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Mongolia: 2008 Article IV Consultation—Staff Report; Staff Supplement; Public Information Notice on the Executive Board Discussion

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2008 Article IV consultation with Mongolia, the following documents have been released and are included in this package:

- The staff report for the 2008 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on March 11, 2008, with the officials of Mongolia on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on May 6, 2008. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF.

- A staff supplement on the joint IMF/World Bank debt sustainability analysis.

- A Public Information Notice (PIN) summarizing the views of the Executive Board as expressed during its June 4, 2008 discussion of the staff report that concluded the Article IV consultation.

The document listed below has been or will be separately released.

Selected Issues Paper and Statistical Appendix

The policy of publication of staff reports and other documents allows for the deletion of market-sensitive information.

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MONGOLIA

Staff Report for the 2008 Article IV Consultation

Prepared by the Staff Representatives for the 2008 Consultation with Mongolia

Approved by Steven Dunaway and Michael Hadjimichael

May 6, 2008

- The 2008 Article IV consultation discussions were held in Ulaanbaatar during February 27–March 11. The staff team comprised Messrs. Kronenberg (Head), Feridhanusetyawan, S. Lee, J. Kang (all APD), and Kim (FAD), and was assisted by Mr. Jang (Resident Representative). Mr. O'Brien (FSAP Mission Chief, MCM) and Mr. Yoon (OED) also participated in some of the discussions. The staff team closely liaised with overlapping MCM and FAD technical assistance (TA) missions.

- The 2006 Article IV consultation was concluded on January 10, 2007, and the PIN and Board documents have been published (http://www.imf.org/external/pubs/cat/longres.cfm?sk=20334.0).

- The joint IMF-World Bank Financial Sector Assessment Program (FSAP) missions took place in Ulaanbaatar in May and September 2007.

- Mongolia accepted the obligations under Article VIII, Sections 2, 3, and 4 on February 1, 1996, and has maintained an exchange system that is free of restrictions on the making of payments and transfers for current international transactions.

- Mongolia's statistical framework is generally adequate for surveillance. However, further improvements are needed, especially on national accounts and government finance statistics.

- The authorities are expected to approve the publication of the Staff Report and all accompanying documents, as in the previous consultation.

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EXECUTIVE SUMMARY

Background

- **Mongolia's economy has performed very well in recent years.** Aided by the sustained run-up in copper and gold prices, real GDP growth has averaged 9 percent over the past four years, and per capita income has more than doubled. The external position also remains comfortable, with gross international reserves reaching a record level of US$1 billion (4½ months of nonmining imports) and the net present value (NPV) of external public debt declining to 24½ percent of GDP at end-2007.

- **Inflation has increased sharply from 6 percent (y/y) in June 2007 to 21 percent in March 2008, posing a risk to macroeconomic stability**. The rise in inflation has been spurred by rapid growth in government spending (particularly for wages and transfer payments), credit to the private sector, and import prices. Transportation bottlenecks and other capacity constraints have added to the price pressures.

- **Although the budget recorded significant surpluses over the past three years, fiscal policy has become increasingly expansionary as government spending has accelerated**. The overall surplus narrowed from 8 percent of GDP in 2006 to 2 percent in 2007, and the 2008 budget projects a deficit of 2½ percent.

- **Monetary conditions have added to inflationary pressures**. Broad money increased by 57 percent in 2007, while domestic credit expanded by 67 percent.

Key Issues and Policy Discussion

- **Both fiscal and monetary policies need to be tightened to contain inflation**. The authorities should aim at achieving a modest budget surplus in 2008 by avoiding further wage increases, consolidating welfare programs, and eliminating low priority capital projects. Monetary policy should aim at containing the growth of reserve money to 12 percent in 2008.

- **The real exchange rate is currently somewhat undervalued.** Greater exchange rate flexibility is crucial to help lower inflation and maintain external stability.

- **The authorities should move cautiously in tapping nonconcessional sources of external financing**. Nonconcessional borrowing should be considered only for projects with clear economic viability that cannot be financed from concessional sources, and only when inflation is under control.

- **Transparent, stable, and internationally competitive fiscal and investments regimes need to be put in place in the mining sector to take full advantage of Mongolia's vast mineral wealth**.

I. Background and Recent Economic Developments

1. **Mongolia's economy has performed very well in recent years**. Aided by a sharp run-up in the international prices of copper and gold, real GDP growth has averaged 9 percent since 2004, while per capita income has more than doubled. Although the upturn in performance was initially driven by developments in the mining sector, growth has spread over time to other sectors, including construction, financial services, and other private sector activities. High minerals prices and improvements in tax administration have generated rapid growth in government revenues, and the budget recorded significant surpluses over the past three years.

2. **Growth picked up to 10 percent in 2007, while signs of overheating became increasingly apparent in the second half of the year**. Inflation rose from 6 percent (y/y) in June 2007 to 21 percent in March 2008. The inflationary pressures reflected a relaxation of monetary and fiscal policies, large increases in import prices for food and fuel, and transportation capacity constraints (Box 1).

3. **Monetary aggregates have been growing rapidly**. Reserve money grew by 39½ percent in 2007, driven by a large increase in net foreign assets of the Bank of Mongolia (BOM). With strong domestic demand and a cut in the reserve requirement, broad money increased by 57 percent (y/y) at end-2007, while credit to the private sector increased by 75 percent.

4. **The overall fiscal surplus declined from 8 percent of GDP in 2006 to 2 percent in 2007, as spending increased by 10 percentage points of GDP**. The growth in spending reflected a proliferation of overlapping and virtually universal social welfare programs (the child money program, newly-wed benefits, and a newborn child allowance), a 49 percent increase in the civil service wage bill, and more than a doubling of capital spending.

5. **Budget revenues also increased relative to GDP, although not as rapidly as expenditure**. In particular, minerals revenues rose from an average of 2½ percent of GDP in 2001−05 to 10½ percent in 2006 and 14½ percent in 2007, reflecting the increase in copper and gold prices and the impact of the Windfall Profits Tax (WPT) on these products that was introduced in June 2006.[1] With improvements in tax administration and compliance, nonmining revenues remained at 26 percent of GDP in 2007, virtually unchanged from 2006 despite significant cuts in the VAT, personal income tax, and corporate income tax rates at the beginning of 2007.[2]

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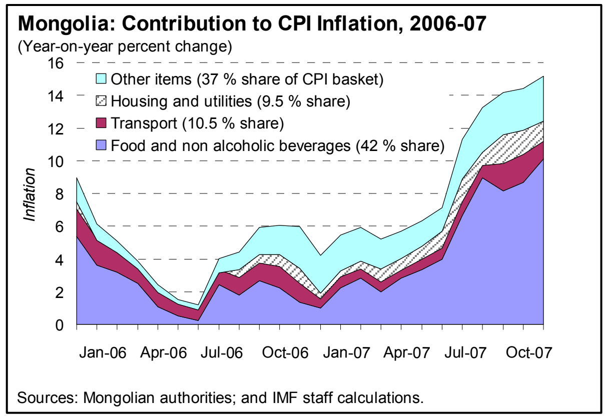
[1] A WPT of 68 percent was introduced on copper revenue from prices exceeding the sum of a base price ($2,600 per ton) and smelting costs, and gold revenues from prices exceeding $500 per ounce.

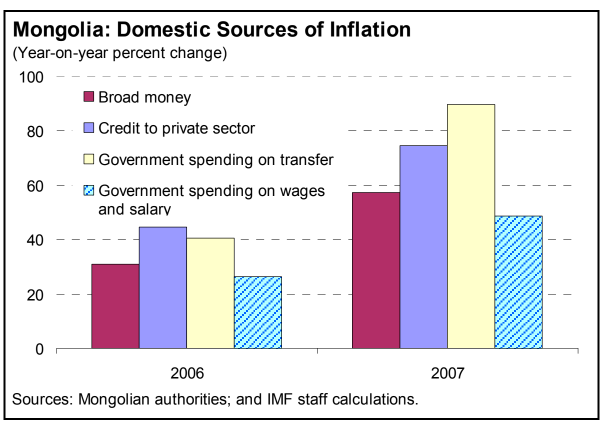
[2] The 2007 tax reform package included reductions of 5 percentage points in both the VAT and corporate income tax rates and unification of the personal income tax at a 10 percent rate.

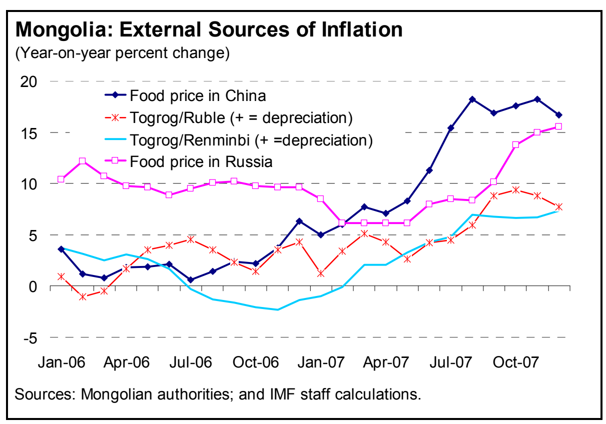
Box 1. Mongolia: The Sources of Rising Inflation

CPI inflation increased rapidly in the second half of 2007, rising from 6 percent (y/y) in June to 15 percent in December. In terms of contributions, food prices accounted for two third of inflation, with prices of bread and meat products rising by 38 percent and 20 percent, respectively, at end-2007, contributing to nearly half of inflation. Prices of utilities, transport, education, services, as well as housing rents also increased at double-digit rates.



Several factors have contributed to the rise in inflation. Rapid growth in government transfer payments (90 percent in 2007) and the wage bill (49 percent) stimulated domestic demand, as did rapid growth in broad money (57 percent) and credit to the private sector (75 percent). On the supply side, the pick up in inflation reflected rising prices of food and fuel products in China and Russia (Mongolia's largest trading partners) and the depreciation of the togrog against the Chinese renminbi (7 percent in 2007) and Russian ruble (8 percent). In addition, capacity constraints due to transportation bottlenecks put additional upward pressure on prices.





6. **With domestic demand accelerating, the external current account surplus narrowed from 7 percent of GDP in 2006 to 2½ percent in 2007**. Imports increased very rapidly, reflecting the run-up in food and fuel import prices and large imports of capital equipment for the mining sector, while export growth slowed as copper prices and export volumes reached a plateau. However, the overall balance of payments position remained comfortable, as imports of capital goods were largely financed by foreign direct investment in the mining sector.

7. **The nominal effective exchange rate (NEER) depreciated by 4 percent in 2007**. While the bilateral exchange rate with the U.S. dollar has been largely flat since mid-2006, the togrog depreciated by 7 percent vis-à-vis the Chinese renminbi and 8 percent vis-à-vis the Russian ruble in 2007. However, the real effective exchange rate (REER) appreciated by 6 percent in 2007, reflecting the pick up in inflation relative to trading partners.

8. **The strong economic performance of recent years has helped reduce Mongolia's vulnerability to severe shocks, such as large swings in the terms of trade and periodic episodes of drought and devastating cold**. The net present value (NPV) of external public debt was cut from 51 percent of GDP at end-2004 to 24½ percent at end-2007, while international reserves of the Bank of Mongolia (BOM) have increased almost fivefold since 2003 to US$1 billion (4½ months of nonmining imports).[3] External debt is almost entirely concessional, and the debt service burden is low.

9. **The authorities have made progress in implementing recommendations made by Directors in the 2006 Article IV consultation, particularly with respect to establishing a sustainable debt position, strengthening central bank governance, and improving financial sector soundness.** However, further progress is needed to contain the growth in government spending and ensure greater exchange rate flexibility, which are important to help reduce inflation.

II. Policy Discussions

A. Medium-Term Outlook and Main Policy Challenges

10. **Mongolia's medium-term economic outlook is favorable**. High minerals prices have spurred minerals exploration and re-energized plans to exploit very large untapped deposits of copper, gold, coal, uranium, and other minerals. With the expected opening of the new Oyu Tolgoi copper and gold mine in 2011, the staff's baseline scenario envisages that real GDP growth will pick up from around 7−9 percent in 2008−10 to 12−14 percent in 2011−12. Other large mining projects, including the development of huge coal deposits near China, are on the drawing boards but not yet incorporated in the baseline scenario, giving

[3] Nonmining imports of goods and services are approximated by total imports minus foreign direct investment.

significant further upside potential to the outlook. With strong policy implementation, it should be possible to bring inflation down to a single digit by end-2008 and to maintain a rate of 5−6 percent over the medium term. The external current account is expected to move into deficit during 2008−11, reflecting expected declines in copper prices and large FDI-financed imports of capital equipment for the mining sector, but it is projected to move back into surplus in 2012, after the Oyu Tolgoi mine comes on stream. The NPV of public debt, the debt service burden, and international reserves are expected to remain at comfortable levels.

11. **However, the mission team and authorities agreed that major policy challenges need to be addressed if Mongolia is to fully exploit this potential**. In the near term, rapidly rising inflation poses the biggest risk to sustainable growth, and both fiscal and monetary policies need to be tightened to maintain macroeconomic stability. The approach of parliamentary elections in June 2008 could add to the political difficulty of this task. Looking ahead, it will be crucial to put in place a medium-term fiscal framework that can contribute to the maintenance of low inflation and fiscal sustainability, without sharp disruptive swings in government spending. To take full advantage of Mongolia's vast mineral wealth, it will be equally important to have transparent, stable, and internationally competitive fiscal and investment regimes. Continued progress in strengthening the financial sector will also be critical for sustained growth.

B. Fiscal Policy

12. **The budget calls for the overall balance to swing from a surplus of 2 percent of GDP in 2007 to a deficit of 2½ percent of GDP in 2008**. Despite a cut in the employer social security contribution rate, revenues are budgeted to reach a record 44½ percent of GDP, reflecting continued high minerals prices, ongoing improvements in tax administration, and continued strong growth. However, spending is expected to increase even more rapidly to a record 47 percent of GDP. The growth in spending would be associated with large nominal increases in the wage bill, social welfare spending, and capital expenditure, following earlier large increases in each of those categories in 2007. In March 2008, a tax amnesty program was put into effect, which provides an opportunity for taxpayers to correct their tax information without penalty.

Mongolia: Consolidated Budget Nominal Growth

	2005	2006	2007	2008	
				budget	recom.
	(Annual percentage growth)				
Total Revenue and Grants	17.5	62.4	36.1	30.9	25.6
Current revenue	17.9	62.6	36.2	30.5	25.2
Total Expenditure and Net Lending	1.6	38.6	65.3	46.2	28.0
Current expenditure	11.4	34.1	49.4	45.8	36.6
Wages and salaries	13.0	26.5	48.8	91.4	74.0
Transfers	23.9	40.4	89.8	35.1	27.0
Capital expenditure	-23.1	55.0	115.8	46.9	9.1

Sources: Ministry of Finance; and Fund staff estimates and projections.

13. **The mission team argued that the fiscal stimulus in the 2008 budget risked further aggravating inflation**. To prevent higher inflationary expectations from getting entrenched, the mission recommended maintaining a surplus of about 1½ percent of GDP in 2008. Such a target could be achieved, even with the civil service wage increases granted at the beginning of the year, by (i) strictly avoiding any further increases in civil service employment and wages during the remainder of the year; (ii) reducing overlapping social spending and improving its targeting; and (iii) curtailing low priority capital spending. The mission also advised the authorities to avoid recourse to fiscal measures to control inflation.[4] Investment spending should be prioritized to ensure there is adequate room for investment in human capital and basic infrastructure to help avoid the emergence of "Dutch Disease" as the mining sector grows.

14. **The authorities shared the staff's concerns about the potential impact of fiscal policy on inflation**. Although the scope for maneuver is limited in the run-up to elections, the government decided to cancel plans already underway for further spending increases in an amended budget. In addition, line ministries had been instructed in recent weeks to identify cuts in their purchases of goods and services that could be implemented in the second half of this year. On price stabilization measures, the authorities terminated subsidies for petroleum importing companies after the small budget allocation (0.2 percent of GDP) was spent. The temporary VAT and customs duty exemptions on wheat and flour imports have also been lifted, and an agreement was recently reached with Russia that will ensure wheat supplies at a stable price.

15. **Parliament has authorized the government to issue commercial foreign debt of up to US$1.2 billion (25 percent of GDP)**. The mission stressed that borrowing and spending on this order of magnitude could further aggravate inflationary pressures and, as indicated in the Debt Sustainability Analysis (DSA), cause Mongolia's debt burden indicators to breach their indicative thresholds in the medium term (see Supplement on DSA). The mission and the authorities agreed that Mongolia should continue to rely primarily on concessional borrowing in the near term, while recognizing that Mongolia's infrastructure investment needs were very large and that the country's eligibility for concessional lending facilities would likely taper off in the coming years as per capita income continues to rise. The authorities also indicated that capacity needs to be strengthened and a comprehensive risk management framework needs to be put in place. Any foreign financing should be fully consolidated with the general budget to ensure fiscal

[4] Measures for price stabilization include a temporary exemption of VAT (10 percent) and customs duties (5 percent) on wheat and flour imports, building up of wheat and flour reserves, and subsidies to reduce interest expenses of petroleum importing companies.

transparency. The mission encouraged the authorities to continue the negotiations of overdue obligations with bilateral creditors.[5]

16. **The staff encouraged the authorities to strengthen the macro-fiscal framework to help cope with the inherent volatility and uncertainty of a large mining sector**. The government's current practice essentially targets a constant overall budget balance in percent of GDP over the medium term, which can lead to highly procyclical spending. The mission suggested that the authorities aim at reducing the nonmineral deficit (overall balance minus mining taxes, dividends, and royalties) from 12½ percent of GDP in 2007 to 8 percent of GDP by 2010 and thereafter. This fiscal target would ensure intertemporal smoothing of spending and result in a gradual further reduction in the NPV of public debt to 18 percent of GDP over the medium term (see Supplement on DSA). In addition, the authorities should consider setting a separate overall limit on the growth of spending or the expenditure-to-GDP ratio, reflecting the absorption capacity of the economy, to avoid overheating pressures. This rule would provide an additional anchor to ensure macroeconomic stability when total spending supported by the nonmineral balance targeting exceeds the economy's absorption capacity. The mission stressed that the tax amnesty granted in early 2008 could adversely affect incentives for future tax compliance, and it advised the authorities to strengthen tax enforcement to help achieve the intended goal of tax base broadening.

17. **The authorities agreed that fiscal policy rules should be refined over time to ensure macroeconomic stability and fiscal sustainability, although the formal adoption of these rules would be difficult in the near term**. The authorities agreed about the need for transparent, stable, and internationally competitive fiscal and investment regimes for the mining sector. On the issue of state equity participation in the mining sector, they stressed that public opinion was strongly in favor of greater state ownership, but they believed that increased state equity in large strategic deposits could be acquired gradually over time.

C. Monetary and Exchange Rate Policies

18. **The authorities and mission team agreed that the growth in monetary aggregates should be slowed to help bring inflation down**. Toward this end, the mission recommended that growth in reserve money should be slowed to about 12 percent in 2008, which should be consistent with bringing inflation down to about 9 percent by end-2008 and 5−6 percent thereafter. Given the fiscal target suggested by the mission, this would require an increase in the volume of central bank bills (CBBs) equal to about ½ percentage point of GDP during the year. Towards this end, the BOM raised the policy interest rate on seven-day bills to 9.75 percent in March 2008, bringing the cumulative increase since July

[5] Negotiations to settle overdue obligations with bilateral creditors (Bulgaria, China, Finland, Romania, and Russia) are underway.

2007 to 335 basis points, and reserve money growth slowed sharply in the first three months of the year. Should inflation not show clear signs of declining in the near future, the mission argued that further increase in the policy interest rate would be appropriate. To help contain liquidity expansion, the mission advised to put a hold on plans to transfer deposits of the Social Security system from the BOM to commercial banks.

19. **With the level of international reserves now broadly comfortable, the mission argued that a further large increase in international reserves was not needed and could, indeed, complicate the task of reducing inflation**. A flexible exchange rate policy would, therefore, be an important component of a tightening of monetary policy. In line with the recommendations of a concurrent TA mission by Monetary and Capital Markets Department, the team recommended that the BOM widen its bid-offer spread, reduce the scope of transactions taking place at the BOM's reference rate, and require that a share of mining taxes by the largest copper mine be paid in local currency.

20. **The authorities argued that Mongolia already had a floating exchange rate regime.** They explained that the situation in 2006-07 was atypical because some large mining companies had decided to pay some of their sharply increased tax liabilities in foreign currency. In terms of its operations in the foreign exchange market, the BOM had been a significant net seller of international reserves. However, the authorities agreed that, particularly with the structural changes that were taking place in the economy, there was a need to strengthen the interbank foreign exchange market. Towards this end, they were giving consideration to limiting the payment of taxes in dollars. They also noted that a screen-based foreign exchange trading system is under development by the BOM and the commercial banks, which should facilitate development of market.

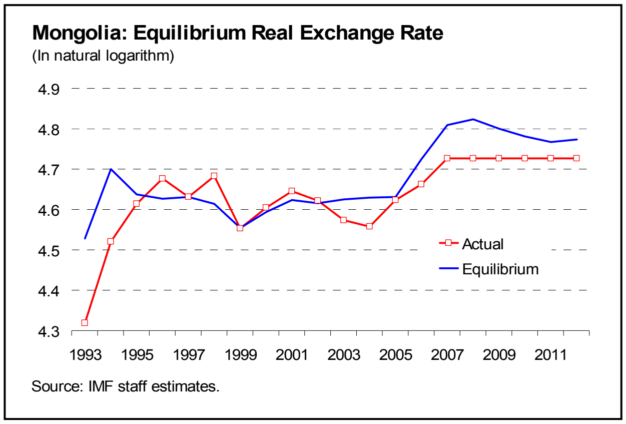
21. **The staff's assessment indicates that the real effective exchange rate may currently be somewhat undervalued**. In this connection, the mission reiterated the importance of exchange rate flexibility to facilitate the maintenance of external stability (Box 2).

D. Preserving Financial Sector Soundness

22. **The recent joint IMF/World Bank Financial Sector Assessment Program (FSAP) found that the BOM's framework for bank supervision is generally well developed and that the BOM is aware of the risks faced by some individual banks**. The banking system's risk-weighted capital adequacy, return on assets, and return on equity were all at comfortable levels in 2007, and the share of nonperforming loans in gross loans has been cut from 5.6 percent at end-2005 to 3.2 percent at end-2007. Nevertheless, the authorities recognized that measures of loan quality could be distorted in the current environment of rapid credit growth and said they would be vigilant in this regard. A few small banks, which did not pose a systemic risk, were considered more vulnerable and remained under an enhanced supervisory regime. The FSAP team advised the BOM to

Box 2. Assessment of Mongolia's External Stability

Staff estimates using the reduced-form equilibrium real exchange rate approach of the CGER indicate that the togrog is currently somewhat undervalued. The estimated vector error correction model based on 1992−2007 data shows that the coefficients of all fundamentals have the expected signs and are statistically significant.[1] The results suggest that the togrog may be somewhat undervalued in relation to the medium term level of its fundamental determinants. These results are consistent with the depreciations of the togrog's bilateral exchange rates against the Russian ruble (12 percent) and the Chinese renminbi (6 percent) over the past two years, while the bilateral exchange rate with the U.S. dollar has been largely flat for most of the period since June 2006. The rapid increase of international reserves for last two years, from US$333 million at end-2005 to US$1 billion at end-2007 is also consistent with these results.



While the current account is expected to be subject to significant fluctuations over the medium term, this reflects the time profile of large mining projects and is not expected to result in external instability. The current account balance is projected to swing from a surplus of 2½ percent of GDP in 2007 to a deficit of 9−13 percent of GDP in 2008−10, reflecting large-scale imports of capital equipment for new mining projects financed by foreign direct investment. When the mine subsequently comes on stream, the current account would be expected to revert to a large surplus. Despite these swings in the current account, however, international reserves would remain comfortable and stable in terms of months of next year nonmining imports.

Under these circumstances, the exchange rate should not be expected to eliminate fluctuations in the current account. Therefore, it would be inappropriate to draw conclusions about the equilibrium exchange rate from the external sustainability approach, which implicitly makes such an assumption. Likewise, the macroeconomic balance approach, in which the estimated current account norm would be largely unaffected by the mining projects, could provide misleading results in the Mongolian case. The large structural changes underway highlight the importance of a flexible exchange rate regime both to promote macroeconomic stability and to support long-term structural adjustment to a growing mining sector.

[1] The fundamentals are: 1) previous year's net foreign asset (scaled by the sum of exports and imports); 2) productivity differential between the tradable and nontradable sectors, relative to trading partners; 3) commodity terms of trade; and 4) government consumption, measured as purchase of goods and services plus government wages relative to GDP. Increases in values of these fundamentals imply real exchange rate appreciation.

closely monitor the suitability of bank shareholders and managements in light of the recent changes at some banks.

23. **The supervision of nonbank financial institutions is at an earlier stage, but progress is being made**. The Financial Regulatory Commission (FRC), established in 2006, has been working to relicense savings and credits cooperatives (SCCs), insurance companies, and other nonbanking financial institutions. With that process under way, the mission advised the authorities to provide no further bailouts to SCCs. Significant steps have been taken to strengthen the framework for Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT), including the establishment of a Financial Intelligence Unit in the BOM. Remaining gaps, particularly with respect to the reporting of suspicious transaction by banks and the capacity constraints in law enforcement, still need to be addressed. The mission encouraged the authorities to proceed cautiously with proposals to establish a development bank to avoid the risk of political interference. The operations of the Mongolian Mortgage Corporation should remain narrowly focused so that they do not impede the development of private sector housing finance.

24. **The BOM has made important strides in strengthening its own risk management and governance structures by strategically managing and controlling exposure to financial and operational risks**. These efforts include the creation of an investment committee in the BOM as well as a risk management unit responsible for identifying and managing the BOM's financial and policy risks. Since September 2007, the risk management unit calculates the Value-at-Risk of its portfolio on a daily basis to monitor market risks. Foreign reserves are divided into short-term and long-term portfolios to manage liquidity risk, and the State Foreign Exchange Reserve Management Regulation, revised in January, requires that counterparties are rated "AA-" or higher. By order of the Governor, the BOM has discontinued dealing in gold and currency options for commercial purposes, and all outstanding positions were closed upon expiration.

E. Other Issues

25. **The recent Review of Standards and Codes conducted by the IMF's Statistics Department found that Mongolia meets most of the recommendations of the General Data Dissemination Standards**. However, the scope and coverage of the national accounts and government statistics need further improvement and the authorities need to broaden the dissemination of macroeconomic data to the public. The staff welcomed Mongolia's participation in the Extractive Industry Transparency Initiative, and encouraged the authorities to make progress in publishing government's and companies' reports and completing the audit of government revenues from extractive industries.

III. Staff Appraisal

26. **Mongolia's economic performance in recent years has been impressive**. GDP growth has averaged more than 9 percent per annum since 2004, and per capita income has more than doubled. The budget has recorded three consecutive years of surplus, the public debt burden has been cut sharply, the external current account is in surplus, and international reserves have reached record levels.

27. **Medium-term prospects are favorable, as high minerals prices have spurred exploration and re-energized plans to exploit large untapped deposits of copper, gold, and other minerals**. However, major challenges need to be addressed for Mongolia to fully exploit this potential. Inflation has risen sharply over the past year and is now posing a threat to macroeconomic stability. In addition, delays have been experienced in finalizing some new investment agreements in the mining sector. In this environment, policies should focus on reducing inflation, keeping fiscal policy on a sustainable track, establishing a transparent, stable, and internationally competitive mining regime, and continuing to strengthen the financial sector.

28. **Fiscal policy should be promptly tightened to contain inflationary pressures**. The staff welcomes the authorities' decision not to proceed with plans for substantial additional spending in an amended budget. Nevertheless, given the continued high level of copper and gold prices, the authorities should aim at maintaining a modest fiscal surplus in 2008, instead of the 2½ percent of GDP deficit that is budgeted. This could be achieved by containing the wage bill, curtailing low priority capital spending, and taking initial steps to reduce the overlapping coverage and improve the targeting of social welfare programs. Consolidation and improved targeting of welfare programs could facilitate the protection of the vulnerable groups from the impact of food price hikes.

29. **Mongolia's medium-term fiscal framework should help the authorities cope with the uncertainty and volatility of a large mining sector**. Taking a conservative view of the timetable for bringing large new mining projects on stream, the staff recommends that the authorities reduce the nonmineral deficit from 12½ percent of GDP in 2007 to about 8 percent of GDP over the medium term, with a separate limit on the growth in nominal expenditure or the expenditure-to-GDP ratio. To maintain macroeconomic stability and debt sustainability, the authorities should be cautious about tapping nonconcessional sources of external finance. Such borrowing should be considered only for projects with clear economic viability that cannot be financed from concessional sources, and only when inflation is under control.

30. **Monetary policy should also be directed at reducing inflation**. The staff welcomes the BOM's recent decision to raise the yield on CBBs and encourages the BOM to consider a moderate further increase in order to reduce the possible need for a more abrupt tightening in the future. The real exchange rate is currently somewhat undervalued,

and greater exchange rate flexibility would facilitate the tightening of monetary policy and enhance the economy's resilience to external shocks. Toward this end, the BOM should reduce the use of the reference rate for its transactions with market participants and foster the development of an interbank foreign exchange market.

31. **The staff welcomes the progress made by the BOM to strengthen its risk management and governance structures**. Looking forward, the BOM should continue to strengthen the management of international reserves, particularly the gold reserves, reduce its role in domestic gold market, and improve the transparency of its operations.

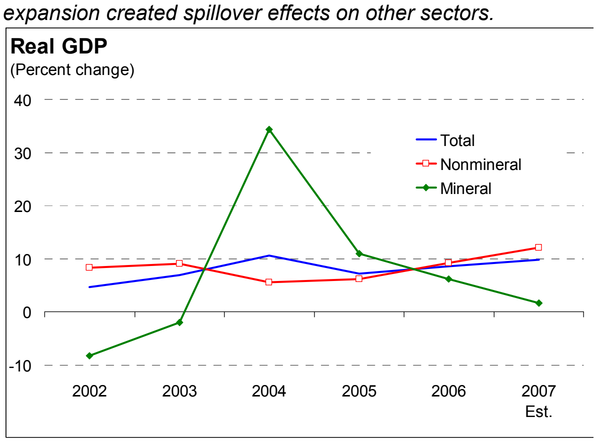
32. **The BOM's framework for banking supervision is generally well developed, and the condition for the banking system as a whole is generally comfortable**. In addition, the FRC has made progress in the supervision of nonbank financial institutions, by conducting offsite examinations of the savings and credit cooperatives, requiring their relicensing, and closing insolvent institutions. However, the rapid growth in banking system credit and the rollover of loans could make it difficult for the BOM to spot emerging problems in the banking system. Going forward, the authorities should continue to upgrade the supervisory framework by monitoring large exposures and improving the supervision of liquidity and operational risks of banks, enacting draft laws to support the supervision of nonbank financial institutions, and continuing to develop tools for consolidated supervision. If the authorities proceed with plans to introduce a deposit insurance system, payments into the system should reflect the condition of individual banks, and the system should not be extended to any nonbank financial institutions.

33. **The staff welcomes the authorities' efforts to improve data quality for surveillance and encourages the authorities to make further progress in completing the GFSM 2001 pilot study and reconciling the discrepancies between fiscal and monetary data on domestic financing**. Considering the increasing role of private capital flows in the economy, the staff encourages the authorities to monitor the size and nature of private capital flows, while maintaining an open capital account regime.

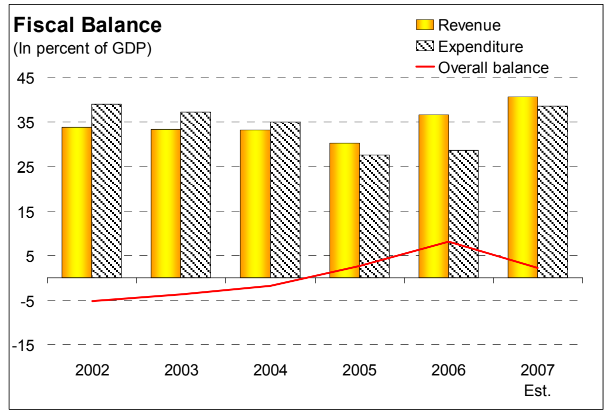
34. The staff recommends that the next Article IV consultation with Mongolia take place on the standard 12-month cycle.

Figure 1. Mongolia: Economic Developments, 2002–07

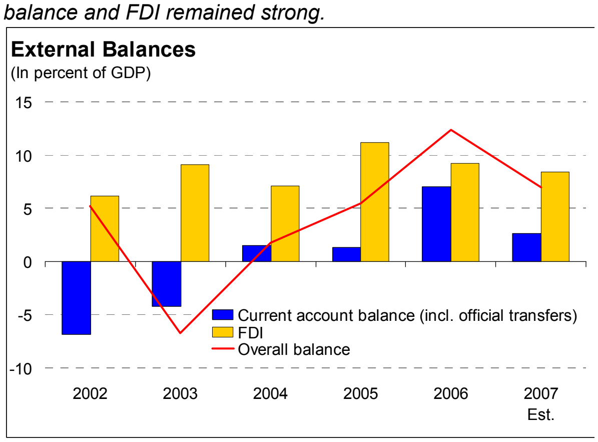
Economic growth has remained strong; Large mining sector expansion created spillover effects on other sectors.



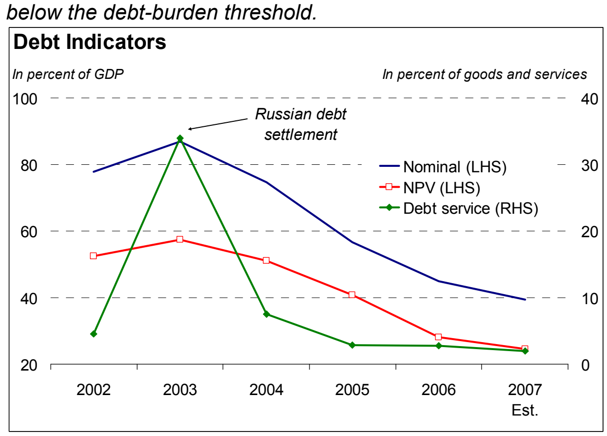
The budget recorded its third consecutive surplus in 2007.



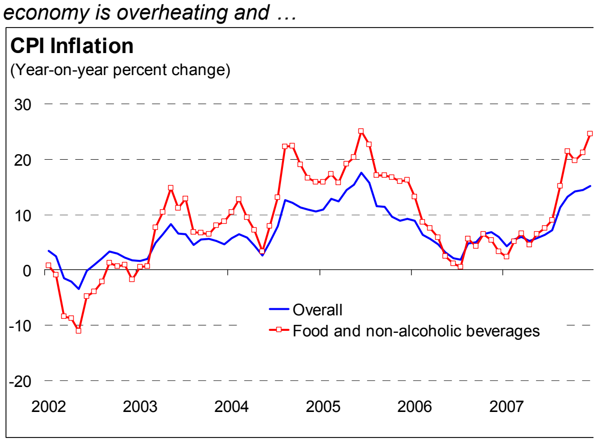
Current account surplus declined in 2007, but the overall balance and FDI remained strong.



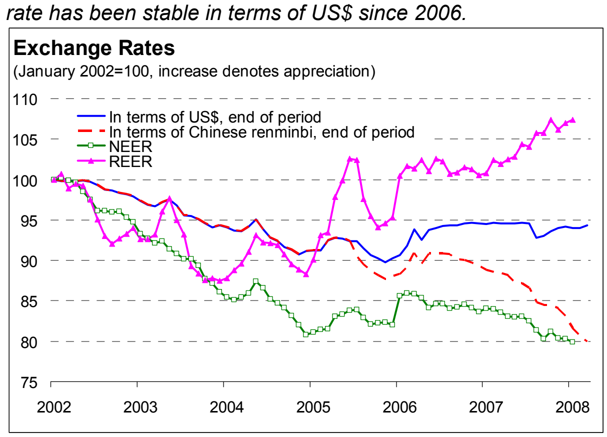
External public debt ratios have declined sharply and are now below the debt-burden threshold.



However, rapid increase in inflation suggests that the economy is overheating and …



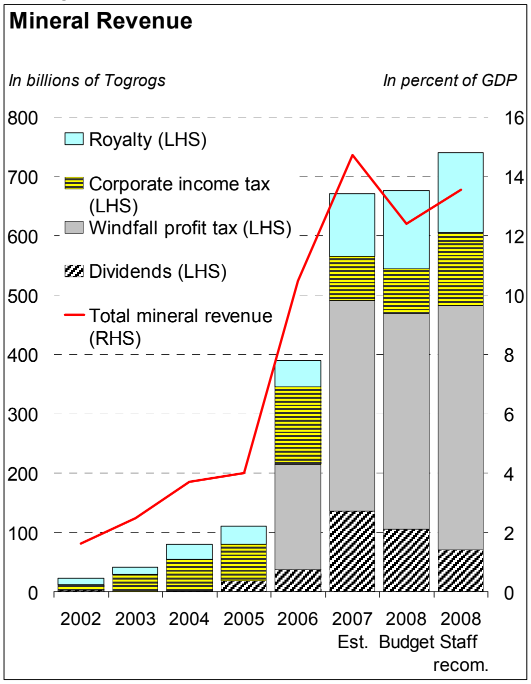
…contributes to rising real exchange rate, while the nominal rate has been stable in terms of US$ since 2006.



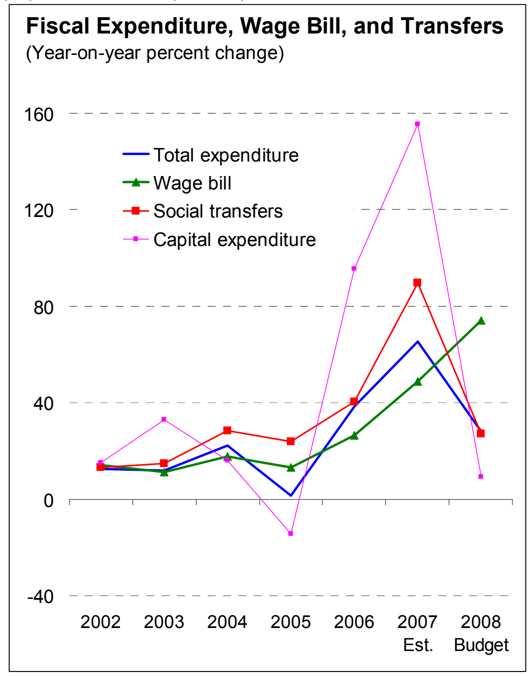
Sources: Mongolian authorities; IMF, Information Notice System, *International Financial Statistics*, and Fund staff estimates.

Figure 2. Mongolia: Fiscal Indicators, 2002–08

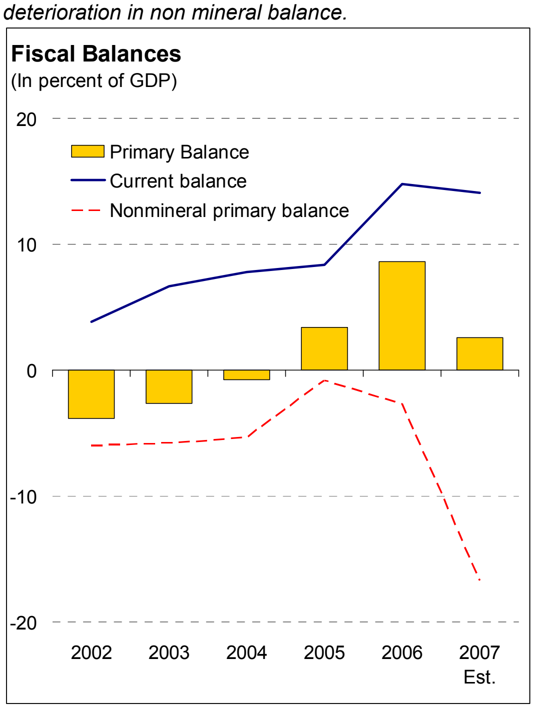
The mining sector has been contributing to rapid growth of budget revenue and …



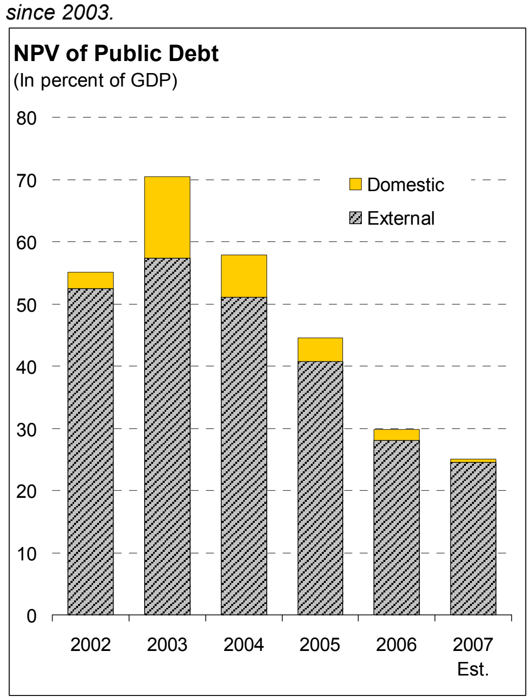
…financing large increases in wage bill, transfer payments, and capital expenditure.



Improvement in current and primary balances mirrors deterioration in non mineral balance.

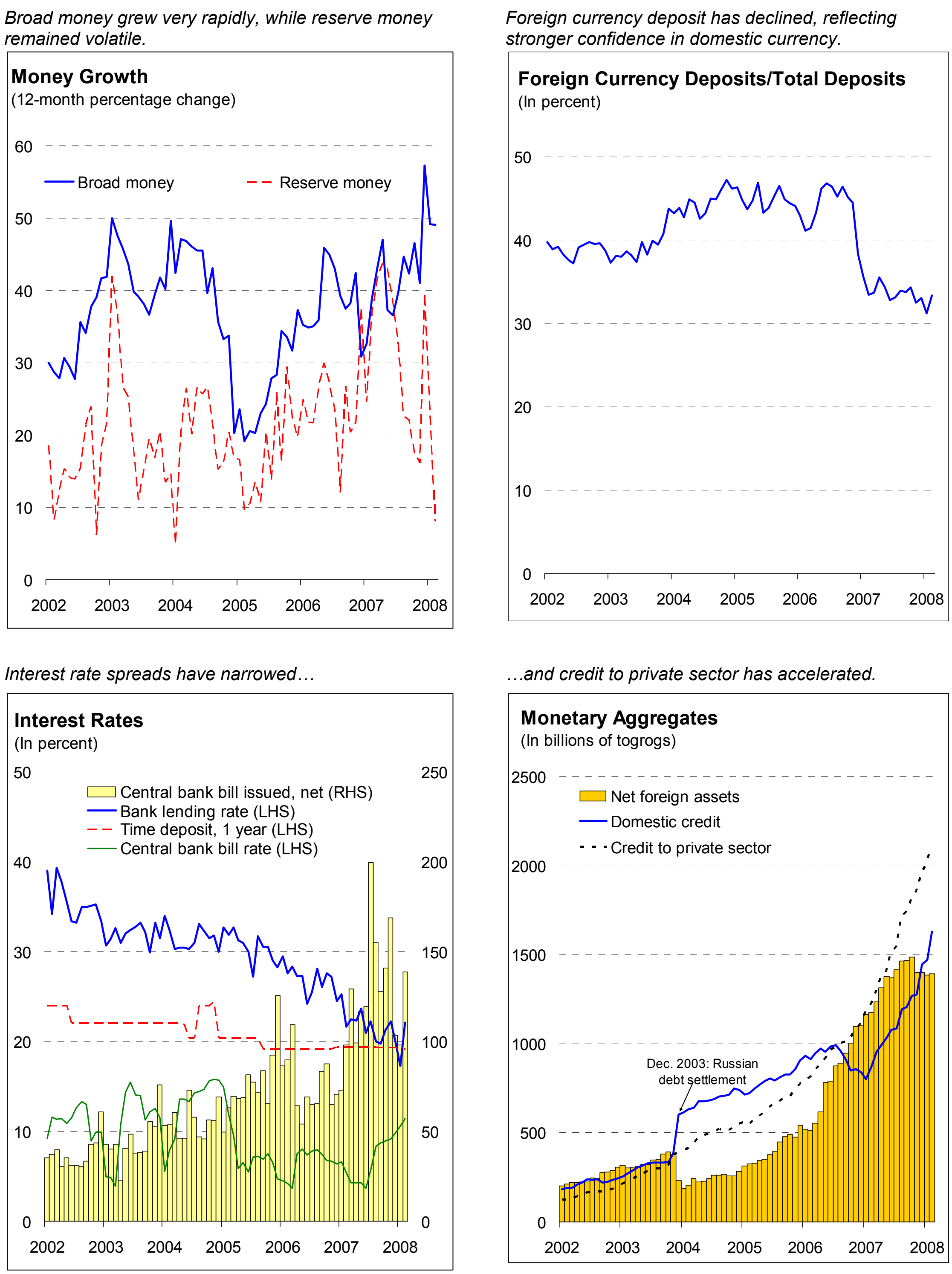


Meanwhile, total public debt has declined remarkably since 2003.



Sources: Mongolian authorities; and Fund staff estimates and projections.

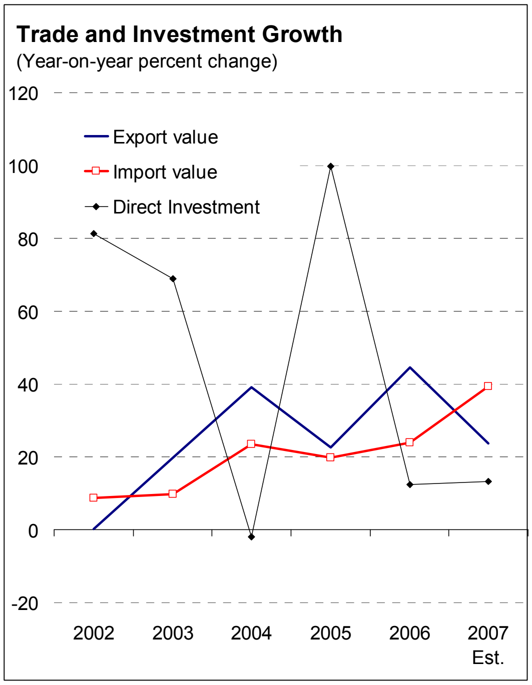
Figure 3. Mongolia: Monetary Developments, 2002–08



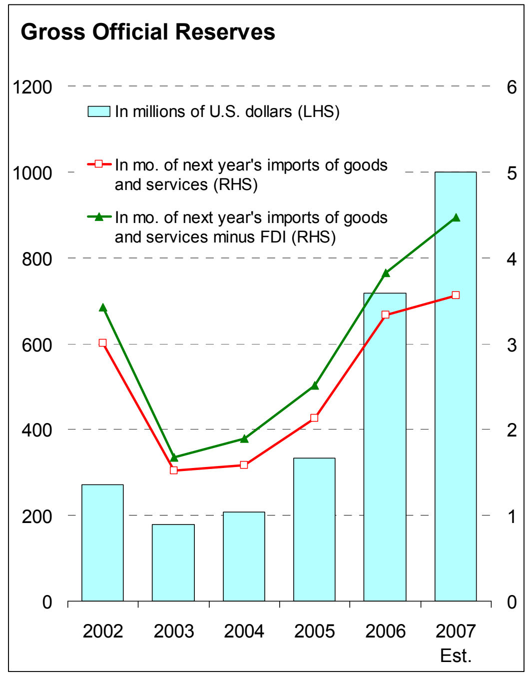
Sources: Mongolian authorities; and Fund staff estimates.

Figure 4. Mongolia: External Developments, 2002-07

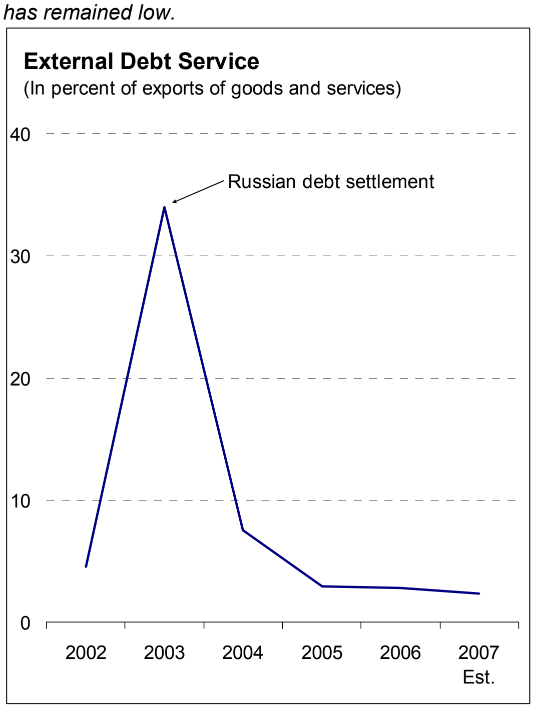
Export, import, and FDI have grown rapidly.



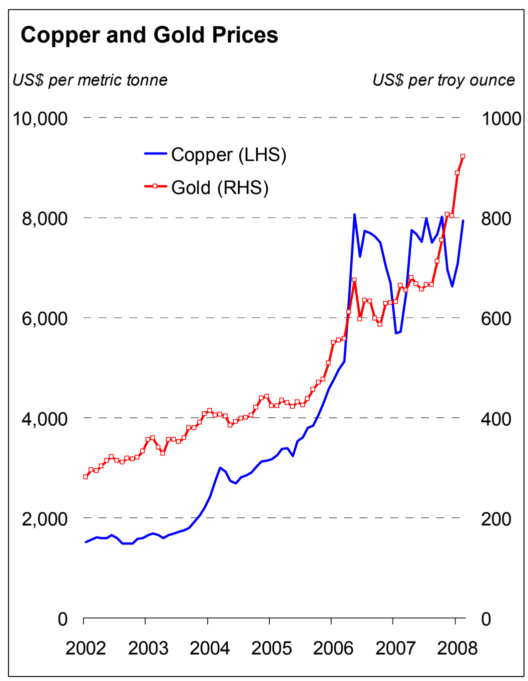
Gross international reserves rose to record levels.



Since the settlement of Russian debt, the debt service has remained low.



Copper and gold prices remained exceptionally high.



Sources: Mongolian authorities; and IMF, *International Financial Statistics,* Commodity Price System, and staff estimates.

Table 1. Mongolia: Selected Economic and Financial Indicators, 2004–08

Nominal GDP (2007): $3,894 million 1/
Population, end-year (2007): 2.64 million
Per capita GDP (2007): $1,489 1/
Poverty incidence (2006): 32.2 percent 2/
Quota: SDR 51.1 million

	2004	2005	2006	2007	2008	
				Est.	Budget	Staff Recom.3/
			(Percent change)			
Real sector						
Real GDP growth	10.6	7.3	8.6	9.9	…	8.6
Mineral	34.3	10.9	6.3	1.7	…	1.4
Nonmineral	5.6	6.3	9.2	12.2	…	10.3
Consumer prices (period average)	7.9	12.5	5.1	9.0	…	12.0
Consumer prices (end-period)	10.6	9.2	6.0	15.1	…	8.8
GDP deflator	17.2	20.4	23.1	11.6	…	10.3
			(In percent of GDP)			
General government budget						
Revenue and grants	33.1	30.1	36.6	40.6	44.4	42.6
Expenditure and net lending	35.0	27.5	28.5	38.4	46.9	41.1
Current balance	7.8	8.4	14.8	14.1	12.0	12.2
Primary balance	-0.8	3.4	8.6	2.6	-2.1	1.9
Overall balance (including grants)	-1.8	2.6	8.1	2.2	-2.5	1.5
Nonmineral overall balance	-5.5	-1.4	-2.4	-12.5	-14.9	-12.0
Net domestic bank credit to government	-2.5	-5.9	-11.8	-4.2	-0.9	-3.2
			(Percent change)			
Money and credit						
Net foreign assets	22.0	92.4	103.3	26.7	...	18.1
Net domestic assets	19.5	9.6	-33.0	139.1	...	29.7
Domestic credit	23.0	22.3	-7.5	72.5	...	25.2
Of which: claims on nonbanks	43.7	40.1	41.1	67.2	...	25.4
Broad money	20.3	37.3	30.8	57.3	...	22.9
Reserve money	16.8	19.7	37.7	39.6	...	12.0
Broad money velocity (GDP/BM) 4/	2.5	2.5	2.4	2.0	...	1.9
Interest rate on central bank bills, end-period (percent) 5/	15.8	3.7	5.1	8.4	...	...
			(In millions of U.S. dollars; unless otherwise indicated)			
Balance of payments						
Current account balance (including official transfers)	27	29	222	101	...	-405
(In percent of GDP)	1.5	1.3	7.0	2.6	...	-8.5
Trade balance	-149	-155	30	-218	...	-839
(In percent of GDP)	-8.2	-6.7	0.9	-5.6	...	-17.6
Exports, f.o.b.	872	1,069	1,545	1,952	...	2,163
(Percent change)	39.0	22.5	44.6	26.3	...	10.8
Imports, c.i.f.	1,021	1,224	1,516	2,170	...	3,002
(Percent change)	23.5	19.8	23.9	43.2	...	38.4
Foreign direct investment	129	258	290	328	...	688
Gross official international reserves (end-period)	208	333	718	1,001	...	1,253
(In months of next year's imports of goods and services)	1.6	2.1	3.3	3.6	...	4.0
(In months of next year's nonmining imports) 6/	1.9	2.5	3.8	4.5		5.1
Trade prices						
Export prices (U.S. dollar, percent change)	23.1	13.1	38.7	30.5	...	4.0
Import prices (U.S. dollar, percent change)	15.3	9.2	12.2	9.5	...	15.2
Terms of trade (percent change)	6.8	3.5	23.7	19.2	...	-9.7
			(In millions of U.S. dollars; unless otherwise indicated)			
Public and publicly guaranteed debt						
Total public debt (In percent of GDP)	81.4	60.3	46.7	40.0	35.7	34.1
Domestic debt (In percent of GDP)	6.8	3.7	1.7	0.6	0.3	0.3
External debt 7/	1,352	1,306	1,420	1,535	1,687	1,611
(In percent of GDP)	74.6	56.6	45.0	39.4	35.4	33.8
(In percent of total public debt)	91.6	93.8	96.4	98.5	99.2	99.2
NPV of total public debt (In percent of GDP) 8/	57.9	44.5	29.8	25.1	22.6	21.6
NPV of external debt (In percent of GDP) 8/	51.1	40.8	28.1	24.5	...	21.3
(In percent of exports of goods and services)	76.6	63.4	43.6	37.8	...	36.4
External debt service	91	43	57	52	...	61
(In percent of exports of goods and services)	7.5	2.9	2.8	2.0	...	2.1
Exchange rate						
Togrogs per U.S. dollar (end-period)	1,209	1,221	1,165	1,170	...	...
Togrogs per U.S. dollar (period average)	1,187	1,205	1,177	1,170	...	...
Nominal effective exchange rate (end-period; percent change)	-6.1	1.5	1.9	-4.0	...	...
Real effective exchange rate (end-period; percent change)	0.9	8.0	5.5	6.4	...	...
Nominal GDP (billion togrogs)	2,152	2,780	3,715	4,558	...	5,456
Nominal GDP (million U.S. dollars) 1/	1,814	2,307	3,156	3,894	...	4,759

Sources: Data provided by the Mongolian authorities; and Fund staff estimates and projections.

1/ Based on period average exchange rate.
2/ Share of households below national poverty line, based on The Millennium Development Goals Implementation 2007.
3/ Fund staff projections based on policy recommendation.
4/ Seasonally adjusted figures for broad money velocity.
5/ Yield of 14-day bills until 2006 and of 7-day bills for 2007.
6/ Nonmining imports of goods and services are approximated by total imports minus foreign direct investment.
7/ Includes IMF loans, guarantees, and arrears.
8/ Based on 5 percent discount rate from 2004 onwards.

Table 2. Mongolia: Summary Operations of the General Government, 2004−08

	2004	2005	2006	2007		2008	
				Amended Budget	Est.	Budget	Staff Recom.
	(In billions of togrogs)						
Total revenue and grants	713.1	837.9	1,360.4	1,699.3	1,851.2	2,423.2	2,325.0
Total expenditure and net lending	752.5	764.6	1,059.5	1,847.1	1,751.6	2,560.1	2,242.0
Overall balance (incl. grants)	-39.4	73.3	300.9	-147.7	99.6	-136.9	83.0
Nonmineral overall balance	-119.2	-37.9	-88.3	-764.5	-571.7	-813.4	-656.4
Financing	39.4	-73.3	-336.4	147.7	-99.6	136.9	-83.0
Foreign (net)	77.4	89.9	87.1	78.2	79.9	169.6	93.3
Domestic (net)	-38.0	-163.2	-423.5	69.5	-179.5	-32.7	-176.4
	(In percent of GDP)						
Total revenue and grants	33.1	30.1	36.6	37.3	40.6	44.4	42.6
Current revenue	32.8	30.0	36.4	37.2	40.5	44.1	42.3
Mineral revenue	3.7	4.0	10.5	13.5	14.7	12.4	13.6
Nonmineral revenue	29.1	26.0	26.0	23.6	25.7	31.7	28.8
Tax revenue and social security contributions	27.1	24.9	30.4	29.6	32.9	38.1	36.8
Income taxes	6.7	6.4	12.8	12.6	14.2	14.8	15.9
Enterprise income tax	4.6	4.3	6.0	5.1	4.8	6.6	6.7
Personal income tax	2.1	2.1	2.1	1.5	1.6	1.6	1.6
"Windfall" tax	0.0	0.0	4.8	5.9	7.8	6.7	7.5
Social security contributions	3.8	3.4	3.0	3.1	3.5	4.4	3.6
Sales tax and VAT	7.6	6.5	6.5	5.0	5.8	8.3	6.6
Excise taxes	3.3	2.8	2.7	2.4	2.9	3.1	3.2
Customs duties and export taxes	2.1	2.0	1.9	2.1	2.2	3.1	2.8
Other taxes	3.7	3.6	3.4	4.4	4.3	4.5	4.6
Nontax revenue	5.7	5.1	6.1	7.6	7.5	6.0	5.5
Capital revenue and grants	0.3	0.2	0.2	0.1	0.2	0.3	0.3
Total expenditure and net lending	35.0	27.5	28.5	40.5	38.4	46.9	41.1
Current expenditure	25.0	21.6	21.7	27.0	26.4	32.1	30.1
Wages and salaries	6.4	5.6	5.3	6.7	6.4	10.3	9.3
Purchase of goods and services	10.1	8.3	8.6	8.2	8.4	8.8	8.5
Subsidies to public enterprises	0.5	0.3	0.3	0.3	0.3	0.4	0.4
Transfers	6.9	6.6	7.0	11.1	10.8	12.2	11.5
Interest payments	1.1	0.7	0.5	0.5	0.4	0.4	0.4
Contingency allocation	...	0.0	0.0	0.0	0.0	0.0	0.0
Capital expenditure and net lending	9.9	5.9	6.9	13.6	12.1	14.8	11.0
Capital expenditure	4.9	3.2	4.7	11.3	9.8	12.6	9.0
Domestically-financed	3.8	2.9	4.5	10.5	9.5	11.5	8.2
Foreign-financed	1.0	0.4	0.2	0.8	0.4	1.2	0.8
Net lending	5.1	2.7	2.1	2.2	2.2	2.2	2.0
On-lent foreign project loans	4.9	3.2	2.4	2.0	1.4	3.0	2.0
Domestic lending minus repayments	0.1	-0.5	-0.3	0.0	0.8	-0.8	0.0
Current balance (excl. privatization receipts)	7.8	8.4	14.8	10.2	14.1	12.0	12.2
Primary balance	-0.8	3.4	8.6	-2.7	2.6	-2.1	1.9
Overall balance (incl. grants)	-1.8	2.6	8.1	-3.2	2.2	-2.5	1.5
Nonmineral overall balance	-5.5	-1.4	-2.4	-16.8	-12.5	-14.9	-12.0
Discrepancy between deficit from above and below the line	0.0	0.0	-1.0	0.0	0.0	0.0	0.0
Financing	1.8	-2.6	-9.1	3.2	-2.2	2.5	-1.5
Foreign (net)	3.6	3.2	2.3	3.5	1.8	3.1	1.7
External borrowing (net)	3.0	3.0	2.3	1.0	1.8	3.0	1.7
Disbursements	4.3	4.0	3.0	2.1	1.8	4.1	2.5
Amortization	1.3	0.9	0.6	1.1	0.0	1.1	0.8
External arrears	0.6	0.2	0.0	0.0	0.0	0.0	0.0
Domestic (net)	-1.8	-5.9	-11.4	1.5	-3.9	-0.6	-3.2
Banking system (net)	-2.5	-5.9	-11.8	0.8	-4.2	-0.9	-3.2
Nonbank	0.7	0.0	0.4	0.7	0.2	0.3	0.0
Privatization receipts	0.8	0.2	0.4	0.7	0.4	0.3	0.2
Other nonbank (net)	0.0	-0.2	0.0	0.0	-0.1	0.0	-0.2
Memorandum items:							
Mineral revenue/total revenue and grants (in percent)	11.2	13.3	28.6	32.2	36.3	27.9	31.8
Total public debt (incl. IMF)/GDP	81.4	60.3	46.7	41.0	40.0	35.7	34.1
Foreign debt (incl. IMF)/GDP	74.6	56.6	45.0	40.4	39.4	35.4	33.8
Domestic debt/GDP	6.8	3.7	1.7	0.6	0.6	0.3	0.3
Governments deposits	4.5	5.3	14.5	10.0	15.0	13.1	15.4
Net public debt	76.9	55.1	32.2	31.0	25.0	22.6	18.7
NPV of total public debt	57.9	44.5	29.8	25.7	25.1	22.6	21.6
Nominal GDP (in billions togrogs)	2,152	2,780	3,715	4,558	4,558	5,456	5,456
Copper price per ton	2,863	3,676	6,731	7,132	7,132	6,800	7,000

Sources: Ministry of Finance; and Fund staff estimates and projections.

Table 3. Mongolia: Monetary Aggregates, 2004−08

	2004	2005	2006				2007				2008	
	Dec.	Dec.	Mar.	Jun.	Sept.	Dec.	Mar.	Jun.	Sept.	Dec.	Dec. Auth. 1/	Dec. Staff recom.
	(In billions of togrog; end of period)											
Monetary survey												
Broad Money	846	1,162	1,205	1,463	1,528	1,520	1,725	1,998	2,175	2,391	...	2,939
Currency	144	152	145	198	189	185	216	262	267	283	...	342
Deposits	703	1,009	1,061	1,265	1,339	1,335	1,509	1,736	1,908	2,108	...	2,597
Net foreign assets 2/	283	544	555	791	946	1,106	1,237	1,369	1,465	1,401	...	1,655
Net international reserves	294	551	564	782	944	1,118	1,249	1,387	1,479	1,414	...	1,668
Bank of Mongolia	198	364	411	449	596	801	994	1,136	1,241	1,141	...	1,442
Commercial banks	96	187	153	333	347	317	256	250	238	273	...	226
Other foreign assets, net	-11	-7	-9	10	3	-12	-12	-17	-14	-13	...	-13
Net domestic assets	564	618	650	672	582	414	489	629	710	991	...	1,284
Domestic credit	740	904	946	983	910	837	953	1,080	1,204	1,444	...	1,808
Net credit to government	94	-1	-50	-121	-267	-440	-510	-587	-732	-691	...	-868
Claims on nonbanks	646	905	996	1,103	1,177	1,277	1,463	1,667	1,935	2,135	...	2,676
Of which:												
Claims on public enterprises	13	34	29	30	33	36	36	23	22	26	...	26
Claims on the private sector	552	776	858	966	1,011	1,122	1,298	1,511	1,743	1,957	...	2,519
Nonperforming loans	39	49	54	60	68	60	61	62	69	68	...	85
Other items, net	-176	-286	-296	-311	-328	-423	-464	-451	-494	-453	...	-523
Monetary authorities												
Reserve money	235	281	308	376	377	387	436	520	460	540	673	605
Net foreign assets 2/	199	372	415	469	610	801	994	1,136	1,241	1,141	1,642	1,442
Net international reserves	198	364	411	449	596	801	994	1,136	1,241	1,141	1,642	1,442
Other assets, net	1	8	4	20	14	0	0	0	0	0	0	0
Net domestic assets	36	-91	-107	-93	-234	-414	-557	-616	-782	-600	-969	-836
Net credit to government	106	52	-2	-72	-190	-333	-431	-510	-637	-571	-621	-748
Claims on deposit money banks	22	18	18	18	18	18	22	20	22	19	19	19
Minus: Central bank bills (net)	69	126	110	69	84	71	129	120	128	103	407	147
Other items, net	-23	-35	-13	30	22	-28	-19	-6	-38	55	40	40
Of which : precious metals	6	10	11	51	43	11	26	26	45	133	...	...
Memorandum items:	(In percent; except otherwise indicated)											
Annual broad money growth	20.3	37.3	35.1	45.0	37.4	30.8	43.1	36.6	42.4	57.3	...	22.9
Annual growth of credit to nonbanks 3/	43.7	40.1	46.0	45.7	43.3	41.1	46.9	51.1	64.5	67.2	...	25.4
Annual reserve money growth	16.8	19.7	21.7	27.2	26.8	37.7	41.7	38.4	22.1	39.6	24.5	12.0
Velocity, seasonally adjusted	2.5	2.5	3.0	2.4	2.3	2.4	2.6	2.3	2.1	2.0	...	1.9
Broad money/Reserve money	3.6	4.1	3.9	3.9	4.1	3.9	4.0	3.8	4.7	4.4	...	4.9
Nonperforming loans/total loans (percent)	6.1	5.5	5.5	5.5	5.7	4.7	4.2	3.7	3.6	3.2	...	...
Excess reserves (billions of togrogs)	3.0	15.3	58.0	18.4	24.3	26.0	49.9	83.2	14.0	23.2	...	...

Sources: Data provided by the Mongolian authorities; and Fund staff estimates and projections.

1/ Based on BOM's reserve money and NIR targets and 2008 budget.
2/ Valued at actual exchange rates and gold prices.
3/ Includes nonperforming loans.

Table 4. Mongolia: Balance of Payments, 2004−13

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
				Est.			Proj. 1/			
	(In millions of US dollars; unless otherwise indicated)									
Current account balance (including official transfers)	27	29	222	101	-405	-645	-727	-59	400	60
Trade balance	-149	-155	30	-218	-839	-1,125	-1,244	-472	780	99
Exports, f.o.b.	872	1,069	1,545	1,952	2,163	2,237	2,403	2,824	4,425	3,917
Of which: Copper	284	326	635	812	836	789	769	892	1,296	1,354
Gold	240	331	270	235	340	384	415	749	1,890	1,287
Imports, c.i.f.	-1,021	-1,224	-1,516	-2,170	-3,002	-3,362	-3,646	-3,296	-3,645	-3,818
Of which: petroleum products	-210	-272	-423	-551	-804	-859	-909	-1,014	-1,150	-1,211
Services, net	-46	65	122	161	251	293	328	344	349	378
Receipts	338	414	486	574	623	675	733	795	863	936
Payments	-383	-350	-364	-413	-371	-383	-405	-451	-514	-558
Income, net 2/	-48	-106	-144	-79	-91	-105	-124	-253	-993	-663
Private transfers, net	146	134	77	84	91	98	106	113	119	125
Official transfers	87	88	112	133	162	174	186	186	123	97
Other grants	36	3	26	20	21	21	22	23	23	24
Financial and capital account	10	88	110	182	662	780	810	132	-218	19
Direct investment	129	258	290	328	688	823	941	442	663	507
Portfolio investment	-53	0	0	6	8	10	14	18	23	30
Loans	49	-14	37	139	367	370	318	154	-238	-204
Medium- and long-term, net	75	61	39	150	382	391	348	196	-179	-121
Disbursements	157	91	88	237	444	457	468	486	523	584
Public	129	90	88	82	120	124	129	131	135	139
Private	29	1	0	155	324	333	339	355	388	445
Amortization	-82	-31	-49	-86	-62	-66	-119	-290	-702	-706
Public	-18	-22	-38	-29	-39	-42	-44	-49	-49	-49
Private 2/	-64	-9	-11	-57	-23	-23	-75	-242	-652	-656
Short-term, net	-27	-75	-3	-11	-15	-22	-30	-42	-59	-83
Currency and deposits, net 2/	-120	-162	-244	-249	-293	-314	-327	-344	-454	-361
Trade credits, net	4	7	28	-13	-42	-59	-76	-84	-156	106
Other, net	0	0	0	-28	-66	-50	-59	-53	-55	-59
Errors and omissions	-5	8	57	6	0	0	0	0	0	0
Overall balance	32	125	389	289	257	136	83	74	182	79
Financing	-32	-125	-389	-289	-257	-136	-83	-74	-182	-79
Increase in net official reserves (-)	-37	-131	-389	-289	-257	-136	-83	-74	-182	-79
Use of IMF credit (+)	-7	-6	-4	-6	-5	-7	-5	-4	-3	-3
Increase in gross official reserves (-)	-30	-125	-385	-283	-252	-129	-78	-70	-179	-77
Arrears accumulation (+) / payments (-) (net) 3/	5	6	0	0	0	0	0	0	0	0
Exceptional financing / rescheduling	0	0	0	0	0	0	0	0	0	0
Memorandum items:										
Current account balance (in percent of GDP)										
Excluding official transfers	-3.3	-2.5	3.5	-0.8	-11.9	-15.3	-16.0	-3.8	3.8	-0.5
Including official transfers	1.5	1.3	7.0	2.6	-8.5	-12.1	-12.8	-0.9	5.5	0.8
Export volume (annual growth)	0.0	8.3	4.3	-3.2	6.5	11.4	15.4	33.5	60.0	-11.5
Import volume (annual growth)	6.9	8.8	10.5	31.5	23.2	12.1	8.2	-13.1	9.3	4.0
Export price index (annual change)	23.1	13.1	38.7	30.5	4.0	-7.2	-10.8	-8.1	-2.1	0.0
Import price index (annual change)	15.3	9.2	12.2	9.5	15.2	0.2	0.1	0.4	0.5	0.6
Trade balance (in percent of GDP)	-8.2	-6.7	0.9	-5.6	-17.6	-21.1	-21.9	-7.4	10.7	1.3
Gross official reserves (end-period)	208	333	718	1,001	1,253	1,382	1,460	1,530	1,709	1,786
(In months of next year's imports of goods and services)	1.6	2.1	3.3	3.6	4.0	4.1	4.7	4.4	4.7	4.6
(In months of next year's nonmining imports) 4/	1.9	2.5	3.8	4.5	5.1	5.3	5.3	5.3	5.3	5.3

Sources: Data provided by the Mongolian authorities; and Fund staff estimates and projections.

1/ Fund staff projections based on policy recommendations.
2/ Includes estimated payments and capital flows related to Oyu Tolgoi project.
3/ Arrears on post-1991 Russian debt. Excluding disputed amount with Finland.
4/ Nonmining imports of goods and services are approximated by total imports minus foreign direct investment.

Table 5. Mongolia: External Debt and Debt Service, 2004–13

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
				Est.			Proj. 1/			
	(In millions of U.S. dollars; unless otherwise indicated)									
Nominal Debt Stock	1,395	1,340	1,444	1,657	1,951	2,251	2,507	2,609	2,740	2,925
IMF	44	35	31	25	20	13	9	5	3	0
Non-IMF	1,351	1,305	1,413	1,631	1,931	2,237	2,498	2,604	2,737	2,925
Existing debt	1,351	1,305	1,413	1,631	1,569	1,504	1,384	1,336	1,286	1,237
Public sector	1,309	1,271	1,390	1,510	1,471	1,429	1,384	1,336	1,286	1,237
Multilateral	791	771	853	923	907	889	870	850	827	804
Bilateral	505	487	537	587	564	539	514	486	459	433
Commercial	13	13	0	0	0	0	0	0	0	0
Private sector 2/	43	35	24	122	98	75	0	0	0	0
New borrowing	0	0	0	0	362	734	1,114	1,269	1,451	1,688
Public sector	0	0	0	0	120	244	373	504	639	778
Private sector 2/	0	0	0	0	242	489	741	764	812	910
Total Debt Service	155	52	68	109	92	119	194	380	388	397
IMF	8	6	4	6	5	7	5	4	3	3
Non-IMF	148	46	64	102	87	113	189	376	386	395
Existing debt	148	46	64	102	86	89	141	63	63	63
Amortization	132	31	49	86	62	66	119	49	49	49
Public sector	68	22	38	30	39	42	44	49	49	49
Multilateral	4	6	8	11	16	18	19	20	22	23
Bilateral	14	16	18	19	23	24	25	28	27	26
Commercial	50	0	13	0	0	0	0	0	0	0
Private sector 2/	64	9	11	57	23	23	75	0	0	0
Interest	16	15	14	16	24	23	22	15	14	13
Public sector	16	15	14	16	16	16	15	15	14	13
Multilateral	7	7	7	8	8	8	8	8	8	7
Bilateral	8	8	7	8	8	8	7	7	6	6
Commercial	1	0	0	0	0	0	0	0	0	0
Private sector 2/	0	0	0	0	8	7	7	0	0	0
New borrowing	0	0	0	0	1	24	48	313	323	332
Amortization	0	0	0	0	0	0	0	242	248	252
Interest	0	0	0	0	1	24	48	71	75	80
Memorandum items: 3/										
Total debt service in percent of exports	12.8	3.5	3.3	4.3	3.3	4.1	6.2	10.6	7.4	8.3
Of which: public and publicly guaranteed	7.5	2.9	2.8	2.0	2.1	2.3	2.2	2.1	1.5	1.6
Total debt stock in percent of GDP	76.9	58.1	45.8	42.5	41.0	42.1	44.0	40.7	37.4	37.5
Of which: public and publicly guaranteed	74.6	56.6	45.0	39.4	33.8	31.5	31.0	28.8	26.3	25.9
Net present value of debt										
In percent of exports of goods and services	80.2	65.8	44.8	42.6	48.6	56.2	59.9	54.5	39.6	46.9
Of which: public and publicly guaranteed	76.6	63.4	43.6	37.8	36.4	36.8	36.3	33.4	24.3	28.1
In percent of GDP	53.5	42.3	28.8	27.6	28.4	30.6	33.0	30.8	28.6	29.2
Of which: public and publicly guaranteed	51.1	40.8	28.1	24.5	21.3	20.1	20.0	18.9	17.5	17.5

Sources: Data provided by the Mongolian authorities; and IMF staff estimates and projections.

1/ Fund staff projections based on policy recommendations.
2/ Until 2006, the stock of private debt is derived based on data from the balance of payments.
3/ These figures are calculated in the debt sustainability analysis.

Table 6. Mongolia: Medium-Term Macroeconomic Framework, 2004–13

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
				Est.			Proj. 1/			
	(In percent of GDP; unless otherwise indicated)									
Real sector										
Nominal GDP (in billions of togrogs)	2,152	2,780	3,715	4,558	5,456	6,123	6,766	7,886	9,328	10,261
Nominal GDP (in millions of U.S. dollars) 2/	1,814	2,307	3,156	3,894	4,759	5,344	5,690	6,405	7,316	7,787
Per capita GDP (in U.S. dollars) 2/	720	905	1,224	1,489	1,793	1,984	2,081	2,308	2,597	2,723
Real GDP (percent change)	10.6	7.3	8.6	9.9	8.6	8.0	7.2	12.2	13.7	5.3
Mineral real GDP	34.3	10.9	6.3	1.7	1.4	1.2	1.1	37.5	42.2	3.2
Nonmineral real GDP	5.6	6.3	9.2	12.2	10.3	9.6	8.5	7.2	6.6	6.0
GDP deflator (percent change)	17.2	20.4	23.1	11.6	10.3	3.9	3.1	3.9	4.0	4.5
Consumer prices (period average; percent change)	7.9	12.5	5.1	9.0	12.0	7.4	5.8	5.5	5.5	5.3
Consumer prices (end-period; percent change)	10.6	9.2	6.0	15.1	8.8	6.0	5.5	5.5	5.5	5.0
General government accounts										
Total revenue and grants	33.1	30.1	36.6	40.6	42.6	40.8	39.0	35.8	36.5	36.5
Mineral revenue	3.7	4.0	10.5	14.7	13.6	10.6	6.8	5.0	5.7	5.8
Nonmineral revenue	29.1	26.0	26.0	25.7	28.8	29.9	31.8	30.5	30.5	30.4
Capital revenue and grants	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
Total expenditure and net lending	35.0	27.5	28.5	38.4	41.1	40.2	40.1	38.8	38.8	38.7
Current expenditure	25.0	21.6	21.7	26.4	30.1	29.3	29.2	28.8	28.8	28.7
Wages and salaries	6.4	5.6	5.3	6.4	9.3	9.3	9.2	9.1	9.1	9.1
Goods and services	10.1	8.3	8.6	8.4	8.5	8.2	8.2	8.2	8.2	8.2
Interest payments	1.1	0.7	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Other	7.5	6.9	7.3	11.1	11.9	11.5	11.4	11.1	11.1	11.0
Capital expenditure and net lending	9.9	5.9	6.9	12.1	11.0	10.9	10.9	10.0	10.0	10.0
Current balance	7.8	8.4	14.8	14.1	12.2	11.2	9.5	6.7	7.4	7.5
Overall balance (including grants)	-1.8	2.6	8.1	2.2	1.5	0.6	-1.1	-3.0	-2.3	-2.2
Nonmineral overall balance	-5.5	-1.4	-2.4	-12.5	-12.0	-9.9	-8.0	-8.0	-8.0	-8.0
Foreign financing (including gap financing)	3.6	3.2	2.3	1.8	1.7	1.5	1.5	1.3	1.2	1.1
Monetary sector										
Broad money (percent change)	20.3	37.3	30.8	57.3	22.9	23.3	22.1	21.4	19.5	17.0
Velocity (GDP/M2)	2.5	2.5	2.4	2.0	1.9	1.7	1.5	1.5	1.5	1.4
Balance of payments										
Exports (percent change)	39.0	22.5	44.6	26.3	10.8	3.4	7.4	17.5	56.7	-11.5
Imports (percent change)	23.5	19.8	23.9	43.2	38.4	12.0	8.5	-9.6	10.6	4.8
Current account balance (excluding official transfers)	-3.3	-2.5	3.5	-0.8	-11.9	-15.3	-16.0	-3.8	3.8	-0.5
Current account balance (including official transfers)	1.5	1.3	7.0	2.6	-8.5	-12.1	-12.8	-0.9	5.5	0.8
Gross official reserves										
(In millions of U.S. dollars)	208	333	718	1001	1253	1,382	1,460	1,530	1,709	1,786
(In months of next year's imports of goods and services)	1.6	2.1	3.3	3.6	4.0	4.1	4.7	4.4	4.7	4.6
Debt indicators										
Total public debt	81.4	60.3	46.7	40.0	34.1	31.8	31.3	29.1	26.6	26.1
Domestic debt	6.8	3.7	1.7	0.6	0.3	0.3	0.3	0.3	0.3	0.3
External debt	74.6	56.6	45.0	39.4	33.8	31.5	31.0	28.8	26.3	25.9
(in millions of U.S. dollars)	1,352	1,306	1,420	1,535	1,611	1,686	1,766	1,845	1,928	2,015
NPV of total public debt	57.9	44.5	29.8	25.1	21.6	20.3	20.3	19.1	17.8	17.8
Of which: external debt	51.1	40.8	28.1	24.5	21.3	20.1	20.0	18.9	17.5	17.5
Government deposits in the banking system	4.5	5.3	13.9	16.5	16.7	16.9	15.5	11.5	11.5	11.5
External public debt service 3/	7.5	2.9	2.8	2.0	2.1	2.3	2.2	2.1	1.5	1.6
Memorandum items										
Copper prices (US$ per ton)	2,863	3,676	6,731	7,132	7,000	6,000	4,500	3,500	3,300	3,300
Gold prices (US$ per ounce)	409	445	604	697	960	985	1,015	1,050	1,080	1,095

Sources: Data provided by the Mongolian authorities; and Fund staff estimates and projections.

1/ Fund staff projections based on policy recommendations.
2/ Based on period average exchange rate.
3/ In percent of exports of goods and services.

Table 7. Mongolia: Indicators for Vulnerability and Financial Soundness, 2004–07

	2004	2005	2006	2007
Key Economic and Market Indicators				
Real GDP growth (in percent)	10.6	7.3	8.6	9.9
CPI inflation (end-period; in percent)	10.6	9.2	6.0	15.1
Short-term interest rate (end-period; in percent) 1/	15.8	3.7	5.1	8.4
Exchange rate, Togrog/US$ (end-period)	1,209	1,221	1,165	1,170
External Sector				
Exchange rate regime (end-period)	Floating	Floating	Pegged	Pegged
Current account balance (in percent of GDP) 2/	1.5	1.3	7.0	2.6
Direct investment (in percent of GDP)	7.1	11.2	9.2	8.4
Export growth (US$ value, percent change)	39.0	22.5	44.6	26.3
Real effective exchange rate (end-period; 2000=100)	93.3	100.7	106.2	113.0
Gross international reserves (in US$ million)	208	333	718	1,001
NPV of external debt (in percent of GDP)	53.5	42.3	28.8	27.6
General Government				
Overall balance (in percent of GDP)	-1.8	2.6	8.1	2.2
Primary balance (in percent of GDP)	-0.8	3.4	8.6	2.6
General government financing (in percent of GDP)				
Foreign (net)	3.6	3.2	2.3	1.8
Domestic (net)	-1.8	-5.9	-11.4	-3.9
Financial Sector (in percent)				
Capital adequacy ratio				
Tier I capital ratio	17.4	15.8	15.6	11.8
Total regulatory capital/risk-weighted assets	20.0	18.2	18.1	14.2
Total regulatory capital/total assets	15.6	13.6	13.6	11.2
Asset quality				
Foreign exchange loans/total loans	45.6	47.0	46.7	33.2
NPLs/total loans	6.0	5.6	4.7	3.2
Provisions/NPLs	97.2	99.2	87.8	87.1
Earnings and profitability				
Return on (average) assets	2.5	2.2	2.7	2.5
Interest margin/gross income	31.5	30.9	27.8	28.3
Non-interest expenses/gross income	58.8	54.3	55.4	46.5
Personnel expenses to non-interest expenses	26.7	28.5	15.5	20.4
Liquidity				
Loans to deposits	91.9	89.7	95.6	101.3
Liquid assets/total assets	31.6	36.0	37.9	28.1
Liquid assets/short-term liabilities 3/	28.8	37.7	38.2	37.0

Sources: Data provided by the Mongolian authorities; and Fund staff estimates.

1/ Yield of 14-day bills until 2006 and of 7-day bills for 2007.
2/ Including official transfers.
3/ Short-term liabilities are defined as the sum of current account and demand deposits.

INTERNATIONAL MONETARY FUND
INTERNATIONAL DEVELOPMENT ASSOCIATION

MONGOLIA

Joint IMF/World Bank Debt Sustainability Analysis

Prepared by the staffs of the International Monetary Fund and
The International Development Association

Approved by Steven Dunaway and Michael Hadjimichael (IMF)
and Carlos Braga and Vikram Nehru (IDA)

May 6, 2008

After four years of strong economic performance, Mongolia is now at a low risk of debt distress and, with its vast mineral wealth, the public debt burden is projected to continue to decline. Debt burden indicators under the baseline and the standard stress tests are generally well below their indicative thresholds, even in the event of a decline in the terms of trade or further delays in developing a large new copper and gold mine. However, a large issuance of nonconcessional external sovereign debt, which is being considered, could raise concerns over Mongolia's debt sustainability. In addition, the historical scenario leads to a prolonged and sustained breach of the threshold for the NPV of debt-to-GDP. The Staff considers, however, that this result should be interpreted cautiously given the extensive structural changes that have taken place in the economy, which implies that a scenario based on historical averages does not appropriately capture the risks to the economy.

I. Background

1. **This debt sustainability analysis (DSA) assesses Mongolia's fiscal and external debt outlook using the joint IMF/World Bank forward-looking debt sustainability framework for low-income countries (LICs).**[1] Compared with the previous exercise, the baseline scenario of the current analysis assumes that the development of Oyu Tolgoi (OT) mine will go forward, which leads to substantial increases in GDP, exports, and government

[1] The DSAs presented in this document are based on the common standard LIC DSA framework. Under this framework, Mongolia is rated as a medium performer with regard to its policies and institutions, and the debt sustainability is analyzed in relation to the indicative threshold indicators for countries in this category. See "Debt Sustainability in Low-Income Countries: Proposal for an Operational Framework and Policy Implications" (http://www.imf.org/external/np/pdr/sustain/2004/020304.htm and IDA/SECM2004/0035, 2/3/04) and "Debt Sustainability in Low-Income Countries: Further Considerations on an Operational Framework, Policy Implications" (http://www.imf.org/external/np/pdr/sustain/2004/091004.htm and IDA/SECM2004/0629, 9/10/04) and "Applying the Debt Sustainability Framework for Low-Income Countries Post Debt Relief", (http://www.imf.org/external/np/pp/eng/2006/110606.pdf and IDA/SecM2006-0564, 8/11/06).

revenues starting from 2011.[2] The current analysis also recognizes that private external debt and portfolio capital flows, in addition to foreign direct investment, are likely to be of increasing importance in the economy in the future.

2. **Mongolia's public debt at the end of 2007 was estimated to amount to 40 percent of GDP.** Most of Mongolia's public debt is external with about 60 percent of external debt contracted with multilateral creditors on concessional terms and the remaining amount contracted with official bilateral creditors. At the end of 2007, Mongolia did not have any outstanding public debt to external commercial creditors.

II. Medium-Term Macroeconomic and DSA Assumptions

3. **The baseline macroeconomic framework is built on the assumption that the medium-term economic outlook is favorable.** Real GDP is assumed to grow by 7−10 percent during 2007−10, underpinned by the development of the OT mine, and increase to 12−14 percent during 2011−12 when the production of the OT mine comes on stream. In the long run, real GDP is expected to grow by 5 percent. Inflation is projected to slow to about 5−6 percent in the medium term, while GDP deflator is expected to decline following the projected declines in commodity prices.

4. **The baseline scenario assumes that the overall budget would fluctuate from a surplus in 2008 to deficits in the medium term and back to a surplus in 2014, when the budget begins accruing significant revenues from the OT mine**. Similarly, the external current account balance will deteriorate in the next few years due to large mining-related imports of investment goods, but will improve from 2011 when the OT mine begins production and export growth picks up substantially.[3]

[2] IMF Country Report No. 07/30.

[3] The current account is expected to record surplus from 2012 (a residual item in LIC DSA framework).

Mongolia: Medium-Term Macroeconomic Framework, 2004–13										
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
				Est.			Proj. 1/			
	(In percent of GDP; unless otherwise indicated)									
Real sector										
Nominal GDP (in billions of togrogs)	2,152	2,780	3,715	4,558	5,456	6,123	6,766	7,886	9,328	10,261
Nominal GDP (in millions of U.S. dollars) 2/	1,814	2,307	3,156	3,894	4,759	5,344	5,690	6,405	7,316	7,787
Per capita GDP (in U.S. dollars) 2/	720	905	1,224	1,489	1,793	1,984	2,081	2,308	2,597	2,723
Real GDP (percent change)	10.6	7.3	8.6	9.9	8.6	8.0	7.2	12.2	13.7	5.3
Mineral real GDP	34.3	10.9	6.3	1.7	1.4	1.2	1.1	37.5	42.2	3.2
Nonmineral real GDP	5.6	6.3	9.2	12.2	10.3	9.6	8.5	7.2	6.6	6.0
GDP deflator (percent change)	17.2	20.4	23.1	11.6	10.3	3.9	3.1	3.9	4.0	4.5
Consumer prices (period average; percent change)	7.9	12.5	5.1	9.0	12.0	7.4	5.8	5.5	5.5	5.3
Consumer prices (end-period; percent change)	10.6	9.2	6.0	15.1	8.8	6.0	5.5	5.5	5.5	5.0
General government accounts										
Total revenue and grants	33.1	30.1	36.6	40.6	42.6	40.8	39.0	35.8	36.5	36.5
Total expenditure and net lending	35.0	27.5	28.5	38.4	41.1	40.2	40.1	38.8	38.8	38.7
Current balance	7.8	8.4	14.8	14.1	12.2	11.2	9.5	6.7	7.4	7.5
Overall balance (including grants)	-1.8	2.6	8.1	2.2	1.5	0.6	-1.1	-3.0	-2.3	-2.2
Nonmineral overall balance	-5.5	-1.4	-2.4	-12.5	-12.0	-9.9	-8.0	-8.0	-8.0	-8.0
Foreign financing (including gap financing)	3.6	3.2	2.3	1.8	1.7	1.5	1.5	1.3	1.2	1.1
Balance of payments										
Exports (percent change)	39.0	22.5	44.6	26.3	10.8	3.4	7.4	17.5	56.7	-11.5
Imports (percent change)	23.5	19.8	23.9	43.2	38.4	12.0	8.5	-9.6	10.6	4.8
Current account balance (including official transfers)	1.5	1.3	7.0	2.6	-8.5	-12.1	-12.8	-0.9	5.5	0.8
Gross official reserves										
(In millions of U.S. dollars)	208	333	718	1001	1253	1,382	1,460	1,530	1,709	1,786
(In months of next year's imports of goods and services)	1.6	2.1	3.3	3.6	4.0	4.1	4.7	4.4	4.7	4.6
Memorandum items										
Copper prices (US$ per ton)	2,863	3,676	6,731	7,132	7,000	6,000	4,500	3,500	3,300	3,300
Gold prices (US$ per ounce)	409	445	604	697	960	985	1,015	1,050	1,080	1,095
Broad money growth (percent change)	20.3	37.3	30.8	57.3	22.9	23.3	22.1	21.4	19.5	17.0

Sources: Data provided by the Mongolian authorities; and Fund staff estimates and projections.

1/ Fund staff projections based on policy recommendations.
2/ Based on period average exchange rate.

5. **The baseline scenario assumes that the NPV of public external debt in terms of GDP would be kept at comfortable levels in the long run**. As Mongolia's per capita income rises, the share of external financing provided on concessional terms is expected to decline. The baseline scenario also assumes that Mongolia will no longer receive any grants in the long run. Along with greater participation of the private sector in the economy, the external borrowing of the private sector, which (apart from foreign direct investment) has been negligible so far, is assumed to increase in the medium and long term.

6. **In addition to the standard alternative scenarios and bound tests used in the DSA exercise, this analysis presents additional country-specific scenarios and shocks**. The first country-specific scenario assumes that the government will borrow a total of US$1.2 billion in 2008−09 (half in each year) on commercial terms.[4] The projects financed by the bonds are assumed to be economically viable and have a high import content (90 percent). The second country-specific scenario assumes a 3−year delay in the timetable for bringing the OT mine on stream and a higher government equity participation (51 percent) in the project.[5] The government's equity participation is assumed to be financed through nonrecourse borrowing. Repayment of this loan will be made out of dividends and the government would not have to make payments exceeding its cash flow from the project. The third country-specific scenario assumes an adverse terms-of-trade shock in which copper

[4] US$1.2 billion is the maximum amount approved by the Parliament.

[5] The government equity participation in the baseline scenario is 34 percent. The discussions and negotiations to raise the government equity participation, to at least 51 percent, are now in progress.

and gold prices decline sharply in 2011 (i.e., by 35 percent and 25 percent, respectively, on top of the WEO projection) and catch up with the prices used in the baseline scenario within 5 years.

III. PUBLIC DEBT SUSTAINABILITY ASSESSMENT

A. Baseline Scenarios

7. **Under the baseline scenario, public sector debt remains on a downward trend over the projection period** (Figure 1 and Table 1). Public debt falls from about 46½ percent of GDP at end-2006 to 26½ percent at end-2012 and continues to decline thereafter.[6] Strong growth, together with buoyant revenues from new mining projects in outer years, bolsters the downward trend of public debt. In NPV terms, the amount of public debt as a share of GDP declines to 18 percent by 2012, with further modest declines thereafter. The NPV of debt-to-revenue and debt service-to-revenue ratios are also projected to follow a similar pattern.

B. Alternative Scenarios

8. **The alternative scenarios under the standard DSA template suggests that public debt sustainability would be put at risk if GDP growth and the primary budget balance reverted to historical averages** (Figure 1 and Table 2). However, this result should be interpreted cautiously. Given the extensive structural changes that have taken place in the economy, it is not clear that a scenario based on historical averages appropriately captures the risks to the economy. For this reason, country-specific scenarios have been included in the LIC DSA analysis.

9. **The analysis based on the country-specific scenarios indicates that large sovereign borrowing would increase the public debt burden in the medium term** (Table 2). Delays in developing the OT mine and greater government equity participation would also increase public debt burden slightly over the medium term. However, once the mine is developed, the debt burden would come down to that of the baseline scenario by 2027.

C. Bound Tests

10. **The bound tests indicate that Mongolia's public debt sustainability would be most vulnerable to a sharp decline in economic activity**. Given the high importance of the mining sector in the Mongolian economy, the authorities should ensure that the tax and investment regimes for the mining sector are transparent, stable, and internationally competitive.

[6] Fiscal surpluses during 2014-22 would lead to a large build up of government assets (a residual item in LIC DSA framework).

IV. External Debt Sustainability Assessment

A. Baseline Scenarios

11. **The results of the external debt sustainability analysis indicate that Mongolia is now at a low risk of external debt distress** (Figure 2 and Table 3). Under the baseline scenario, the NPV of the external debt-to-GDP ratio, which was 24½ percent (below the 40 percent threshold) at end-2007, is projected to decline to 17½ percent in 2012, dropping further in the long run. The NPV of debt-to-exports ratio would stay well below the corresponding threshold (150 percent) during the entire projection period. Since most of the external debt is on concessional terms, the debt service ratio would stay at 1−3 percent of exports, against the 20 percent threshold. The NPVs of debt-to-revenue and debt service-to-revenue ratios would also stay well below the 250 percent and 30 percent thresholds, respectively, as a result of buoyant mineral revenues and robust growth.

B. Alternative Scenarios

12. **The debt burden is expected to increase under the alternative scenarios, but most debt burden indicators would remain below their indicative thresholds** (Figure 2 and Table 4). The standard alternative scenario using key variables at historical averages indicates that the NPV of debt-to-GDP ratio would breach the threshold in the medium and long terms, but for the reasons mentioned earlier, the Staff does not consider that this scenario appropriately captures the risks to the baselines scenario. The issuance of sovereign bonds worth US$1.2 billion (about a quarter of the projected nominal GDP in 2009), would make the NPV of debt-to-GDP ratio breach the 40 percent threshold in 2009, although the other indicators would remain below their indicative thresholds. A delay of the OT mine would raise the debt burden modestly in the medium term, especially in terms of exports and revenue. However, the external debt burden indicator would improve substantially in the long run.

C. Bound Tests

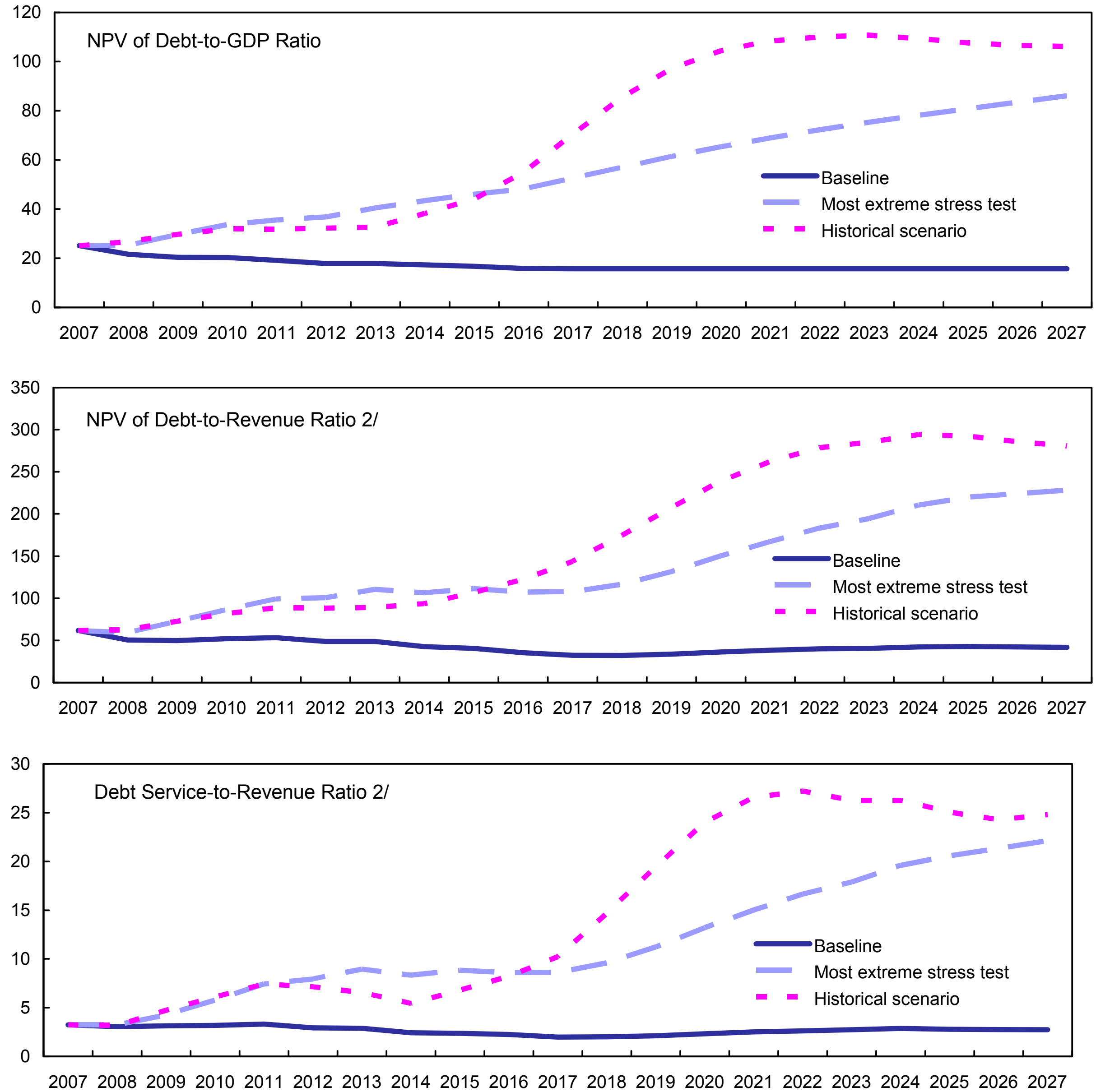
13. **The stress test would result in a mild deterioration of the debt burden indicators, but all these indicators would remain well below their indicative thresholds** (Figure 2 and Table 4**).** Of all the stress tests, the adverse terms-of-trade shock, discussed earlier, generally results in the most important deterioration of the debt burden indicators. However, even under the terms-of-trade shock, debt burden indicators are not expected to breach their indicative threshold because the additional production and exports from the OT mine would offset the effect of price shocks.

V. Conclusion

14. **Mongolia is now at a low risk of debt distress, assuming the authorities continue to borrow mainly on concessional terms and the external economic environment evolves**

broadly as envisaged in the baseline scenario. The strong economic performance over the past years has been crucial for lowering the debt burden, reducing vulnerability to external shocks, and making room for high priority public investment in the future. However, Mongolia should move gradually and cautiously in tapping nonconcessional sources of finance, which should be used only for projects with clear economic viability that cannot be financed from concessional sources. Establishing transparent, stable, and internationally competitive mining regime is also important to sustain rapid growth and preserve Mongolia's debt sustainability.

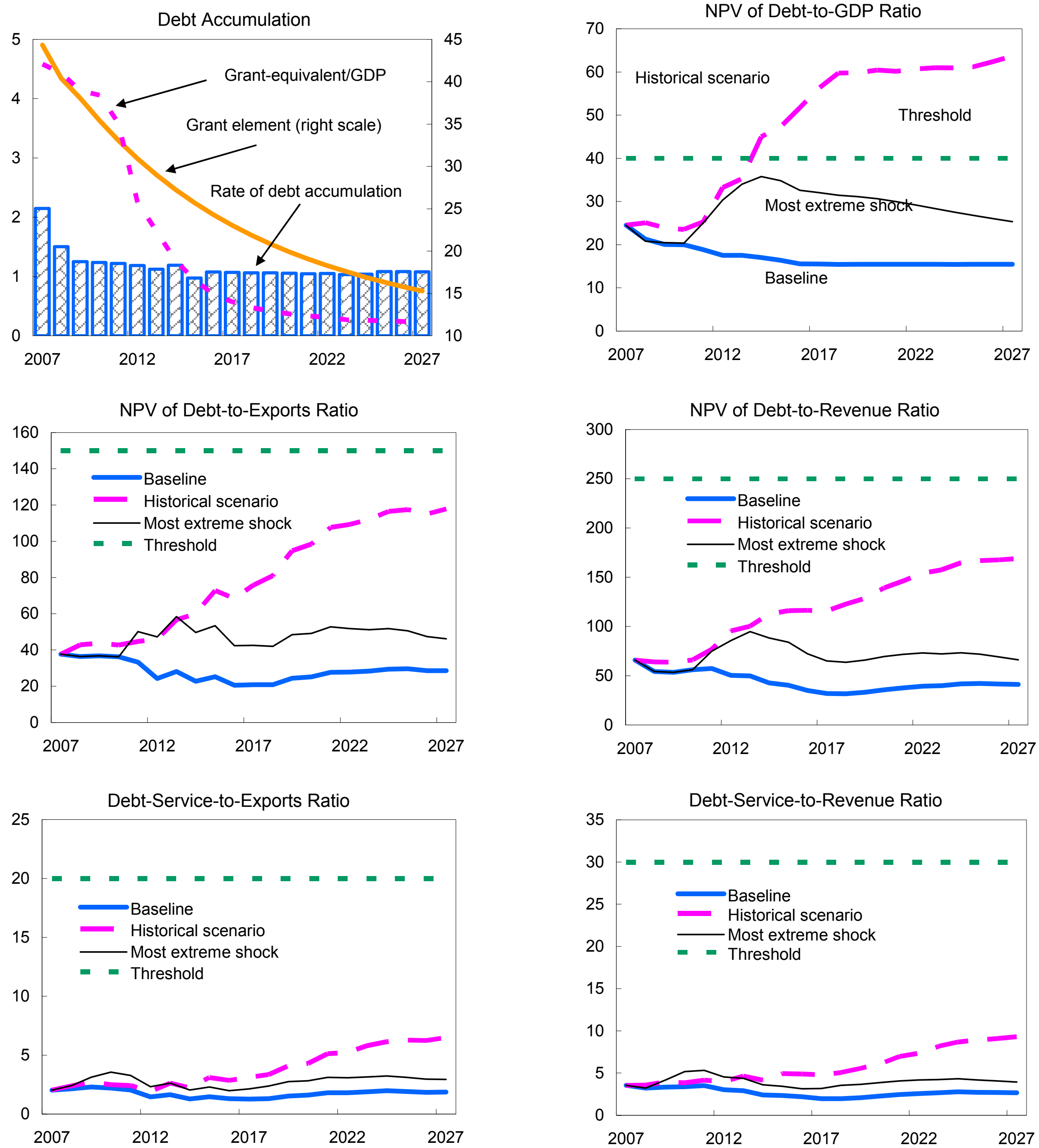
Figure 1. Mongolia: Indicators of Public Debt Under Alternative Scenarios, 2007–27 1/



Source: Fund staff projections and simulations.

1/ Most extreme stress test is test that yields highest ratio in 2017.
2/ Revenue including grants.

Figure 2. Mongolia: Indicators of Public and Publicly Guaranteed External Debt
Under Alternative Scenarios, 2007–27



Source: Staff projections and simulations.

Table 1. Mongolia: Public Sector Debt Sustainability Framework, Baseline Scenario, 2004–27

(In percent of GDP, unless otherwise indicated)

	Actual			Historical	Standard	Est.	Projections								
	2004	2005	2006	Average 5/	Deviation 5/	2007	2008	2009	2010	2011	2012	2007–12 average	2017	2027	2018–23 average
Public sector debt 1/	81.4	60.3	46.7			40.0	34.1	31.8	31.3	29.1	26.6		21.6	19.0	
Of which : foreign-currency denominated	74.9	56.9	45.0			39.4	33.8	31.5	31.0	28.8	26.3		21.4	18.7	
Change in public sector debt	-18.8	-21.0	-13.6			-6.7	-5.9	-2.3	-0.5	-2.2	-2.4		-0.5	-0.2	
Identified debt-creating flows	-19.4	-20.6	-25.7			-11.0	-9.6	-3.3	-1.0	-0.6	-1.4		-11.7	-0.2	
Primary deficit	0.8	-3.4	-8.6	2.9	5.7	-2.6	-1.9	-1.0	0.7	2.6	1.9	0.0	-10.5	0.6	-3.0
Revenue and grants	33.1	30.1	36.6			40.6	42.6	40.8	39.0	35.8	36.5		48.8	37.7	
Of which: grants	0.3	0.2	0.1			0.1	0.3	0.3	0.3	0.3	0.3		0.3	0.3	
Primary (noninterest) expenditure	33.9	26.8	28.0			38.0	40.7	39.8	39.7	38.5	38.5		38.3	38.3	
Automatic debt dynamics	-19.4	-17.0	-16.7			-8.1	-7.5	-2.1	-1.6	-3.1	-3.2		-1.1	-0.7	
Contribution from interest rate/growth differential	-11.1	-6.3	-10.0			-5.0	-3.5	-2.8	-2.3	-3.5	-3.6		-1.1	-0.7	
Of which: contribution from average real interest rate	-1.5	-0.8	-5.2			-0.8	-0.3	-0.2	-0.2	-0.2	-0.1		0.0	0.2	
Of which: contribution from real GDP growth	-9.6	-5.5	-4.8			-4.2	-3.1	-2.5	-2.1	-3.4	-3.5		-1.1	-0.9	
Contribution from real exchange rate depreciation	-8.4	-10.7	-6.7			-3.0	-4.0	0.7	0.7	0.4	0.4		...	...	
Other identified debt-creating flows	-0.8	-0.2	-0.4			-0.4	-0.2	-0.2	-0.1	-0.1	-0.1		-0.1	0.0	
Privatization receipts (negative)	-0.8	-0.2	-0.4			-0.4	-0.2	-0.2	-0.1	-0.1	-0.1		-0.1	0.0	
Recognition of implicit or contingent liabilities	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Debt relief (HIPC and other)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other (specify, e.g., bank recapitalization)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Residual, including asset changes	0.7	-0.4	12.0			4.3	3.7	1.0	0.5	-1.6	-1.0		11.2	0.0	
NPV of public sector debt	57.9	44.5	29.8			25.1	21.6	20.3	20.3	19.1	17.8		15.8	15.7	
Of which : foreign-currency denominated	51.5	41.1	28.1			24.5	21.3	20.1	20.0	18.9	17.5		15.5	15.5	
Of which : external	...	...	28.1			24.5	21.3	20.1	20.0	18.9	17.5		15.5	15.5	
NPV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	5.6	-1.7	-6.8			-1.3	-0.6	0.3	2.0	3.8	3.0		-9.5	1.6	
NPV of public sector debt-to-revenue and grants ratio (in percent)	174.8	147.6	81.3			61.8	50.6	49.8	52.0	53.4	48.8		32.3	41.7	
NPV of public sector debt-to-revenue ratio (in percent)	176.3	148.4	81.6			61.9	50.9	50.2	52.4	53.9	49.2		32.5	42.1	
Of which : external 3/	...	...	77.0			60.5	50.3	49.5	51.7	53.1	48.4		32.0	41.4	
Debt service-to-revenue and grants ratio (in percent) 4/	14.6	5.6	5.0			3.2	3.0	3.1	3.2	3.3	2.9		2.0	2.7	
Debt service-to-revenue ratio (in percent) 4/	14.7	5.6	5.0			3.3	3.1	3.1	3.2	3.3	3.0		2.0	2.8	
Primary deficit that stabilizes the debt-to-GDP ratio	19.5	17.7	5.1			4.1	4.0	1.3	1.3	4.8	4.4		-10.0	0.7	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	10.6	7.3	8.6	5.3	2.9	9.9	8.6	8.0	7.2	12.2	13.7	9.9	5.4	4.8	5.8
Average nominal interest rate on forex debt (in percent)	1.1	1.1	1.1	1.3	0.3	1.1	1.1	1.2	1.3	1.4	1.5	1.3	2.0	3.1	2.3
Average real interest rate on domestic currency debt (in percent)	-12.0	-15.6	-18.0	-85.7	223.1	-10.7	-1.6	5.9	6.7	5.8	5.8	2.0	4.6	4.5	4.8
Real exchange rate depreciation (in percent, + indicates depreciation)	-10.8	-15.3	-14.0	-3.3	10.3	-7.5	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	17.2	20.4	23.1	11.9	9.2	11.6	10.3	3.9	3.1	3.9	4.0	6.1	5.1	5.3	5.0
Growth of real primary spending (deflated by GDP deflator, in percent)	4.1	-15.3	13.7	5.9	11.9	49.1	16.1	5.7	7.1	8.5	13.8	16.7	5.3	4.8	5.8
Grant element of new external borrowing (in percent)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Sources: Mongolian authorities; and Fund staff estimates and projections.

1/ Gross debt of the general government sector.
2/ Gross financing need is defined as the primary deficit plus debt service plus the stock of short-term debt at the end of the last period.
3/ Revenues excluding grants.
4/ Debt service is defined as the sum of interest and amortization of medium and long-term debt.
5/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

Table 2. Mongolia: Sensitivity Analysis for Key Indicators of Public Debt, 2007–27

	Projections							
	2007	2008	2009	2010	2011	2012	2017	2027
NPV of Debt-to-GDP Ratio								
Baseline	25	22	20	20	19	18	16	16
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	25	27	30	32	32	32	70	106
A2. Primary balance is unchanged from 2007	25	21	18	15	10	5	13	11
A3. Permanently lower GDP growth 1/	25	22	21	22	22	21	28	62
A4. Sovereign bond issue for 2008–09 2/	25	35	45	43	38	34	15	15
A5. Delay of a big mining project and higher government equity participation 3/	25	21	20	22	23	25	29	16
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2008–2009	25	25	30	34	36	37	53	86
B2. Primary balance is at historical average minus one standard deviations in 2008–2009	25	31	39	38	36	33	28	25
B3. Combination of B1-B2 using one half standard deviation shocks	25	30	36	35	33	30	27	26
B4. One-time 30 percent real depreciation in 2008	25	29	28	27	26	24	20	21
B5. 10 percent of GDP increase in other debt-creating flows in 2008	25	31	29	29	27	25	22	20
NPV of Debt-to-Revenue Ratio 4/								
Baseline	62	51	50	52	53	49	32	42
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	62	63	73	82	89	88	144	281
A2. Primary balance is unchanged from 2007	62	49	45	39	27	13	27	28
A3. Permanently lower GDP growth 1/	62	51	52	56	60	58	58	165
A4. Sovereign bond issue for 2008–09 2/	62	79	110	109	108	94	32	41
A5. Delay of a big mining project and higher government equity participation 3/	62	52	53	60	63	68	72	41
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2008–2009	62	59	73	86	99	101	108	228
B2. Primary balance is at historical average minus one standard deviations in 2008–2009	62	74	95	98	100	90	57	67
B3. Combination of B1-B2 using one half standard deviation shocks	62	70	88	90	91	82	56	70
B4. One-time 30 percent real depreciation in 2008	62	69	68	70	72	65	42	55
B5. 10 percent of GDP increase in other debt-creating flows in 2008	62	72	72	74	76	69	44	54
Debt Service-to-Revenue Ratio 4/								
Baseline	3	3	3	3	3	3	2	3
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	3	3	5	6	7	7	10	25
A2. Primary balance is unchanged from 2007	3	3	3	3	2	0	1	-1
A3. Permanently lower GDP growth 1/	3	3	3	3	4	4	4	15
A4. Sovereign bond issue for 2008–09 2/	3	3	5	7	7	6	2	3
A5. Delay of a big mining project and higher government equity participation 3/	3	3	3	3	4	4	6	3
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2008–2009	3	3	4	6	7	8	9	22
B2. Primary balance is at historical average minus one standard deviations in 2008–2009	3	3	6	9	9	8	4	6
B3. Combination of B1-B2 using one half standard deviation shocks	3	3	6	8	8	7	3	6
B4. One-time 30 percent real depreciation in 2008	3	3	4	4	4	3	3	4
B5. 10 percent of GDP increase in other debt-creating flows in 2008	3	3	6	6	6	6	3	5

Sources: Mongolia authorities; and Fund staff estimates and projections.

1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of 20 (i.e., the length of the projection period).
2/ Assumes that the government issues sovereign bonds of $1.2 billion in 2008–09 ($600 million each year).
3/ Assumes that the Oyu Tolgoi mining project will be delayed by 3 years and government equity participation in the project will be 51 percent.
4/ Revenues are defined inclusive of grants, however not all grants reported in the balance of payment are included in the budget.

Table 3. Mongolia: External Debt Sustainability Framework, Baseline Scenario, 2007–27 1/

(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average 6/	Standard Deviation 6/	Projections									
	2004	2005	2006			2007	2008	2009	2010	2011	2012	2007–12 Average	2017	2027	2013–27 Average
External debt (nominal) 1/	76.9	58.1	45.8			42.5	41.0	42.1	44.0	40.7	37.4		33.3	30.5	
Of which: public and publicly guaranteed (PPG)	74.6	56.6	45.0			39.4	33.8	31.5	31.0	28.8	26.3		21.4	18.7	
Change in external debt	-13.9	-18.8	-12.3			-3.2	-1.6	1.1	1.9	-3.3	-3.3		-0.5	-0.2	
Identified net debt-creating flows	-26.9	-28.9	-31.8			-14.7	-8.9	-6.3	-6.6	-10.7	-19.4		-13.4	-10.6	
Non-interest current account deficit	-2.3	-1.9	-7.5	2.5	5.2	-3.0	8.0	11.2	11.5	-0.5	-6.8		-6.1	-3.7	-3.3
Deficit in balance of goods and services	10.7	3.9	-4.8			1.5	12.4	15.6	16.1	2.0	-15.4		-18.4	-7.0	
Exports	66.7	64.3	64.4			64.9	58.5	54.5	55.1	56.5	72.3		74.2	54.1	
Imports	77.5	68.2	59.6			66.3	70.9	70.1	71.2	58.5	56.8		55.8	47.1	
Net current transfers (negative = inflow)	-12.9	-9.6	-6.0	-8.7	2.7	-5.6	-5.3	-5.1	-5.1	-4.7	-3.3		-1.7	-1.3	-1.7
Of which: official	-4.8	-3.8	-3.5			-3.4	-3.4	-3.3	-3.3	-2.9	-1.7		-0.2	0.0	
Other current account flows (negative = net inflow)	-0.2	3.8	3.3			1.1	1.0	0.7	0.5	2.2	12.0		14.0	4.6	
Net FDI (negative = inflow)	-7.1	-11.2	-9.2	-5.7	3.4	-8.4	-14.5	-15.4	-16.5	-6.9	-9.1		-7.0	-7.0	-7.0
Endogenous debt dynamics 2/	-17.4	-15.8	-15.2			-3.3	-2.4	-2.0	-1.6	-3.3	-3.6		-0.3	0.1	
Contribution from nominal interest rate	0.9	0.7	0.5			0.4	0.5	0.9	1.3	1.4	1.3		1.4	1.5	
Contribution from real GDP growth	-7.7	-4.4	-3.6			-3.7	-3.0	-2.9	-2.9	-4.8	-4.9		-1.7	-1.4	
Contribution from price and exchange rate changes	-10.6	-12.1	-12.0			…	…	…	…	…	…		…	…	
Residual (3–4) 3/	13.0	10.1	19.5			11.4	7.4	7.4	8.6	7.4	16.1		12.9	10.4	
Of which: exceptional financing	-0.3	-0.2	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
NPV of external debt 4/	...	...	28.8			27.6	28.4	30.6	33.0	30.8	28.6		27.4	27.2	
In percent of exports	...	...	44.8			42.6	48.6	56.2	59.9	54.5	39.6		37.0	50.4	
NPV of PPG external debt	...	...	28.1			24.5	21.3	20.1	20.0	18.9	17.5		15.5	15.5	
In percent of exports	...	...	43.6			37.8	36.4	36.8	36.3	33.4	24.3		20.9	28.6	
In percent of government revenues	...	...	84.9			65.9	54.3	53.4	56.0	57.3	50.3		31.9	41.1	
Debt service-to-exports ratio (in percent)	12.8	3.5	3.3			4.3	3.3	4.1	6.2	10.6	7.4		7.1	9.9	
PPG debt service-to-exports ratio (in percent)	7.5	2.9	2.8			2.0	2.1	2.3	2.2	2.1	1.5		1.3	1.9	
PPG debt service-to-revenue ratio (in percent)	17.6	7.1	5.4			3.6	3.2	3.3	3.4	3.5	3.0		1.9	2.7	
Total gross financing need (billions of U.S. dollars)	0.0	-0.3	-0.5			-0.3	-0.2	-0.1	-0.1	-0.1	-0.8		-0.9	-1.2	
Non-interest current account deficit that stabilizes debt ratio	11.6	16.9	4.9			0.2	9.5	10.0	9.6	2.8	-3.5		-5.6	-3.5	
Key macroeconomic assumptions															
Real GDP growth (in percent)	10.6	7.3	8.6	5.3	2.9	9.9	8.6	8.0	7.2	12.2	13.7	9.9	5.4	4.8	5.8
GDP deflator in U.S. dollar terms (change in percent)	13.2	18.6	26.0	4.1	13.0	12.3	12.6	3.9	-0.7	0.4	0.4	4.8	1.9	2.1	1.8
Effective interest rate (percent) 5/	1.2	1.1	1.1	1.1	0.1	1.1	1.5	2.5	3.2	3.6	3.6	2.6	4.4	5.3	4.6
Growth of exports of G&S (U.S. dollar terms, in percent)	44.9	22.6	37.0	17.0	18.9	24.4	10.3	4.5	7.7	15.4	46.1	18.1	5.3	6.7	6.1
Growth of imports of G&S (U.S. dollar terms, in percent)	29.6	12.0	19.5	12.9	8.2	37.4	30.6	11.0	8.2	-7.5	11.0	15.1	5.1	5.9	6.3
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	44.4	40.4	38.0	35.4	33.1	30.9	37.0	23.0	15.3	20.8
Aid flows (in billions of U.S. dollars) 7/	0.2	0.2	0.2			0.2	0.3	0.3	0.3	0.3	0.3		0.2	0.1	
Of which: grants	0.1	0.1	0.1			0.1	0.2	0.2	0.2	0.2	0.1		0.0	0.0	
Of which: concessional loans	0.1	0.1	0.1			0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			4.6	4.4	4.1	4.1	3.6	2.3		0.6	0.2	0.6
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			75.9	74.7	74.2	73.7	72.3	63.9		31.9	15.3	27.9
Memorandum items:															
Nominal GDP (billions of U.S. dollars)	1.8	2.3	3.2			3.9	4.8	5.3	5.7	6.4	7.3		11.3	22.0	
(NPVt-NPVt-1)/GDPt-1 (in percent)						2.1	1.5	1.3	1.2	1.2	1.2	1.4	1.1	1.1	1.1

Source: Staff simulations.

1/ Includes both public and private sector external debt.
2/ Derived as [r - g - r(1+g)]/(1+g+r+gr) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and r = growth rate of GDP deflator in U.S. dollar terms.
3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.
4/ Assumes that NPV of private sector debt is equivalent to its face value.
5/ Current-year interest payments divided by previous period debt stock.
6/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.
7/ Defined as grants, concessional loans, and debt relief.
8/ Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the NPV of new debt).

Table 4. Mongolia: Sensitivity Analyses for Key Indicators of Public and Publicly Guaranteed External Debt, 2007–27

(In percent)

	Projections							
	2007	2008	2009	2010	2011	2012	2017	2027
NPV of debt-to-GDP ratio								
Baseline	24	21	20	20	19	18	16	15
A. Alternative scenarios								
A1. Key variables at their historical averages in 2008–27 1/	24	25	24	24	25	33	56	64
A2. New public sector loans on less favorable terms in 2008–27 2/	24	22	21	22	21	20	19	23
A3. Sovereign bond issue for 2008–09 3/	24	34	45	43	38	34	15	15
A4. Delay of a big mining project and higher government equity participation 4/	24	21	20	20	20	20	17	16
B. Bound tests								
B1. Real GDP growth at historical average minus one standard deviation in 2008–09	24	23	22	22	21	20	17	17
B2. Export value growth at historical average minus one standard deviation in 2008–09 5/	24	26	31	31	29	27	23	19
B3. US dollar GDP deflator at historical average minus one standard deviation in 2008–09	24	26	28	28	27	25	22	22
B4. Net nondebt creating flows at historical average minus one standard deviation in 2008–09 6/	24	30	37	37	34	32	26	21
B5. Combination of B1-B4 using one-half standard deviation shocks	24	26	27	27	25	23	21	21
B6. One-time 30 percent nominal depreciation relative to the baseline in 2008 7/	24	29	27	27	26	24	21	21
B7. Terms-of-trade shocks on copper and gold exports in 2011 8/	24	21	20	20	25	30	32	25
NPV of debt-to-exports ratio								
Baseline	38	36	37	36	33	24	21	29
A. Alternative scenarios								
A1. Key variables at their historical averages in 2007–26 1/	38	43	44	43	45	46	76	118
A2. New public sector loans on less favorable terms in 2007–26 2/	38	37	39	40	37	28	26	42
A3. Sovereign bond issue for 2008–09 3/	38	61	83	78	66	46	21	29
A4. Delay of a big mining project and higher government equity participation 4/	38	36	37	36	40	40	24	30
B. Bound tests								
B1. Real GDP growth at historical average minus one standard deviation in 2008–09	38	36	37	36	33	24	21	29
B2. Export value growth at historical average minus one standard deviation in 2008–09 5/	38	50	69	68	62	45	37	42
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2008–09	38	36	37	36	33	24	21	29
B4. Net nondebt creating flows at historical average minus one standard deviation in 2008–09 6/	38	51	68	67	61	44	36	39
B5. Combination of B1-B4 using one-half standard deviation shocks	38	38	37	36	33	24	21	29
B6. One-time 30 percent nominal depreciation relative to the baseline in 2008 7/	38	36	37	36	33	24	21	29
B7. Terms-of-trade shocks on copper and gold exports in 2011 8/	38	36	37	36	50	47	43	46
NPV of debt-to-revenue ratio								
Baseline	66	54	53	56	57	50	32	41
A. Alternative scenarios								
A1. Key variables at their historical averages in 2007–26 1/	66	64	63	66	77	95	116	169
A2. New public sector loans on less favorable terms in 2007–26 2/	66	56	57	61	64	57	40	60
A3. Sovereign bond issue for 2008–09 3/	66	86	116	116	114	96	31	40
A4. Delay of a big mining project and higher government equity participation 4/	66	57	57	60	58	56	41	39
B. Bound tests								
B1. Real GDP growth at historical average minus one standard deviation in 2008–09	66	58	60	63	64	56	36	46
B2. Export value growth at historical average minus one standard deviation in 2008–09 5/	66	67	84	87	88	77	47	51
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2008–09	66	67	75	79	81	71	45	58
B4. Net nondebt creating flows at historical average minus one standard deviation in 2008–09 6/	66	76	99	103	104	91	54	55
B5. Combination of B1-B4 using one-half standard deviation shocks	66	67	71	75	77	67	43	55
B6. One-time 30 percent nominal depreciation relative to the baseline in 2008 7/	66	74	73	76	78	69	43	56
B7. Terms-of-trade shocks on copper and gold exports in 2011 8/	66	54	53	56	75	86	65	66
Debt service-to-exports ratio								
Baseline	2.0	2.1	2.3	2.2	2.1	1.5	1.3	1.9
A. Alternative scenarios								
A1. Key variables at their historical averages in 2008–27 1/	2.0	2.4	2.7	2.5	2.4	1.9	3.1	6.5
A2. New public sector loans on less favorable terms in 2008–27 2/	2.0	2.1	2.3	2.3	2.2	1.6	1.6	2.8
A3. Sovereign bond issue for 2008–09 3/	2.2	2.1	3.9	5.3	4.5	3.2	1.3	1.9
A4. Delay of a big mining project and higher government equity participation 4/	2.2	2.1	2.3	2.2	2.4	2.4	1.4	2.0
B. Bound tests								
B1. Real GDP growth at historical average minus one standard deviation in 2008–09	2.0	2.1	2.3	2.2	2.1	1.5	1.3	1.9
B2. Export value growth at historical average minus one standard deviation in 2008–09 5/	2.0	2.4	3.1	3.6	3.3	2.3	2.1	2.9
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2008–09	2.0	2.1	2.3	2.2	2.1	1.5	1.3	1.9
B4. Net nondebt creating flows at historical average minus one standard deviation in 2008–09 6/	2.0	2.1	2.9	3.4	3.1	2.2	2.1	2.8
B5. Combination of B1-B4 using one-half standard deviation shocks	2.0	2.2	2.3	2.2	2.1	1.5	1.3	1.9
B6. One-time 30 percent nominal depreciation relative to the baseline in 2008 7/	2.0	2.1	2.3	2.2	2.1	1.5	1.3	1.9
B7. Terms-of-trade shocks on copper and gold exports in 2011 8/	2.2	2.1	2.3	2.2	2.4	2.0	2.1	3.3
Debt service-to-revenue ratio								
Baseline	3.6	3.2	3.3	3.4	3.5	3.0	1.9	2.7
A. Alternative scenarios								
A1. Key variables at their historical averages in 2008–27 1/	3.6	3.6	3.9	3.8	4.2	4.0	4.8	9.3
A2. New public sector loans on less favorable terms in 2008–27 2/	3.6	3.2	3.4	3.5	3.8	3.4	2.4	3.9
A3. Sovereign bond issue for 2008–09 3/	3.8	3.1	5.5	7.8	7.8	6.5	1.9	2.6
A4. Delay of a big mining project and higher government equity participation 4/	3.8	3.4	3.5	3.6	3.6	3.3	2.5	2.5
B. Bound tests								
B1. Real GDP growth at historical average minus one standard deviation in 2008–09	3.6	3.4	3.7	3.8	3.9	3.4	2.2	3.0
B2. Export value growth at historical average minus one standard deviation in 2008–09 5/	3.6	3.2	3.8	4.6	4.7	4.0	2.7	3.5
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2008–09	3.6	4.0	4.7	4.8	5.0	4.3	2.7	3.8
B4. Net non-debt creating flows at historical average minus one standard deviation in 2008–09 6/	3.6	3.2	4.1	5.2	5.3	4.5	3.2	3.9
B5. Combination of B1-B4 using one-half standard deviation shocks	3.6	3.9	4.5	4.5	4.7	4.0	2.6	3.6
B6. One-time 30 percent nominal depreciation relative to the baseline in 2008 7/	3.6	4.4	4.5	4.6	4.8	4.1	2.7	3.6
B7. Terms-of-trade shocks on copper and gold exports in 2011 8/	3.8	3.2	3.3	3.4	3.5	3.6	3.2	4.7
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 9/	25	25	25	25	25	25	25	25

Source: Staff projections and simulations.

1/ Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and nondebt creating flows.
2/ Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline., while grace and maturity periods are the same as in the baseline.
3/ Assumes that the government issues sovereign bonds of $1.2 billion in 2008–09 ($600 million each year)
4/ Assumes that the Oyu Tolgoi mining project will be delayed by 3 years and government equity participation in the project will be 51 percent.
5/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming an offsetting adjustment in import levels).
6/ Includes official and private transfers and FDI.
7/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.
8/ Assumes that copper and gold prices decline by 35 percent and 25 percent, respectively, in 2011 on top of the WEO assumptions, and catch up with prices in the baseline scenario in 5 years.
9/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

INTERNATIONAL MONETARY FUND

MONGOLIA

Staff Report for the 2008 Article IV Consultation—Informational Annexes

Prepared by the Asia and Pacific Department

May 6, 2008

Contents Page

ANNEX I: MONGOLIA—FUND RELATIONS

(As of April 30, 2008)

I. **Membership Status**: Joined: 02/14/1991; Article VIII

II. **General Resources Account**:	**SDR Million**	**Percent Quota**
Quota	51.10	100.0
Fund Holdings of Currency	50.97	99.74
Reserve Position in Fund	0.14	0.27

III. **SDR Department**:	**SDR Million**	**Percent Allocation**
Holdings	0.06	N/A

IV. **Outstanding Purchases and Loans**:	**SDR Million**	**Percent Quota**
ESAF/PRGF Arrangements	15.55	30.43

V. **Financial Arrangements**:

Type	**Approval Date**	**Expiration Date**	**Amount Approved (SDR Million)**	**Amount Drawn (SDR Million)**
PRGF	09/28/2001	07/31/2005	28.49	12.21
ESAF/PRGF	07/30/1997	07/29/2000	33.39	17.44
ESAF	06/25/1993	06/24/1996	40.81	29.68

VI. **Projected Obligations to Fund**: (SDR Million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	2008	**2009**	**2010**	**2011**	**2012**
Principal	2.59	4.22	3.04	2.44	1.63
Charges/interest	0.07	0.05	0.03	0.02	0.01
Total	2.67	4.28	3.07	2.46	1.64

VII. **Safeguards Assessments**:

Under the Fund's safeguards assessment policy, the Bank of Mongolia (BOM) was subject to a full safeguards assessment with respect to the PRGF arrangement that was approved by the Executive Board on September 28, 2001. An on-site safeguards assessment of the BOM was completed on September 10, 2003. Staff recommended that the BOM implement measures to strengthen its external audit mechanism and financial reporting framework. The BOM has so far implemented several of the recommendations. Staff continues to monitor the BOM's efforts to: (i) commit to the full adoption of International Accounting Standards (IAS) and to disclose its guarantees and pledges in its financial statements; and (ii) disclose the fair value of derivatives in its net international reserve position and financial statements. At the conclusion of the

December 2002 PRGF discussions, the BOM agreed to implement special semi-annual audits of NIR to provide further assurance on the NIR position and to identify any related pledges or guarantees.

VIII. **Exchange Arrangement**:

On May 27, 1993, Mongolia moved from a fixed exchange rate against the U.S. dollar to a floating exchange rate system. The official exchange rate is set daily on the basis of transactions in the foreign exchange market. The *de facto* exchange rate arrangement was reclassified to a conventional peg effective from June 2006. The official exchange rate is applied to State budget and customs transactions, including debt-service payments, and to trade and service transactions conducted under bilateral payments arrangements. Mongolia accepted the obligations of Article VIII, Sections 2, 3, and 4 on February 1, 1996, and maintains an exchange system that is free from restrictions on payments and transfers for current international transactions. Mongolia imposes exchange restrictions for security reasons in accordance with United Nations Security Council Resolution No. 92/757 concerning certain transactions with the Federal Republic of Yugoslavia (Serbia and Montenegro) that have been notified to the Fund under Decision 144-(52/51).

IX. **Article IV Consultation**:

The 2006 Article IV consultation (IMF Country Report No. 07/30) was concluded by the Executive Board on January 10, 2007. Mongolia is on the 12–month cycle.

X. **ROSC Assessments**:

- ROSC, Data Module, May 4, 2001 (www.imf.org)
- ROSC, Fiscal Transparency Module, November 8, 2001 (Country Report No. 01/218)
- ROSC, Fiscal update, May, 2005
- ROSC, Data Module, October 2007 (www.imf.org)

XI. **Recent Financial Arrangements**:

A three-year arrangement under the Enhanced Structural Adjustment Facility in an amount equivalent to SDR 40.81 million (80 percent of quota) with a first annual arrangement in an amount of SDR 18.55 million (36.3 percent of quota), was approved on June 25, 1993. The second annual arrangement in an amount of SDR 11.13 million (21.8 percent of quota) was approved on November 23, 1994. The ESAF arrangement lapsed on June 24, 1996.

A three-year arrangement under the ESAF/PRGF in an amount equivalent to SDR 33.4 million (65.4 percent of quota), with a first annual arrangement in an amount of SDR 11.13 million (21.8 percent of quota), was approved by the Executive Board on July 30, 1997. The first year arrangement lapsed on July 30, 1998. The second annual arrangement of SDR 14.8 million (29 percent of quota) was approved on June 16, 1999. The first review under that arrangement was completed in January 2000 and the arrangement lapsed on June 15, 2000. The ESAF/PRGF arrangement lapsed on July 29, 2000.

A three-year arrangement under the PRGF in an amount equivalent to SDR 28.49 million (55.8 percent of quota), with the first year of the arrangement in an amount of SDR 12.21 million (23.9 percent of quota), was approved by the Executive Board on September 28, 2001. The first and second review under the PRGF was completed on September 12, 2003, and the Executive Board approved the extension of the PRGF through July 31, 2005. The arrangement expired on that date without the completion of the third and subsequent reviews.

XII. **FSAP Participation**:

Mongolia participates in the Financial Sector Assessment Program (FSAP). The first and second FSAP missions took place in May 2007 and September 2007 respectively.

XIII. **Technical Assistance**:

Missions:

- Budget Preparation (FAD), February 2008
- Bank Supervision (MCM), February 2008
- Enhancing Foreign Exchange Market (MCM), February 2008
- Monetary Operations (MCM), January 2008
- Real Sector Statistics (STA), November-December 2007
- Poverty and Social Impact Analysis (FAD), December 2007
- Measures to Combat Money Laundering and the Financing of Terrorism (LEG), December 2007
- ROSC Data Module (STA), October 2007
- Fiscal Affairs Department Scoping Mission (FAD), September 2007
- Real Sector Statistics (STA), June-July, 2007
- International Market Access (MCM), May 2007
- Bank Supervision and Reserves Management (MCM), April 2007
- Real Sector Statistics (STA), March-April 2007
- Government Finance Statistics (STA), March-April 2007
- Fiscal Regime for the Mining Sector and the Development Fund (FAD), January 2007
- Government Finance and Monetary and Financial Statistics (STA), September 2006
- Improving Banking Supervision and Reserve Management (MCM), September 2006
- Value Added Tax, Income Tax and Excise Tax Legislation (LEG), August 2006
- Cooperation between Mongolia's NSO and STA, May 2006
- Management Structure of the Bank of Mongolia (MFD), April 2006
- Monetary and Financial Statistics (STA), October 2005.
- Banking supervision and payment systems (MFD), June 2005.
- Options for Expenditure Savings and Efficiency Improvements (FAD), January 2005.

- Banking supervision and prudential framework (MFD), October 2004.
- Reforms of Tax Policies (FAD), October 2004.
- Government Finance Statistics (STA), August 2004.
- Balance of Payments Statistics (STA), July-August 2004.
- Banking supervision and prudential framework, (MFD), May-June 2004.
- AML/CFT Action Plan and legislative awareness, May 2004.
- Banking supervision and accounting (MFD), October 2003.
- Government Finance Statistics (STA), August 2003.
- AML/CFT (MFD), June 2003.
- Banking supervision and accounting (MAE), November 2002.
- Revenue administration (FAD), September 2002.
- Banking supervision and accounting (MAE), May 2002.
- Review of treasury and intergovernmental fiscal reforms (FAD), August 2001.
- Banking supervision and accounting (MAE), May–June 2001.
- Money and banking statistics (STA), May 2001.
- Government finance statistics (STA), March 2001.
- Fiscal transparency and ROSC (FAD), March 2001.
- Intergovernmental fiscal relations and budget reform (FAD), January 2001.
- Visits by MAE peripatetic experts on banking supervision, payments system, monetary policy, and accounting and audit, November 2000.
- Consumer price statistics (STA), September–October 2000.
- ROSC Data Module (STA), May 2000.
- Restructuring bonds and other securities (MAE), March 2000.
- National accounts statistics (STA), February 2000.

Resident Advisors:

- National accounts statistics (STA), August 2001–September 2003
- Treasury reform (FAD), June 1999–November 2003
- Balance of payments (STA), March 1999–May 2001

Technical assistance for the period May 1995–October 1999 is reported in Annex II of the staff report for the 1999 Article IV consultation.

XIV. **Resident Representative**:

Mr. Jang has been the Fund’s resident representative in Mongolia since April 1, 2006.

ANNEX II. MONGOLIA—RELATIONS WITH THE WORLD BANK GROUP[1]

Mongolia became a member of the World Bank Group in February 1991. Bank lending to Mongolia, currently on IDA-only terms, represents about 11 percent of the country's overall official development assistance flows. A new World Bank Group Country Partnership Strategy (CPS) is under preparation, which will be broadly aligned with the Mongolian Government's National Development Strategy (NDS).

The Bank's main sectoral activities also include:

Public Sector Governance. The Bank is working with the Government to strengthen its public finance management framework, improve civil service administration through the combination of analytical advice, and technical assistance projects under the ongoing Economic Capacity building Technical Assistance project. In addition, a Governance Assistance Project was approved in May 2006. This project helps improve transparency, accountability and governance in the areas of public financial management (budget execution, debt management, civil service), supports the government in its ongoing anti-corruption efforts, poverty monitoring, and improving the investment climate (especially, tax administration and public procurement). A Public Expenditure and Financial Management Review is being prepared for completion in the first half of 2008. As part of the Bank's Country Governance Assessment Program (C-GAP), Governance Assessment is underway in Mongolia which aims at informing the next CPS implementation process in order to enhance prospects of achieving the desired development results.

Financial sector. The World Bank Group has actively supported capacity building and reforms in the financial sector with an emphasis on strengthening banking supervision and credit risk management capacity of commercial banks. The Bank is jointly conducting a Financial Sector Assessment Program (FSAP) with the IMF, and will continue to provide technical assistance (TA) support under ongoing operations such as the second Private Sector Development Credit (PSDC II) (which provides technical assistance in developing risk management and term-lending capacity in selected Mongolian banks, and enhancing central bank supervision capacity, in addition to improving access to financing for long-term private sector capital investments.) The IFC is also playing a significant role in the World Bank Group's investments and transactions in the Mongolian financial sector (see below).

Private Sector Development (PSD). The findings from an Investment Climate study completed in 2006 and a study on Mongolia's *Sources of Growth* (the 2007 Country Economic Memorandum) identified key constraints to sustained broad-based economic growth in Mongolia over the medium term. The Governance Assistance project is addressing some of

[1] Questions may be addressed to Ms. Boyreau, 473-8541.

these identified issues related to investment climate issues in the areas of tax administration or public procurement, as well as in reducing corruption and improving transparency. New lending operations to encourage private sector participation in infrastructure sector are also being considered for the next three to four years, as well as in the mining sector Technical assistance is also being provided at the request of the Government in the mining sector in cooperation with the ABD, IMF and EBRD.

Social sectors. A Poverty Assessment was completed by the World Bank in 2006 which reports on the findings of the 2003−2004 HIES-LSMS household survey. The Bank is working with the Mongolian authorities to help them conduct another HIES-LSMS study in 2007−2008 to track progress in poverty alleviation in the country over the past few years. In *education*, the Bank launched a Rural Education project that will build classroom libraries in all rural elementary schools in Mongolia. The World Bank is playing a catalytic role in enabling Mongolia to access $29 million in grant funds under the "Education for All − Fast Track Initiative (FTI)". This program will help smooth the ongoing transition in the educational curriculum from a 10-year to a 12-year education system. The Bank has also completed analytical studies on the quality of the educational system in Mongolia and its implications for the eventual transition to a 12-grade system. A labor market study by the Bank was also undertaken recently, which identifies three major interrelated challenges facing Mongolia's labor market—joblessness, informality and skills mismatch. In *social protection,* studies were carried out on the pension system and the social welfare/transfer schemes in the context of the ongoing Public Expenditure and Financial Management Review (PEFMR).

Rural and Urban sustainable development. The Bank is also assisting the government in the development of its rural development strategy. Projects are financing efforts to promote secure and sustainable livelihoods through activities in pastoral risk management, microfinance services, basic infrastructure investment (through community-driven approaches), and the piloting of a new index-based livestock insurance product. In this regard, the second Sustainable Livelihood Project was approved in 2007. A Forest Landscapes Development and Conservation project is under preparation. In the area of urban development, the focus of the Bank Group activities is primarily on city development strategies in Mongolia. The Bank is also supporting the improvement of basic service delivery, particularly on improvement of water supply and *ger* area upgrading.[2] In the context of the new CPS, efforts at reducing air pollution and strengthening urban governance also being discussed with the authorities. The World Bank has been engaged in partnership with the Dutch government to support analytical work and technical assistance in the environment and natural resources management areas. In addition, work is underway to analyze and advise the authorities towards determining its medium-term infrastructure needs and environmental issues that need to be addressed in the South Gobi.

[2] A Ger is the traditional dwelling tent of Mongolian people.

Infrastructure. An Information and Communication Infrastructure Development Project was approved on June 8, 2006. The Bank is working with the government to improve the technical and financial operations of Mongolian electricity and water utilities through two projects: namely, the Energy Project and UB2 project respectively. An Infrastructure Strategy report—including sectoral background notes was completed in early 2007. Ongoing policy discussions include a range of issues, including: tariffs adjustment in the energy sector; increased reliance on renewable energy technologies in rural energy supply; strengthening and diversifying off-grid energy supply chains; and increasing rural access to modern energy facilities. In this regard, a Renewable Energy and Access Project was approved in November, 2006. The World Bank is also providing policy advice and assistance to improve energy efficiency and enhancing the financial sustainability of Mongolia's district heating sector.

Judicial and Legal reforms, Supreme Audit Institutions. The Bank is supporting efforts to enhance public confidence in the legal system, with a focus on the judiciary system through the creation of an administrative court system, the establishment of the National Legal Center and through pilots designed to improve legal education and information. Challenges remain in improving legal education, enforcing court decisions, enhancing access to justice, especially for the poor; disseminating new laws to the public; and enforcing existing laws. The Bank continues to work with the Mongolia National Audit Office to strengthen its technical audit capacity.

IFC became a minority owner of two Mongolian banks in 2004 as well as providing debt capital to a third bank. In 2007 IFC became a shareholder in the third bank and will continue in the near term to support access to finance through the banking sector. The IFC is also providing technical assistance for developing a leasing industry and the creation of a mortgage corporation. IFC plans to scale up its activities in Mongolia under the next CPS. It will continue to support the development of the leasing industry in Mongolia, and could also assist in building an SME linkages program with an effort towards strengthening local suppliers and supporting community development. IFC may consider, if appropriate, assistance in developing mining in an environmentally and socially responsible manner through transaction support, joint financing of public-private partnerships, and technical assistance. Finally, IFC is currently exploring opportunities to support manufacturing and agri-business (cashmere industry), renewable energy and water treatment projects in the Mongolia.

MIGA: Mongolia signed the MIGA convention in 1991 and ratified it the following year. MIGA is able to assist the country in attracting foreign investment through its guarantee program.

ANNEX III. MONGOLIA—RELATIONS WITH THE ASIAN DEVELOPMENT BANK[3]

Mongolia became a member of the Asian Development Bank (ADB) in February 1991. In line with ADB's poverty reduction strategy, ADB entered into a Poverty Partnership Agreement (PPA) with the Government of Mongolia in 2000. Within the framework of the PPA, in October 2005, ADB formulated its Country Strategy and Program (CSP) for 2006−08. The new CSP concentrates on achieving poverty reduction by supporting (i) stable, broad based growth and (ii) socially inclusive development. An indicative lending level of $85 million from ADB's concessional Asian Development Fund resources is programmed for 2006−2008, supplemented by an additional $40 million from ADB's regional fund. The CSP formulates a program that includes assistance in agriculture, transport, education, health, and urban development and support for administrative consolidation in support of interventions in these sectors. A CSP Update for 2007−2009 maintains the overall directions of the CSP while increasing the focus of projects on the Government's own strategic objectives, accounting for the need for better governance, the potential for increased levels of grant funding from other agencies, and ADB's own Medium Term Strategy II and its Managing for Development Results Agenda. Since March 2002, Mongolia has been a full member of the ADB-supported Central Asia Regional Economic Cooperation program for the Central Asian Republics and People's Republic of China (PRC).

ADB has provided loans for 40 projects totaling $675.1 million in the agriculture, education, energy, financial, health, industry, telecommunications, transport, and urban development sectors. Fourteen loans were active at the end of 2007. ADB has also provided one private sector equity investment in the amount of $6.1 million and one private sector credit line of $10 million. Technical assistance grants have totaled close to $63.0 million, and grants funded by the Japan Fund for Poverty Reduction and Japan Fund for Information and Communication Technology total $10.7 million. Most early ADB support was in the form of quick-disbursing loans and investments in ailing infrastructure sectors. Governance and poverty were identified as the major development objectives in later years.

ADB allocates its concessional ADF resources to eligible member countries, including Mongolia, based on an annual country performance assessment. The assessment focuses on indicators of sustainable economic growth, socially inclusive development, governance and public sector management, and portfolio performance. Based upon its debt-sustainability, Mongolia is eligible for grant funding of 100 percent of its ADF allocation of $46.83 million over 2007–08.

[3] Prepared by Asian Development Bank staff.

ANNEX IV. MONGOLIA—STATISTICAL ISSUES

Data provision to the Fund is adequate for surveillance, but further improvements are needed, especially on national accounts and government finance statistics. There is also a need for broadening the dissemination of macroeconomic data to the public. Mongolia participates in the General Data Dissemination System (GDDS). A data ROSC mission visited Mongolia in October 2007 to update the May 2000 assessment of the macroeconomic statistics against the GDDS, complemented by an assessment of data quality based on the IMF's Data Quality Assessment Framework.

The IMF Statistics Department is providing support to the National Statistical Office (NSO) in implementing its Program of Statistics Development for 2006–2010. It aims to strengthen the statistical capacity in conformity with the GDDS plans for improvement and to place Mongolia in a position to subscribe the Special Data Dissemination Standard.

On **national accounts** and price statistics deficiencies persist in the annual and quarterly production accounts that detract from the accuracy of the data, including the use of inappropriate techniques to estimate capital formation and inconsistent deflators to derive constant price estimates of GDP. While a proper methodological treatment of animal losses due to harsh winters has been finalized, efforts are needed to improve coverage of the informal sector and small-scale activity, especially in the services sector. Furthermore, the construction of expenditure-based national accounts in constant price terms would serve as a useful check for the production side estimates. The supply and use table for 2005 is being finalized and should provide a new benchmark for GDP. The first real sector technical assistance mission following the October 2007 ROSC took place in November 2007, and the final mission is expected to take place in late-2008.

The **consumer price index** (CPI) was rebased in January 2008 with expenditure derived weights from the 2005 Household Income and Expenditure Survey (HIES). The NSO has published a national CPI for Ulaanbaatar and 21 aimags (provinces) since January 2008, and is now developing a house price index. Progress is still needed on wages and earnings data.

The concepts and definitions used to compile **fiscal statistics** generally follow the guidelines of the *GFSM 1986*. No formal decision has yet been taken on adopting a migration path to the *GFSM 2001* methodology, although the new framework is planned to be used for compiling fiscal statistics. The classifications used for sub-annual and annual fiscal statistics follow broadly the classifications of the *GFSM 1986*, but with some differences for financing. A major classification issue concerns financing. The item *banking system net credit* is calculated as a residual and the change in cash balances for the period is not identified separately.

Monetary and financial statistics broadly conform to the concepts and definitions of the *MFSM* methodology. The Bank of Mongolia's (BOM's) monetary survey covers the central bank and 16 operating commercial banks, but excludes savings and credit unions, which increasingly compete with commercial banks and whose deposit share is growing rapidly. The September 2006 STA mission recommended actions aimed at correcting misreporting of government deposit data by commercial banks. The BOM has begun compilation of monetary data based on the Standardized Report Forms (SRFs), but further technical assistance may be needed to complete the project.

Regarding **balance of payments** statistics, the BOM strictly follows the concepts and methods in the Balance of Payment Manual fifth edition. Coverage has been expanded through the introduction of a survey of enterprises. Work has commenced on revising the register of businesses, last updated in 2002. In addition, a working group with key official and private data providers and users has been established and commercial bank staff has been trained in data reporting. Further progress is needed in the estimation of the international investment position and in procedures to adjust for nonresponses in the enterprise survey.

As regards dissemination, the NSO publishes monthly and annual *Statistical Bulletins* in English and Mongolian. These bulletins include data on population, employment, national accounts, prices, household income and expenditure, central and local government revenue and expenditure, and external trade. The BOM publishes an *Annual Reports* and a monthly *Statistical Bulletin*, which includes summary statistics for the central bank, consolidated balance sheet for commercial banks, and interest and exchange rate data.

Annex IV. Mongolia—Table of Common Indicators Required for Surveillance

As of April 1, 2008

	Date of Latest Observation	Date Received	Frequency of Data[6]	Frequency of Reporting[6]	Frequency of Publication[6]
Exchange rates	3/31/08	4/1/08	D	M	D
International reserve assets and reserve liabilities of the Monetary Authorities[1]	2/2008	3/18/08	D	M	M
Reserve/base money	2/2008	3/18/08	M	M	M
Broad money	2/2008	3/18/08	M	M	M
Central bank balance sheet	2/2008	3/18/08	M	M	M
Consolidated balance sheet of the banking system	2/2008	3/18/08	M	M	M
Interest rates[2]	2/2008	3/18/08	M	M	M
Consumer price index	2/2008	3/18/08	M	M	M
Revenue, expenditure, balance and composition of financing[3] – general government[4]	2/2007	3/09/08	M	M	M
Revenue, expenditure, balance and composition of financing[3]– central government	2/2007	3/09/08	M	M	M
Stocks of central government and central government-guaranteed debt[5]	2006	11/2007	A	A	A
External current account balance	Q4 2007	2/28/08	Q	Q	Q
Exports and imports of goods	12/2007	1/29/08	M	M	M
GDP/GNI	2007	1/2008	A	A	A
Gross external debt	2007	3/26/08	A	A	A

[1]Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.
[2] Both market-based and officially determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3] Foreign, domestic bank, and domestic nonbank financing.
[4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.
[5] Including currency and maturity composition.
[6] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); Irregular (I); Not Available (NA).

Annex V. Mongolia—Millennium Development Goals

	1990	1995	2000	2002	2003	2004	2005
Eradicate extreme poverty and hunger 1/	(2015 target = halve 1990 $1 a day poverty and malnutrition rates)						
Population below $1 a day (percent)	..	14	..	..	..	..	..
Prevalence of undernourishment (percent of population)	..	45	..	28	28	28	27
Poverty gap ratio at $1 a day (incidence x depth of poverty)	..	3	..	..	..	..	..
Poverty headcount, national (in percent of population)	..	36	..	..	36	..	36
Prevalence of underweight in children (under five years of age)	..	..	13	..	..	..	6
Achieve universal primary education 2/	(2015 target = net enrollment to 100)						
Net primary enrollment ratio (in percent of relevant age group)	90	..	91	79	80	84	93
Primary completion rate, total (in percent of relevant age group)	..	..	87	108	98	96	97
Youth literacy rate (in percent ages 15-24)	99	99	98	..	..	98	..
Promote gender equality and empower women3/	(2005 target = education rate to 100)						
Proportion of seats held by women in national parliament (in percent)	25	..	8	11	11	11	7
Ratio of girls to boys in primary and secondary education (in percent)	109	..	112	110	110	108	116
Ratio of young literate females to males (in percent ages 15-24)	100	101	101	..	..	102	..
Share of women employed in the nonagricultural sector (in percent)	49	48	49	47	49	49	53
Reduce child mortality 4/	(2015 target = reduce 1990 under 5 mortality by two thirds)						
Immunization, measles (in percent of children ages 12-23 months)	92	85	94	98	95	96	98
Infant mortality rate (per 1,000 live births)	74	67	50	..	..	41	21
Under 5 mortality rate (per 1,000)	108	89	65	..	..	52	26
Improved maternal health 5/	(2015 target = reduce 1990 maternal mortality by three fourths)						
Births attended by skilled health staff (in percent of total)	..	..	97	..	97	99	100
Maternal mortality ratio (modeled estimate, per 100,000 live births)	..	..	110	..	..	..	93
Combat HIV/AIDS, malaria, and other diseases 6/	(2015 target = halt, and begin to reverse, AIDS, etc.)						
Contraceptive prevalence rate (in percent of women ages 15-49)	..	..	67	..	69	69	..
Incidence of tuberculosis (per 100,000 people)	220	209	199	196	194	192	177
Prevalence of HIV, total (in percent of population aged 15-49)	..	..	..	..	0	0	0
Tuberculosis cases detected under DOTS (in percent)	..	7	62	74	68	80	79
Ensure environmental sustainability 7/	(2015 target = various)						
Access to an improved water source (in percent of population)	62	..	..	62	62	..	62
Access to improved sanitation (in percent of population)	..	..	..	59	59	..	59
CO2 emissions (metric tons per capita)	5	3	3	..	3	..	6
Forest area (in percent of total land area)	7	..	7	..	..		8
Nationally protected areas (in percent of total land area)	..	..	..	..	12	12	14
Develop a global partnership for development 8/	(2015 target = various)						
Aid per capita (current US$)	6	93	91	85	100	104	83
Debt service (in percent of exports)	0	..	6	..	34	3	3
Fixed line and mobile phone subscribers (per 1,000 people)	32	35	114	142	184	184	279
Internet users (per 1,000 people)	..	0	13	21	58	80	105
Personal computers (per 1,000 people)	..	3	13	28	77	124	133
Total debt service (in percent of exports of goods, services and income)	..	10	6	7	29	3	3
Unemployment, youth female (in percent of female labor force ages 15-24)	..	..	23	..	21	..	..
Unemployment, youth male (in percent of male labor force ages 15-24)	..	..	23	..	20	..	..
Unemployment, youth total (in percent of total labor force ages 15-24)	..	..	23	..	20	..	..
General indicators							
Fertility rate, total (births per woman)	4	3	3	2	2	2	2
GNI per capita, Atlas method (current US$)	..	260	390	450	480	600	690
GNI, Atlas method (current US$, in billions)	..	0.6	0.9	1,097	1.2	1.5	2
Gross capital formation (in percent of GDP)	38	29	36	31	38	37	36
Life expectancy at birth, total (years)	63	..	63	65	64	65	67
Literacy rate, adult total (percent of people ages 15 and above)	98	98	98	..	98	98	..
Population, total (in millions)	2.1	2.3	2.4	2.4	2.5	2.5	2.6
Trade (in percent of GDP)	77	112	128	148	151	162	160

Sources: World Bank, *World Development Indicators Database*; UNDP; NSO, *Living Standard Measurement Survey 2002/2003*; and MOF: Millennium Development Goals Implementation in Mongolia 2007.

1/ Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day, and the proportion of people who suffer from hunger.

2/ Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.
3/ Eliminate gender disparity in primary and secondary education preferably by 2005 and to all levels of education no later than 2015.
4/ Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate.
5/ Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio.
6/ Have halted by 2015, and begun to reverse, the spread of HIV/AIDS and the incidence of malaria and other major diseases.
7/ Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources. Halve, by 2015, the proportion of people without sustainable access to safe drinking water.
8/ Develop further an open, rule-based, predictable, non-discriminatory trading and financial system. Address the special needs of the least developed countries. Address the special needs of landlocked countries and small island developing states.

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IMF Executive Board Concludes 2008 Article IV Consultation with Mongolia

On June 4, 2008, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Mongolia.[1]

Background

Mongolia's economy has performed extremely well in recent years. Aided by a sharp run-up in the international prices of copper and gold, real GDP growth has averaged 9 percent since 2004, while per capita income has more than doubled. Although the upturn in performance was initially driven by developments in the mining sector, growth has spread to other sectors over time, including construction and financial services. High minerals prices and improvements in tax administration have generated rapid growth in government revenues, and the budget recorded significant surpluses over the past three years.

Growth picked up to 10 percent in 2007, while signs of overheating became increasingly apparent in the second half of the year. Inflation rose from 6 percent (year-on-year) in June 2007 to 21 percent in March 2008. The inflationary pressures reflected a relaxation of monetary and fiscal policies, large increases in prices for food and fuel, and transportation capacity constraints.

Monetary aggregates have been growing rapidly. Reserve money grew by 39½ percent in 2007, driven by a large increase in net foreign assets of the Bank of Mongolia (BOM), while broad money and credit to the private sector increased by 57 percent and 75 percent, respectively.

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board. At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities.

The overall fiscal surplus declined from 8 percent of GDP in 2006 to 2 percent in 2007. The decline in the surplus reflected an increase in spending amounting to 10 percentage points of GDP, including a proliferation of social welfare programs, a 49 percent increase in the civil service wage bill, and more than a doubling of capital spending. Budget revenues also increased, although less than expenditure, as high copper and gold prices, the mid-2006 introduction of a Windfall Profits Tax (WPT) on copper and gold, and improvements in tax administration and compliance, more than offset the revenue loss from cuts in the VAT, personal income tax, and corporate income tax rates.

With domestic demand accelerating, the external current account surplus narrowed from 7 percent of GDP in 2006 to 2½ percent in 2007. Imports increased very rapidly, reflecting the run-up in food and fuel import prices and large imports of capital equipment for the mining sector, while export growth slowed. However, the overall balance of payments position remained comfortable, as imports of capital goods were largely financed by foreign direct investment in the mining sector.

The strong economic performance of recent years has helped reduce Mongolia's vulnerability to severe shocks, such as large swings in the terms of trade and periodic episodes of drought and devastating cold. The net present value (NPV) of external public debt was cut from 51 percent of GDP at end-2004 to 24½ percent at end-2007, while international reserves of the BOM have increased almost fivefold since 2003 to US$1 billion (4½ months of nonmining imports). External debt is almost entirely concessional, and the debt service burden is low.

Mongolia's medium-term economic outlook is favorable. High minerals prices have spurred minerals exploration and re-energized plans to exploit very large untapped deposits of copper, gold, coal, uranium, and other minerals. With the expected opening of the new Oyu Tolgoi copper and gold mine in 2011, real GDP growth is projected to pick up from around 7−9 percent in 2008−10 to 12−14 percent in 2011−12. With strong policy implementation, it should be possible to bring inflation down to a single digit by end-2008 and to maintain a rate of 5−6 percent over the medium term. The external current account is expected to move into deficit during 2008−11, reflecting expected declines in copper prices and large FDI-financed imports of capital equipment for the mining sector, but it is projected to move back into surplus in 2012, after the Oyu Tolgoi mine comes on stream. The NPV of public debt, the debt service burden, and international reserves are expected to remain at comfortable levels.

Executive Board Assessment

Executive Directors commended the authorities for Mongolia's impressive economic performance in recent years, notably rapid GDP growth, budget and external current account surpluses, and record levels of international reserves. Directors considered that the medium-term outlook remains favorable, given Mongolia's vast mineral wealth. Nevertheless, they noted that near-term prospects are clouded by rising inflation, reflecting rapid growth in government spending and private sector credit, large increases in imported food and fuel prices, and the tightening of supply constraints. If allowed to persist, these inflationary pressures could threaten macroeconomic stability and impair growth.

Against this background, Directors underlined that the authorities' immediate priority is to address the risk of overheating by tightening both fiscal and monetary policies. On the structural front, steps should be taken to address transportation bottlenecks and other capacity constraints. Directors encouraged the authorities to establish a transparent, stable, and internationally competitive mining regime to reap the full benefits of the country's mineral resources.

Directors expressed concern about the inflationary consequences of a relaxation of fiscal policy over the past year. They welcomed the authorities' decision to cancel plans for additional spending in an amended budget. With revenues remaining much stronger than expected in the budget, Directors saw scope for maintaining a small surplus this year by curtailing low-priority capital spending and containing the wage bill. They welcomed the authorities' intention to consider future wage increases carefully in the context of a broader civil service reform aimed at enhancing efficiency. Directors encouraged the authorities to reduce the overlapping coverage and improve the targeting of social spending programs to help contain spending while assisting the most vulnerable groups.

Directors underscored the importance of establishing a clear medium-term fiscal framework to help anchor macroeconomic stability and avoid sharp swings in spending. In this context, they advised the authorities to consider, as part of the fiscal framework, the introduction of a separate limit on expenditure growth and the adoption of realistic nonmineral fiscal targets. The authorities should continue to rely on concessional sources of external finance whenever possible. Nonconcessional borrowing should be considered only for projects with clear economic viability that cannot be financed by concessional loans, and only when the risks of inflation have diminished. Directors also encouraged the authorities to consolidate any foreign financing with the general budget to ensure fiscal transparency.

Directors welcomed the recent tightening of monetary policy, and encouraged the authorities to stand ready to increase the policy interest rate further as needed. They observed that international reserves are now at a broadly comfortable level, and that a further large increase could complicate the efforts to reduce inflation. They also noted the staff's assessment that the real effective exchange rate is currently somewhat undervalued, although a few pointed out that the divergence was within the margin of error. Directors were of the view that, going forward, greater exchange rate flexibility would facilitate the conduct of monetary policy and adjustment to external shocks. Strengthening the interbank foreign exchange market to handle a larger share of foreign exchange transactions will be important, and in this regard, they welcomed the steps being taken by the authorities, including for the introduction of a screen-based trading system.

Directors commended the BOM for the progress made in strengthening its governance and risk management practices. They encouraged the BOM to expedite the preparation of a strategy to exit from its role as a major purchaser of domestically produced gold.

Directors considered that the overall condition of Mongolia's financial system is generally healthy and the framework for banking supervision is well-developed. Given the rapid credit growth, they encouraged the authorities to monitor large exposures closely and improve the supervision of liquidity and operational risks of banks. Directors welcomed the progress made by the Financial Regulatory Commission since its inception in 2006 to create a framework for the supervision of nonbank financial institutions. Further efforts are still needed to strengthen the statutory framework, especially for savings and credit cooperatives, and to develop the tools for consolidated supervision. Directors welcomed the authorities' intention to review plans for the establishment of a development bank, taking account of the experience elsewhere so as to avoid creating unfair competition and distortions in the financial sector.

Mongolia: Selected Economic and Financial Indicators, 2004–08

Nominal GDP (2007); $3,894 million 1/
Population, end year (2007); 2.64 million
Per capita GDP (2007); $1,489 1/
Poverty incidence (2006); 32.2 percent 2/
Quota: SDR 51.1 million

	2004	2005	2006	2007	2008	
				Est.	Budget	Staff Recom. 3/
			(Percent change)			
Real sector						
Real GDP growth	10.6	7.3	8.6	9.9	…	8.6
Mineral	34.3	10.9	6.3	1.7	…	1.4
Nonmineral	5.6	6.3	9.2	12.2	…	10.3
Consumer Prices (end-period)	10.6	9.2	6.0	15.1	…	8.8
GDP deflator	17.2	20.4	23.1	11.6	…	10.3
			(In Percent of GDP)			
General government budget						
Revenue and grants	33.1	30.1	36.6	40.6	44.4	42.6
Expenditure and net lending	35.0	27.5	28.5	38.4	46.9	41.1
Overall balance (including grants)	-1.8	2.6	8.1	2.2	-2.5	1.5
Nonmineral overall balance	-5.5	-1.4	-2.4	-12.5	-14.9	-12.0
			(Percent change)			
Money and credit						
Domestic credit	23.0	22.3	-7.5	72.5	…	25.2
Broad money	20.3	37.3	30.8	57.3	…	22.9
Reserve money	16.8	19.7	37.7	39.6	…	12.0
Interest rate on central bank bills, end-period (percent) 4/	15.8	3.7	5.1	8.4	…	…
			(In million of U.S. dollars; unless otherwise indicated)			
Balance of payments						
Current account balance (including official transfers)	27	29	222	101	…	-405
(In percent of GDP)	1.5	1.3	7.0	2.6	…	-8.5
Trade balance	-149	-155	30	-218	…	-839
(In percent of GDP)	-8.2	-6.7	0.9	-5.6	…	-17.6
Export, f.o.b.	872	1,069	1,545	1.952	…	2,163
Import, c.i.f.	1,021	1,224	1,516	2,170	...	3,002
Foreign direct investment	129	258	290	328	…	688
Gross official international reserves (end-period)	208	333	718	1,001	…	1,253
(In months of next year's imports of goods and services)	1.6	2.1	3.3	3.6		4.0
(In months of next year's nonmining imports) 5/	1.9	2.5	3.8	4.5		5.1
Trade prices						
Export prices (U.S. dollar, percent change)	23.1	13.1	38.7	30.5	…	4.0
Import prices (U.S. dollar, percent change)	15.3	9.2	12.2	9.5	…	15.2
Terms of trade (percent change)	6.8	3.5	23.7	19.2	…	-9.7
			(In million of U.S. dollars; unless otherwise indicated)			
Public and publicly guaranteed debt						
Total public debt (In percent of GDP)	81.4	60.3	46.7	40.0	35.7	34.1
Domestic debt (In percent of GDP)	6.8	3.7	1.7	0.6	0.3	0.3
External debt 6/	1,352	1,306	1,420	1,535	1,687	1,611
(In percent of GDP)	74.6	56.6	45.0	39.4	35.5	33.8
NPV of total public debt (In percent of GDP) 7/	57.9	44.5	29.87	25.1	22.6	21.6
NPV of external debt (In percent of GDP) 7/	51.1	40.8	28.1	24.5	…	21.3
External debt service	91	43	57	52	…	61
(In percent of exports of goods and services)	7.5	2.9	2.8	2.0	…	2.1
Exchange rate						
Togrogs per U.S. dollar (end-period)	1,209	1,221	1,165	1,170	…	…
Togrogs per U.S. dollar (period average)	1,187	1,205	1,177	1,170	…	…
Nominal effective exchange rate (end-period; percent change)	-6.1	1.5	1.9	-4.0	…	…
Real effective exchange rate (end-period; percent change)	0.9	8.0	5.5	6.4	…	…
Nominal GDP (billion togrogs)	2,152	2,780	3,715	4,558	…	5,456

Sources: Data provided by the Mongolian authorities; and Fund staff estimates and projections.

1/ Based on period average exchange rate.
2/ Share of household below national poverty line, based on the Millenium Development Goals Implementation 2007.
3/ Fund staff projections based on policy recommendation.
4/ Yield of 14-day bills until 2006 and of 7-day bills for 2007.
5/ Nonmining imports of goods and services are approximated by total imports minus foreign direct investment .
6/ Includes IMF loans, guarantees, and arrears.
7/ Based on 5 percent discount rate from 2004 onwards.