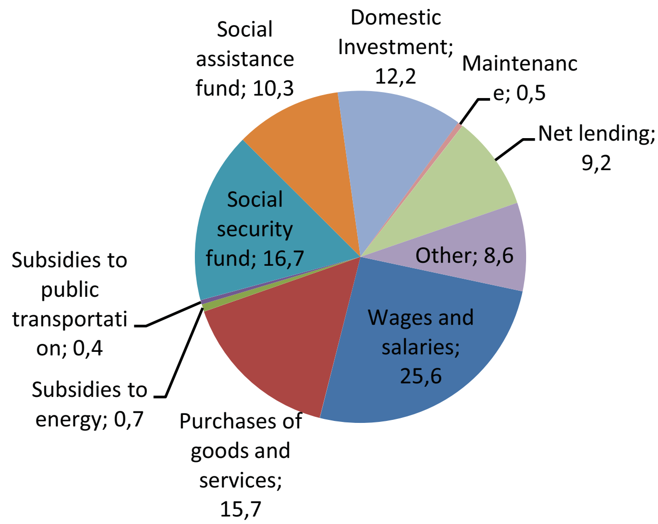
% of total revenue and grants, August 2009




Source: Ministry of Finance, World Bank

**Figure 15b. Shares in expenditure**

% of total expenditure and net lending, August 2009




Source: Ministry of Finance, World Bank

**The Government is preparing to implement major fiscal reforms which aim to bring more stability and sustainability to the budget**

The copper price collapse of 2008 and early 2009 hit Mongolia harder than the world's other major copper exporters, e.g. Chile, Peru, Papua New Guinea and Zambia.[13] This was because of Mongolia's particular combination of expansive fiscal and monetary policies, a fixed exchange rate and an overheated financial sector at the time of the copper price collapse. Using the crisis as an opportunity to improve the fiscal framework, the government will submit two pieces of fiscal management legislation to parliament: a new organic budget law and a fiscal stability law (see Box 2 for details). Passing these two laws means

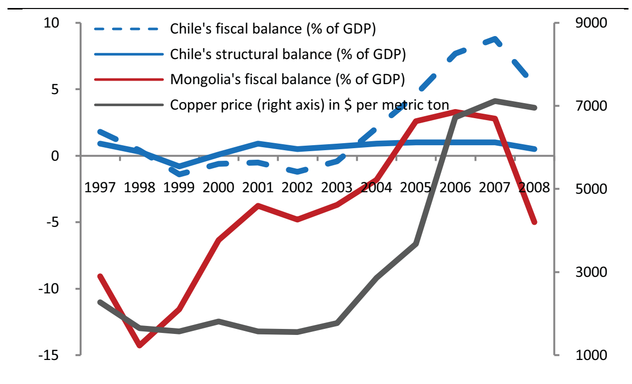
[13] Box 1 in World Bank (2009), *Mongolia August Monthly Economic Update*.

that Parliament is asked to restrict its own powers vis-à-vis the budget, with the purpose of bringing more stability and sustainability to the budget.

To highlight their operation in practice, and the benefits they can bring to economic stability, the Mongolian Ministry of Finance used an existing World Bank-financed technical assistance project (ECTAC) to finance a study tour consisting of Parliament and cabinet members to Chile and Washington D.C from September 7 to 12. Chile was chosen because it is also a world copper producer, but, unlike Mongolia, already had a fiscal responsibility law in place during the last decade. The fiscal rules embedded in this law made Chile save substantial amounts during the boom, allowing it to efficiently respond during the bust (see Box 1).

### Box 1. Chile's Fiscal Regime

**Figure 1.1. How Chile's structural balance rule stabilized the budget during the copper price boom and bust**




Source: World Bank, IMF, Central Bank of Chile and Mongolia

Prior to the introduction of its fiscal regime, Chile had suffered from a seemingly endless succession of mining booms and busts. However, starting in 2001, the Chilean Ministry of Finance adopted a structural balance rule, which limited the effects of cyclicality on fiscal management (mining revenues are in the order of 15 percent of total revenues) and improved the weak public finances seen in the late 1990s. These weaknesses included a series of fiscal deficits, the negative net worth of the Central Bank (undermined by a large bailout of insolvent banks in the 1980s and FX operations in the 1990s), foreign debt vulnerabilities, and the large contingent liabilities associated with pensions and infrastructure concessions. The new fiscal regime was needed to neutralize the fluctuations, but also had to be simple, clearly defined and transparent, in order to provide maximum clarity on the fiscal situation and avoid manipulation.

The source of the fluctuations on fiscal revenues was threefold. First, whenever copper (and molybdenum) prices went up, mining tax revenues went up. To neutralize the fluctuations, a long-term copper price projection was used, instead of the actual price, to determine the "structural" mining revenues. If the actual mining price went above the long-term price projection, the realized revenues would be saved, and not used in the current budget, and vice versa. Second, whenever GDP fluctuated, non-mining tax revenues fluctuated. To neutralize this, a long term GDP growth rate was estimated, and, similar to the mining tax revenue smoothing, a structural non-mining tax revenue stream was created. Third, the return on governments' financial assets fluctuated also, and a similar smoothing mechanism was adopted.

In each year, the "structural" (not the actual) revenues would then set a limit on actual expenditures in such a way that a specific fiscal balance would be achieved. The budget balance thus targeted is therefore called a structural balance. Chile started out with a structural balance of 1 percent of GDP (a surplus). During the mining boom years of the mid-2000s, this type of structural balance rule was in place. Chile's actual fiscal surpluses would grow to8 or 9 percent of GDP, but expenditures would be limited as if the surplus were only 1 percent. The structural balance target is reviewed every year, and in the case of Chile it was also revised downward several times to better respond to the emerging economic trends. Currently, Chile is under a structural fiscal deficit rule of one half of a percent.


Chile's fiscal responsibility law complements this regime by focusing on the management of the stock of financial assets generated by the rule. The Pension Reserve Fund (PRF) and Social and Economic Stabilization Fund (ESSF) were created and wholly invested abroad in order to shield the exchange rate and local financial asset markets from the effects of fiscal portfolio growth. The fiscal responsibility law also permits the re-capitalization of the Central Bank over 5 years and increases transparency of fiscal policy and financial asset management. The savings set aside in the stabilization fund are used for two purposes only: to finance the fiscal deficit and/or repay public debt. The investment strategy is conservative and mindful of the requirement to be liquid; invested mostly (70 percent) in government bonds of the US, several EU states and Japan. The PRF receives 0.5 percent of GDP every year, with a floor of 0.2 percent. The stabilization fund held about $25 billion in savings before the global crisis. Today, the savings are down to $7 billion, because of the financing of the fiscal deficit caused by the stimulus package.

The structural balance rule effectively ended the boom and bust cycles, making budgeting more predictable and sustainable. The recent external shock proved that Chile could weather the storm better than others with savings of about one third of its GDP. While other countries in the region had to cut expenditures, Chile is now injecting funds into the economy, including funds to protect the poor from the downturn. The Chilean fiscal stimulus package is entirely domestically financed, and consists of 1 percent of GDP tax cuts, 1 percent increased current expenditures, and 0.8 percent public investments. The policy of running large fiscal surpluses during the mining boom, which had been controversial, has now been fully vindicated and legitimized by political polls.

Source: World Bank staff; Bloomberg; Budgets Bureau, Ministry of Finance of Chile

**Box 2. Fiscal Stability Law: Smelting Copper into Prosperity**[14]

Mongolia's mineral wealth is an economic blessing that, if well managed, will lead to lasting economic prosperity. But, prosperity is not guaranteed. Indeed, international experience shows this blessing often becomes a resource curse![15] The challenge for Mongolia is to ensure its substantial mineral deposits are exploited to promote strong, sustainable, and equitable growth with low inflation.

A good fiscal policy is critical for turning mineral wealth into economic prosperity. The government, therefore, plans to adopt a fiscal stability law that will promote the needed budget discipline. It will do so by including fiscal rules that put limits on policymakers' discretion. These rules would function much like a fiscal circuit breaker. A set of three complementary rules would, as one example, work together to ensure fiscal discipline:

*Ceiling on the "structural" deficit*. The structural deficit adjusts the deficit for swings in copper prices. Specifically, revenue projections would be based on a "normal" or smoothed copper price instead of the actual copper price. This helps insulate the budget from copper price volatility, and prevents fiscal policy from transmitting copper price shocks to the rest of the economy. In the past, when copper prices were high, fiscal spending increased in tandem with revenue, leading to overheating and inflation. Then, when copper prices fell, revenue fell, and spending had to be curtailed sharply—making the ensuing economic downturn worse. In other words, fiscal policy was too procyclical. Use of a structural deficit rule will prevent this kind of boom-bust policy. Such a rule has worked well in Chile.

*Debt ceiling*. This would hopefully not be a binding constraint. Nonetheless, such a rule would prevent excessive

[14] Prepared by Steven Barnett (IMF). The views expressed herein are those of the author and should not be attributed to the IMF, its Executive Board, or its management

[15] Specifically, resource dependent economies often grow slower than other economies—see, for example, Hausmann and Rigobon, 2003, "An Alternative Interpretation of the "Resource Curse": Theory and Policy Implications", in *Fiscal Policy Formulation and Implementation in Oil-Producing Countries*, ed. by Davis, Ossowski, and Fedelino, (Washington, International Monetary Fund).

borrowing against future wealth—a common mistake among resource economies. High public debt makes the economy vulnerable to commodity price changes, other shocks, or financing constraints. A debt ceiling also reinforces the government's commitment to fiscal sustainability.

*Ceiling on expenditure growth*. This is another circuit breaker that should generally not kick in. Spending growth that is too fast, however, is bad for the economy (it leads to overheating and inflation) and, from a fiscal perspective, difficult to manage without reductions in quality and efficiency. This rule is a safeguard that would apply when structural revenue is rising fast, such as when Oyu Tolgoi mine comes on line.

In addition to the numerical rules, the fiscal stability law will also incorporate procedural and transparency reforms to strengthen budget discipline. This could include, for example, strengthening the role of the medium-term framework in setting aggregate ceilings for the budget process and requiring mandatory cost estimates for program proposals to ensure consistency with the fiscal framework. The government also plans to adopt an organic budget law that will complement the fiscal stability law in promoting sound budgeting.

At the end of the day, the fiscal stability law will only work if policymakers adhere to it. The fiscal rules and the annual budget must become a binding constraint on policy. This means that all new policy initiatives with fiscal consequences would have to be made consistent with the fiscal policy framework before being adopted. So, policies that boost spending, for example, have to be paid for through spending cuts elsewhere or new revenue measures. Policymakers are in effect agreeing to "tie their own hands" to safeguard fiscal discipline. A fiscal discipline, however, that will yield huge benefits in helping to convert Mongolia's substantial mineral wealth into economic prosperity.

**Government signs long-awaited OT deal which should make a substantial contribution to the economic growth of Mongolia**

Recently, Parliament voted to approve four draft law amendments necessary for the conclusion of the Oyu Tolgoi (OT) Investment Agreement between the government and Ivanhoe Mines/Rio Tinto. These amendments will invalidate the WPT [16]with effect from January 1, 2011, introduce changes to the corporate income tax (extending the loss-carried-forward provision from 2 to 8 years), and permit private sector construction and management of roads and water supply facilities. The Government Signed the Investment Agreement with Ivanhoe Mines and Rio Tinto on October 6$^{th}$ paving the way for mine development.

[16] The WPT is a 68 percent tax applies to copper and gold revenues if prices exceed $2600/tonne and $850/ounce respectively. The WPT revenues are deposited in the Mongolian Development Fund (MDF) to finance savings, social programs and infrastructure investments. In practice, between 2006 and end-2008, about 30 percent of WPT revenue was saved, amounting to 4.9 percent of GDP, and 70 percent of revenue was allocated to social transfers and investment.

Mine construction cost projections are approximately US$4 billion to build and commission the mining complex. A future decision to build a coal-powered electricity generating plant for Oyu Tolgoi would require an additional capital commitment.

Taxes and rates stabilized for the life of the agreement include:
o Corporate income tax.
o Customs duty.
o Value-added tax.
o Excise tax.
o Royalties.
o Exploration and mining licences.
o Immovable property and/or real estate tax.

The existing 68% Windfall Profits Tax on copper and gold was cancelled by the Mongolian Parliament in August, effective January 1, 2011.

The agreement's taxation provisions clarify the application of current Mongolian legislation.

Ivanhoe Mines Mongolia Inc. will receive a 10% investment tax credit on all capital expenditures and investments made throughout the Oyu Tolgoi construction period.

Any future taxes introduced will not be imposed on the project unless future legislation is more favourable. If Mongolia enters a treaty that provides greater benefits to the investor, Ivanhoe may request the benefit of such law, regulation or treaty to help ensure that a stable taxation environment is maintained.

In accordance with Mongolia's Minerals Law, Mongolia will acquire a 34% interest in the Oyu Tolgoi Project through the state-owned Erdenes MGL.

- Ivanhoe will arrange financing for the construction of Oyu Tolgoi within two years of the Investment Agreement taking effect; production must begin within five years of financing being secured.
- Ivanhoe will fund the Government's share of initial capital costs, to be financed through loans and equity during the construction and initial production periods. Ivanhoe will receive loan repayments on redemption of the equity, dividends and interest at a rate of 9.9%, adjusted to the US CPI.
- Erdenes will nominate three directors and Ivanhoe will nominate six directors to the nine-member IMMI board.
- Ivanhoe will nominate the management team that will be responsible for Oyu Tolgoi's core operations. Management services payments will be received, based on capital and operating costs through the construction period and after production begins.
- The Government will have the option to purchase an additional equity interest of 16% of IMMI, at an agreed upon fair-market value, one year after the expiry of the initial 30-year term of the Investment Agreement and following the start of the permitted 20-year extension. This would give the government a total maximum interest of 50% of Oyu Tolgoi for the remainder of the project's operational life. Ivanhoe would continue to hold management rights over the project and hold a deciding vote at board and shareholder meetings.
- A condition of ownership is that Erdenes must remain wholly-owned and controlled by the state for the life of the project. The only exception would be if the state listed Erdenes shares on the

Mongolian Stock Exchange, at which time any and all money invested on the Government's behalf would have to be immediately paid in full.

Ivanhoe Mines has agreed to make advance payments to the Government of Mongolia in three tranches. The three payments, which will total US$250 million, will be secured by Mongolian Government bonds that will mature after five years and pay annual interest of 3.8%.

- An initial $100 million will be transferred to the government by October 20, 2009.
- A further $50 million will be transferred within 14 days of the Investment Agreement taking full effect, after all conditions precedent have been satisfied.
- The final $100 million will be transferred within 14 days of the successful raising of funds required to build the open-pit mine and complete shaft and tunnel access to the initial underground deposit at the site.

Specific terms of the Investment Agreement include commitments that:

- At least 90% of the project's employees will be Mongolian citizens. During construction and any expansion periods, at least 60% of the contractors' employees will be Mongolian citizens; and for mining and mining-related work, at least 75% of contractors' employees will be Mongolian citizens.
- Within five years, at least 50% of engineers will be Mongolian citizens, increasing to at least 70% within 10 years.
- A comprehensive, five-year Oyu Tolgoi Training Strategy and Plan will be submitted to the Government for the training of skilled Mongolian workers within 90 days of the agreement taking effect.
- As part of a graduate scholarship program to be established by Ivanhoe, 120 scholarships will be given over six years to Mongolian students studying in Mongolia and 30 Mongolian students will be awarded scholarships to study at international universities.
- The government will support the introduction of international mining education and training courses at selected universities and vocational training institutions within six months of the agreement taking effect.
- Ivanhoe will ensure payment of fair wages and equal remuneration for work of equal value.

Ivanhoe has also made commitments with respect to business development, sustainable communities and best-practice environmental management.

- A report on the economic viability of building a copper smelter in Mongolia will be prepared within five years of the start of production at Oyu Tolgoi – a response to the Government's interest in adding value to Mongolian concentrate. Ivanhoe has agreed that any smelter it might build in connection with the Oyu Tolgoi Project will be located in Mongolia.
- If a smelter is built with Ivanhoe's involvement, or through a third party, the Government may request preferential access, on agreed terms, to Rio Tinto's proprietary flash-smelting technology for use at the smelter. Oyu Tolgoi concentrate would be supplied to such a smelter, in which the Government may have an interest, on commercial terms and at international pricing.
- Ivanhoe and Rio Tinto have agreed to give priority, where possible, to buying and using services provided by Mongolians, and equipment and materials made in Mongolia, with a preference to businesses located in the Umnugovi (South Gobi) region, which contains Oyu Tolgoi.
- Priority will be given to residents of local communities for training assistance and jobs. Support will be given to special programs to help start and develop local businesses capable of supplying Oyu Tolgoi and to help Mongolian businesses diversify to reduce their dependence on the project.
- Nomadic herder families impacted by the Oyu Tolgoi Project will continue to receive compensation.

- Ivanhoe will support and participate in the Southern Gobi Regional Development Council, to be established by the Government, which will formulate a development strategy for the region.

Issues to be addressed within a consultative council will include:
- Transparent and responsible governance.
- In-migration influx issues.
- Urban planning and development.
- Formal and non-formal education, including English-language and vocational training.
- Health care, cultural facilities, sport facilities and veterinary services.
- Capacity building for local governments and civil society.

Ivanhoe has committed to apply modern extraction and processing technology, which meets Mongolian and international environmental codes and standards, in an efficient manner that minimizes environmental impacts to an economically feasible extent.

An independent report on the progress of the project's environmental protection plan and monitoring program will be submitted every three years and made public.

The cost of eliminating material, adverse impacts on air, water, soil, animals and plants will be borne by the project.

Oyu Tolgoi has the right to use water resources that Ivanhoe has discovered for any purposes connected with the project, during the life of the project. Surplus water may be made available to other economic entities provided Ivanhoe is compensated for its exploration costs.
- Water discovered by Ivanhoe will be made available to herder families and community residents for household purposes – and Ivanhoe will guarantee the supply of livestock drinking water for existing users in the area. Water surplus to household requirements will be made available for local, non-commercial agricultural uses.
- Modern technology and procedures will be applied to minimize water usage and water will be recycled where practicable.
- Areas closed to further mining will receive environmental rehabilitation and potential hazards will be addressed to protect the public.
- A mine-closure plan will be financed through funds allocated to an escrow account beginning seven years before actual closure.

Electrical power and transportation among other key provisions

- Recognizing that the supply of reliable electricity is critical to the project, Ivanhoe has the right to obtain power from inside or outside Mongolia, including arranging the construction of a high voltage line from Oyu Tolgoi to the Mongolia-China border to connect with Chinese supply.
- Ivanhoe also has the right to build or sub-contract construction of a coal-fuelled power plant at an appropriate site to supply the project, which could be supplemented by renewable wind or solar power.
- Within four years of the start of mine production, all power requirements must be sourced from within Mongolia, either from a coal-fuelled plant or from the national distribution grid.
- Ivanhoe may build an international road from Oyu Tolgoi to the Gashuun Sukhait crossing on the Mongolia-China border, with costs to be deducted from annual taxable income. The Mongolian Government would be responsible for maintaining the road and collecting fees from other users.

- The government may construct, or permit a third party to construct, a railway in the vicinity of Oyu Tolgoi to the Mongolia-China border, to be made available to Oyu Tolgoi on competitive commercial terms. Ivanhoe would be consulted on the route.
- The contract area includes three mining licences owned and controlled by Ivanhoe Mines and two licences included in the Ivanhoe Mines-Entrée Gold Joint Venture properties that contain the Heruga and Hugo North Extension deposits and future exploration targets.
- All investment by Ivanhoe will enjoy legal protection guaranteed by the Mongolian Constitution,
- Foreign Investment Law and other international treaties to which Mongolia is a party.
- Any disputes between parties that cannot be resolved by the parties within 60 working days may be settled by binding arbitration in accordance with the procedures under the Arbitration Rules of the United Nations Commission on International Trade Law.

The Oyu Tolgoi copper and gold mine (together with the Tavan Tolgoi coal mine) will make a substantial contribution to the economic growth of Mongolia in the near future.

**Table 5. Mongolia: Key Indicators**

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008e | 2009f |
|---|---|---|---|---|---|---|---|
| **Output, Employment and Prices** | | | | | | | |
| Real GDP (% yoy change) | 7.0 | 10.6 | 7.3 | 8.6 | 10.2 | 8.9 | 0.5 |
| Industrial production index | .. | .. | .. | 100.0 | 110.4 | 113.4 | .. |
| (% yoy change) | .. | .. | .. | .. | 10.4 | 2.8 | .. |
| Unemployment (%) | 3.4 | 3.6 | 3.3 | 3.2 | 2.8 | 2.8 | .. |
| Consumer price index (% yoy change) | 4.6 | 10.9 | 9.6 | 5.9 | 14.1 | 23.2 | 8.5 |
| | | | | | | | |
| **Public Sector** | | | | | | | |
| Government balance (% of GDP) | -3.7 | -1.8 | 2.6 | 3.3 | 2.8 | -5.0 | -6.5 |
| Non-mining balance (% of GDP)(1) | -5.9 | -5.8 | -1.3 | -7.3 | -13.4 | -15.3 | -12.1 |
| Domestic public sector debt (% of GDP) | 3.1 | 1.4 | 0.1 | 1.0 | 0.5 | 0.0 | 0.0 |
| | | | | | | | |
| **Foreign Trade, BOP and External Debt** | | | | | | | |
| Trade balance ($ mn) | -199.6 | -99.2 | -99.5 | 136.2 | -52.4 | -612.6 | -183.0 |
| Exports of goods ($ mn) | 627.3 | 872.1 | 1066.1 | 1543.9 | 1950.7 | 2534.5 | 1830.0 |
| (% yoy change) | 19.7 | 39.0 | 22.2 | 44.8 | 26.4 | 29.9 | -27.7 |
| Copper exports (% yoy change) | .. | .. | 14.7 | 94.8 | 27.7 | 3.0 | .. |
| Imports of goods ($ mn) | 826.9 | 971.3 | 1165.6 | 1407.7 | 2003.1 | 3147.0 | 2013.0 |
| (% yoy change) | 21.6 | 17.5 | 20.0 | 20.8 | 42.3 | 57.1 | -35.7 |
| Current account balance ($ mn)(2) | -102.4 | 24.1 | 29.7 | 221.6 | 264.8 | -721.9 | -291.0 |
| (% of GDP) | -7.1 | 1.3 | 1.3 | 7.0 | 6.7 | -13.9 | -6.9 |
| Foreign direct investment ($ mn) | 131.5 | 128.9 | 257.6 | 289.6 | 360.0 | 585.5 | 517.0 |
| External debt ($ mn) | 1240.3 | 1311.8 | 1360.0 | 1413.9 | 1528.7 | 1600.5 | 1860.0 |
| (% of GDP) | 87.3 | 73.7 | 59.7 | 44.3 | 38.9 | 33.1 | 46.5 |
| Short-term debt ($ mn)(3) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | .. |
| Debt service ratio (% of exports of g&s)(3) | 13.4 | 9.4 | 7.6 | 5.4 | 4.3 | 3.5 | 4.3 |
| Foreign exchange reserves, gross ($ mn) | 203.5 | 207.8 | 333.1 | 718.0 | 1,000.6 | 656.7 | 822.1 |
| (month of imports of g&s) | 2.3 | 1.8 | 2.5 | 4.6 | 5.0 | 2.1 | 3.7 |
| | | | | | | | |
| **Financial Markets** | | | | | | | |
| Domestic credit (% yoy change) | 157.3 | 25.8 | 18.8 | -3.1 | 78.4 | 60.6 | .. |
| Short-term interest rate (% per annum)(4) | .. | 15.8 | 3.7 | 5.1 | 8.4 | 9.8 | .. |
| Exchange rate (MNT/USD, eop) | 1168.0 | 1209.0 | 1221.0 | 1165.0 | 1170.0 | 1267.5 | .. |
| Real effective exchange rate (2006=100)(5) | 94.2 | 93.9 | 99.6 | 102.8 | 104.8 | 127.4 | .. |
| (% yoy change) | -4.8 | -0.4 | 6.1 | 3.2 | 1.9 | 21.5 | .. |
| Stock market index (2000=100)(6) | 151.5 | 120.8 | 203.6 | 382.0 | 2048.0 | 1181.6 | .. |
| | | | | | | | |
| Memo: | | | | | | | |
| Nominal GDP (MNT bn) | 1,660 | 2,152 | 2,780 | 3,715 | 4,600 | 6,130 | 6,209 |
| Nominal GDP ($ mn) | 1,448 | 1,814 | 2,307 | 3,156 | 3,930 | 5,258 | .. |
| GDP per capita ($) | 583 | 722 | 900 | 1,214 | 1,491 | 1,960 | .. |

(1) Non-mining balance excludes revenues from corporate income tax and dividends from mining companies, the Windfall Profits Tax and royalties. (2) The 2008 data for the balance of payments are based on the final revision. (3) On public and publicly guaranteed debt. (4) Yield of 14-day bills until 2006 and of 7-day bills for 2007. (5) Increase is appreciation. (6) Top-20 index, end of year, index=100 in Dec-2000.
Source: Bank of Mongolia, National Statistical Office, Ministry of Finance, IMF and World Bank staff estimates