### Mongolia: Financial System Stability Assessment

This Financial System Stability Assessment on Mongolia was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on March 3, 2011. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Mongolia or the Executive Board of the IMF.

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International Monetary Fund Washington, D.C.

#### INTERNATIONAL MONETARY FUND

#### **MONGOLIA**

#### **Financial System Stability Assessment**

Prepared by the Monetary and Capital Markets and Asia and Pacific Departments

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March 3, 2011

This Financial System Stability Assessment summarizes the work of the Financial Sector Stability Module (FSM) mission undertaken during November 8–19, 2010.

The team comprised Rodolfo Maino (head of mission), Diane Mendoza, and Kalin Tintchev (all MCM), Julia Bersch (APD), and Claire McGuire (World Bank). The mission was supported by the IMF Resident Representative Office in Ulaanbaatar. The main findings of the assessment were:

- The authorities are making progress in restructuring the banking sector. Besides placing under conservatorship two state-owned banks, the authorities have also tightened prudential regulations on asset classification and loss provisions.
- The banking system is heavily exposed to several risks. A number of mid-sized banks have yet to conform to minimum capital requirements while high concentrations in banks' loan portfolios as well as cross-ownership linkages between banks and industrial companies facilitate related party lending. In addition, banks are exposed to interest and exchange rate risks due to maturity mismatches and unhedged foreign currency lending.
- The Bank of Mongolia permits regulatory forbearance. Strict enforcement of regulatory requirements is lacking and minimal effort has been made to move toward risk-based and forward-looking supervision. Compliance-based supervision continues to be the norm.
- The blanket deposit guarantee continues to provide generous coverage and needs to be replaced by a well-designed deposit insurance scheme.

FSAP assessments are designed to assess the stability of the financial system as a whole and not that of individual institutions. They have been developed to help countries identify and remedy weaknesses in their financial sector structure, thereby enhancing their resilience to macroeconomic shocks and cross-border contagion. FSAP assessments do not cover risks that are specific to individual institutions such as asset quality, operational or legal risks, or fraud.

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#### **GLOSSARY**

AML/CFT Anti-Money Laundering/Combating the Financing of Terrorism

BOM Bank of Mongolia

CAR Capital Adequacy Ratio

CBBs Central Bank Bills

CIB Credit Information Bureau

ELA Emergency Liquidity Assistance FATF Financial Action Task Force FIU Financial Intelligence Unit

FRC Financial Regulatory Commission

FSC Financial Stability Council FSM Financial Stability Module

IFRS International Financial Reporting Standards

LGD Loss given default

MOU Memorandum of Understanding
MSE Mongolian Stock Exchange
NBFI Non-bank financial institution

NPL Non-performing loan

SCCs Savings and Credit Cooperatives
SD Bank Supervision Department
SME Small and Medium Enterprise

#### EXECUTIVE SUMMARY

Financial stability has been re-established but it is still delicate...

Mongolia is currently enjoying a vigorous economic recovery. The 2009 Stand-by Arrangement has been successful in restoring economic and financial stability. Economic growth is expected to surpass 10 percent this year and the extreme pressures that the financial system faced during 2008–09 have eased. The authorities are making progress in restructuring the banking sector. Two state-owned banks were placed under conservatorship and will eventually be sold to strategic investors.

**Nevertheless, challenges remain**. The banking system is heavily exposed to credit and market risks and the quality of bank capital is weak. Further efforts are needed to strengthen supervision and regulation—in particular, stricter enforcement of prudential rules, regular stress testing, developing a crisis management plan and conducting consolidated supervision would help enhance the resilience of the banking sector.

Banking sector soundness indicators have improved since the 2008 crisis, but capital ratios are likely overstated. Banks returned to profitability in 2010 and the average non-performing loan (NPL) ratio declined from a peak of 20 percent in 2009 to 8 percent in 2010. The system-wide Capital Adequacy Ratio (CAR) also showed improvement, increasing to 15.1 percent in 2010. However, the reported CARs do not take into account expected losses from higher loan provisioning and inadequate risk weighting of interbank exposures. Concerns surround the weakest medium-sized banks which have not yet conformed to minimum capital requirements. These banks have poor underwriting practices and have been expanding their loan book.

Stress tests suggest that credit risk remains the principal vulnerability for banks. The fragility of the banking sector is heightened by large single borrower and sectoral loan concentrations. Cross-ownership linkages among banks and between banks and industrial companies resulted in significant loans made to borrowers that are related parties of banks and to common borrowers across the system. An increase in classified loans, a default of the banks' single largest borrower, or a significant downgrade of performing loans to substandard would significantly erode the capital buffer of the banking system. Banks are also exposed to interest and exchange rate risks due to maturity mismatches and unhedged foreign currency lending.

... banking sector restructuring needs to be reinforced...

The authorities have submitted to parliament the Empowering the Banking Sector and Capital Support Program. This program provides a comprehensive restructuring framework aimed at restoring solvency and ensuring banks' medium-term viability.

Bank-by-bank restructuring plans are supposed to be implemented as soon as parliament approves the Program, but prospects for its passing now seem slim. It is expected that bank restructuring costs will be borne by the budget and that BOM will be reimbursed for its expenses in connection with the Anod Bank resolution.

...with special focus on the regulatory framework...

The BOM permits regulatory forbearance. Strict enforcement of regulatory requirements is lacking despite weak credit underwriting practices and governance systems in banks. Compliance-based supervision continues as the norm, but the BOM is planning to switch smoothly to risk-based and forward-looking supervision. In this regard, the BOM has incorporated market and operational risks in the calculation of capital adequacy ratios.

Recently, the authorities have tightened prudential regulations on asset classification and loss provisions. New requirements mandate the recognition of restructured loans as nonperforming and the establishment of provisioning for excessive related-party loans. Recognition of the problem assets and the corresponding increase in loss provisions will reduce capital ratios and raise nonperforming loans. Further efforts are still needed to strengthen banking supervision and regulation, particularly with respect to: (i) conducting risk-based supervision and the implementation of consolidated supervision; (ii) expanding fit and proper criteria for licensing, credit underwriting, and capital; and (iii) adopting a variety of policies, procedures, and regulations on securities, accounting standards, and consolidated supervision.

...while financial safety nets require a fundamental reform.

The blanket deposit guarantee provides overly generous coverage and needs to be replaced by a well-designed deposit insurance scheme. The blanket guarantee served its intended purpose as a crisis response measure which helped bolster confidence in the depository institutions. Recently, the authorities have tightened the coverage of the blanket deposit guarantee to reduce moral hazard—by no longer covering interbank deposits, by limiting coverage on interest earned on deposits in excess of the policy interest rate, and by netting guaranteed deposits against the depositor's liabilities to the bank. However, the scope of the current guarantee remains extremely generous and the system requires fundamental reform.

The **priority recommendations** based on the Risk Assessment Matrix (Appendix I) emphasized near- and medium-term measures to address key vulnerabilities (Table 1).

Table 1. Key FSM Recommendations

| Recommendations   | Timing,<br>Priority 1/ |
|---|------------------------|
| Financial Stability (from Section II)   |                        |
| Strengthen the capital base of the banking system.  | ST, HP                 |
| Identify and monitor the loan quality of systemic exposures in the banking system and ensure that banks adequately provision for such exposures.  | ST, HP                 |
| Strictly enforce connected lending limits.  | ST, HP                 |
| Build appropriate data systems that allow tracking of bank ownership and interlinkages between banks and other related parties.   | MT, MP                 |
| Enforce large exposure limits.  | MT, MP                 |
| Establish guidelines for foreign exchange lending.  | ST, MP                 |
| Conduct regular stress testing and scenario analysis exercises at the BOM and build capacity in this area. Require the individual banks to conduct regular stress tests under the supervision of the BOM. Strengthen BOM data monitoring systems to support the stress test exercise. | ST, MP                 |
| Financial Sector Oversight (from Section III)   |                        |
| Enforce existing legislation and halt the granting of forbearance.  | ST, HP                 |
| Develop a strategic plan for supervision.   | MT, HP                 |
| Improve communication and relationships within and outside the supervisory agency.  | MT, HP<br>ST, HP       |
| Intensify efforts to effectively conduct risk-based and consolidated supervision.   | 01,111                 |
| Crisis Management Architecture (from Section IV)  |                        |
| Develop time-bound remediation plans for banks that do not meet prudential requirements.  | ST, HP                 |
| Develop a crisis management plan for the financial sector using the Financial Stability Council (FSC) as a vehicle for inter-agency cooperation.  | MT, HP                 |
| Develop a plan for transition from the blanket guarantee to a well-designed, limited deposit insurance scheme.  | MT, HP                 |
| Anti-Money Laundering/Combating the Financial of Terrorism (AML/CFT) (from Section V)   |                        |
| Introduce measures for conducting overall AML/CFT risk assessments and risk profiling of institutions regulated by the Financial Regulatory Commission (FRC).   | ST, MP                 |

1/ ST: short term: up to 1 year; MT; medium term: 1-3 years; HP: high priority; MP: medium priority.

#### I. MACROECONOMIC SETTING AND STRUCTURE OF THE FINANCIAL SECTOR

#### A. Recent Macroeconomic Trends and Outlook

- 1. The economy was hit hard by the global economic crisis but is currently enjoying a vigorous recovery. When copper prices dropped by more than 60 percent in late 2008, the value of Mongolia's exports fell sharply as did foreign exchange inflows and government revenue. The economy was on the verge of collapse when a Fund-supported Stand-By Arrangement was put in place in April 2009. The program has been successful in quickly stabilizing financial markets and a strong recovery is underway. The economy is recovering briskly and real GDP growth could surpass 10 percent this year, following strong growth in the first three quarters fueled by investment in the mining sector, a surge in copper prices, and an expansion in coal exports.
- 2. **Inflationary pressures are emerging.** The severe winter led to a sharp increase in food prices. Moreover the booming economy and the recent 30 percent increase in government wages and pensions are adding to inflationary pressures. Demand pressures are expected to mount further due to the construction and development of the Oyu Tolgoi mine. This project is boosting imports and domestic demand and is widening the current account deficit.
- 3. **During the last two years, the institutional framework for monetary policy has been strengthened**. The flexible exchange rate system was recently reinforced through the implementation of non-discriminatory auctions of foreign exchange, which stabilized the foreign exchange market and eliminated the informal-market premium. The auction system for central-bank bills was improved through the introduction of a new auction system for seven-day central-bank bills.
- 4. **Fiscal spending plans for 2011 pose a risk to macroeconomic stability.** Under the IMF-supported program, fiscal policy had become less procyclical and was aimed at balancing the spending needs of the country and maintaining macroeconomic stability. The overall balance last year ended with a surplus thanks to strong revenues. However, Mongolia's parliament approved a 2011 budget that would raise expenditures 7 percent of GDP higher than the figure the authorities committed to in their last Letter of Intent under the SBA (which expired on October 1).

<sup>1</sup>Mongolia completed successfully the SBA on October 1, 2010. Adverse developments in international commodity markets in 2008 led to a disorderly depreciation of the togrog and a rapid depletion of foreign exchange reserves. The macroeconomic policy framework was not robust enough to withstand the external shock and the banking system also came under stress. The program: (i) helped cushion the adverse consequence of the shock by combining strong policy adjustments with front-loaded financing of an exceptional size; and (ii) facilitated significant structural reforms which should strengthen the resilience of the economy against future shocks. Bank balance sheets improved and the system-wide ratio of non-performing loans declined, albeit with a substantial variation among individual banks.

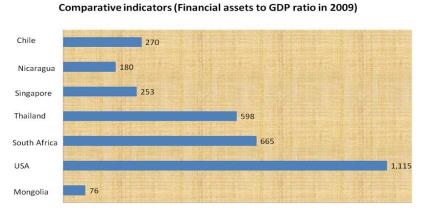
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5. The economy continues to rely heavily on mineral exports. Mining and agriculture are the main economic sectors, with each contributing around 20 percent to GDP. Exports exceeded 50 percent of GDP, with two mining products—copper and coal—accounting for more than half of exports (Figure 1). The economy is also dependent on the import of food, energy, and investment-related goods. Foreign direct investment, especially in the mining sector, has triggered large foreign exchange inflows and international reserves are at an all-time high.

#### **B.** Structure of the Financial System

## 6. **The Mongolian financial system is dominated by commercial banks.** In September 2010, the 14 registered commercial banks accounted for 96 percent of total

financial system assets (Table 2). The banking system has grown rapidly from a small base, with yearly average asset growth of over 30 percent from 2006–09. In 2010, the ratio of total bank assets to GDP was 7 percentage points higher than in 2007.



Source: International Financial Statistics

## 7. The non-bank financial sector, including insurance and the stock market, is small.

• The Mongolian life insurance industry is in its infancy. The first life insurer—National Life—commenced business in 2008. The non-life insurance industry has been growing following the passage of a new Insurance Law in 2004.



The Mongolia Stock Exchange (MSE) was established in 1991, following the
privatization of 475 state-owned enterprises. Some 337 companies are now listed on the
MSE, with total market capitalization of MNT 1,180 billion. The size of the market is a
fraction of regional markets.

Table 2. Structure of the Financial Sector, 2008–2010

|  | Dec-08 |                    |                               | Dec-09    |                    |                               | Jun-10    |                    |                               | Sep-10    |                    |                               |
|--|--------|--------------------|-------------------------------|-----------|--------------------|-------------------------------|-----------|--------------------|-------------------------------|-----------|--------------------|-------------------------------|
|  | Number | Assets<br>(bn Tog) | Percent<br>of total<br>assets | Number 1/ | Assets<br>(bn Tog) | Percent<br>of total<br>assets | Number 1/ | Assets<br>(bn Tog) | Percent<br>of total<br>assets | Number 1/ | Assets<br>(bn Tog) | Percent<br>of total<br>assets |
| Commercial Banks                         | 16     | 3,527              | 95.7                          | 15        | 4,215              | 95.6                          | 14        | 4,851              | 95.6                          | 14        | 5,188              | 96.0                          |
| Private                                  | 16     | 3,527              | 95.7                          | 14        | 4,078              | 92.5                          | 13        | 4,685              | 92.4                          | 13        | 5,007              | 92.7                          |
| Domestic<br>Foreign (foreign ownership   | 11     | 2,291              | 62.2                          | 9         | 2,534              | 57.5                          | 9         | 3,160              | 62.3                          | 9         | 3,462              | 64.1                          |
| exceeding 50 percent)                    | 5      | 1,235              | 33.5                          | 5         | 1,544              | 35.0                          | 4         | 1,526              | 30.1                          | 4         | 1,545              | 28.6                          |
| State-Owned                              | 0      | 0                  | 0.0                           | 1         | 137                | 3.1                           | 1         | 166                | 3.3                           | 1         | 181                | 3.4                           |
| Nonbank Financial Institutions           | 403    | 159                | 4.3                           | 459       | 195                | 4.4                           | 441       | 221                | 4.4                           | 387       | 215                | 4.0                           |
| Insurance companies                      | 16     | 34                 | 0.9                           | 18        | 41                 | 0.9                           | 16        | 45                 | 0.9                           | 16        | 46                 | 0.9                           |
| Life insurance                           | 1      | 1                  | 0.0                           | 1         | 1                  | 0.0                           | 1         | 1                  | 0.0                           | 1         | 1                  | 0.0                           |
| Non-life insurance<br>Savings and Credit | 15     | 33                 | 0.9                           | 17        | 40                 | 0.9                           | 15        | 44                 | 0.9                           | 15        | 45                 | 8.0                           |
| Cooperatives                             | 209    | 32                 | 0.9                           | 217       | 45                 | 1.0                           | 190       | 46                 | 0.9                           | 184       | 47                 | 0.9                           |
| Finance Companies/NBFIs                  | 132    | 79                 | 2.1                           | 177       | 97                 | 2.2                           | 188       | 116                | 2.3                           | 187       | 122                | 2.3                           |
| Securities firms/Broker firms            | 46     | 14                 | 0.4                           | 47        | 13                 | 0.3                           | 47        | 14                 | 0.3                           | n.a.      | n.a.               | n.a.                          |
| Total financial system                   | 419    | 3,685              | 100.0                         | 474       | 4,411              | 100.0                         | 455       | 5,072              | 100.0                         | 401       | 5,403              | 100.0                         |

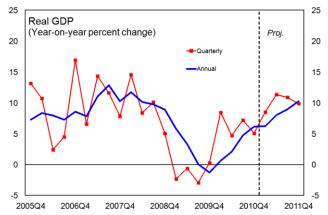
Sources: Bank of Mongolia, Financial Regulatory Commission of Mongolia.

1/ Receiver banks (Anod and Zoos) are excluded.

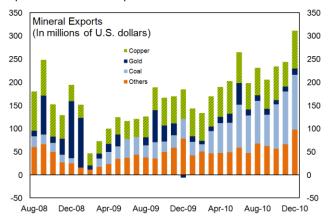
## Figure 1. Macroeconomic Developments

**Main Message:** The economy has recovered and is growing briskly and, with inflation in the double-digits, overheating is a growing concern.

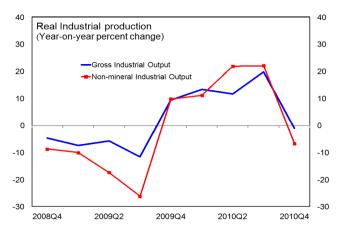
Notwithstanding the impact of the severe winter on agriculture, the economy has bounced back strongly...



...that is driving export earnings along with a sharp increase in coal exports due to increased production.

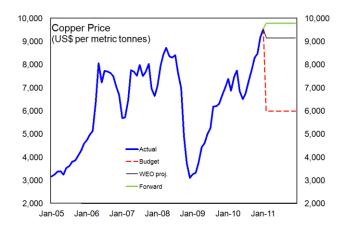


...as well as production in both the mineral and non-mineral sectors.

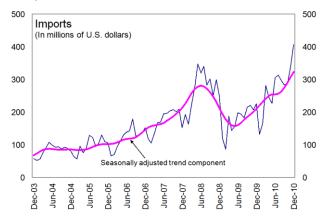


Sources: Mongolian authorities; and IMF staff estimates.

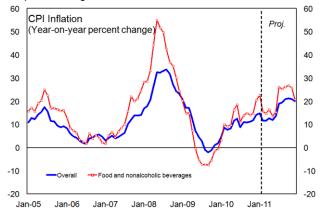
...aided by the sharp rebound in copper prices...



The recovery is showing in demand, with imports growing robustly...



Inflation, however, has also returned to the double-digits driven by food prices, though non-food inflation has also accelerated.



- 8. The current level of dollarization exposes Mongolia's financial system to risk. About a third of deposits are denominated in foreign currency. This level of dollarization limits the BOM's ability to act as a lender-of-last-resort during periods of distress; it also constraints its capacity to manage systemic liquidity. Moreover, in the event of a sharp correction of the togrog, the banking system may be exposed to: (i) indirect credit risk associated with borrowers who have local currency-incomes and U.S. dollars-denominated debts, as well as (ii) solvency risk through currency mismatches, given the growth in togrog-denominated loan portfolios in recent years.
- 9. The authorities are in the process of establishing the Development Bank of Mongolia as a state-owned limited liability company. The goal of the bank is to finance large public infrastructure projects and to provide credit to priority industries as defined in the government's action plan. The government plans to finance the Development Bank through the proceeds of initial public offerings of government-owned mining companies in the MSE. This project is at a very early stage and its success will depend on the authorities' ability to make further substantial improvements in Mongolia's capital markets.
- 10. The authorities should carefully consider the options for financing the Development Bank and their budget and other implications. The development Bank could have significant fiscal implications, both directly and indirectly through guarantees and contingent liabilities. To address these risks, this Bank should be subject to a stringent set of guidelines and oversight.

#### II. OVERALL FINANCIAL STABILITY ASSESSMENT

11. **Financial stability is still delicate (Figure 2).** The banking crisis of 2008–09 was a significant setback, and highlighted the increased vulnerabilities of banks' balance sheets. In the aftermath of the crisis, banking system profitability fell, and nonperforming loans more

than doubled. Leverage in the banking sector was unchanged while loans as a share of GDP declined, suggesting more cautious behavior by both banks and customers. The average Z-score of the system (a measure of the distance to default) is still lower than pre-crisis levels, pointing to continued fragility.<sup>2</sup>

12. The team identified a number of significant threats to financial sector stability. Banking system lending is concentrated as there are few investment opportunities available domestically. The potential downside risk to growth, and continuing weaknesses

Loans to GDP

Z score

Z score

VPLs to gross loans

Assets

Source: BOM.

Figure 2. Mongolia Financial Stability

Map

in supervisory practices are likely high-impact events for bank balance sheets. The failure of systemically important banks or a loss of depositor confidence would also have a devastating impact on the banking sector, given the weak crisis management framework. Regulatory forbearance and weak bank balance sheets—especially in medium-sized banks—exacerbate these risks.

#### A. Financial Soundness Indicators

13. Aggregate financial soundness indicators for the banking system show a partial recovery from the crisis. The impact of the crisis was severe, but most indicators have recently strengthened (Table 3 and Figure 3). The average CAR declined substantially during the crisis, to 5 percent at the end of 2009, but has since increased to 15 percent excluding the two banks under conservatorship. NPLs, which also increased sharply during the crisis to 20 percent, have declined to 8 percent by September 2010. Again, part of the decline is due to the exclusion of NPLs at the two banks under conservatorship. The banks' average return

<sup>&</sup>lt;sup>2</sup>The Z-score measures the number of standard deviations a return realization has to fall in order to deplete equity—under the assumption of normality of banks' returns. As such, the Z-score can be thought of as a measure of resilience, i.e., higher Z-score implying stronger resilience to shocks. Only current banks were included in the analysis.

on equity (before taxes) was deeply negative (as low as minus 130 percent) during the crisis years and has now recovered to 2005 levels.

- 14. **The reported CARs, however, are overstated** because: (i) provisioning requirements have been relaxed and do not account for some of the expected losses; (ii) exposures to the largest problem borrowers have not been adequately classified and provisioned; and (iii) notwithstanding the revision of the provisioning regulation, some interbank exposures—corresponding to on-lending to large borrowers are not properly risk weighted for calculation of the CAR (20 percent instead of 100 percent).
- 15. The deterioration in credit quality was strongest in construction, manufacturing, and agriculture. Agriculture was particularly affected by the severe winter in 2009–10. A few sectors, in particular mining, real estate activities, and wholesale and retail trade, have seen a recent improvement in NPLs. However, the impact of the crisis is still feeding through the banking system and widespread loan restructurings mask problems in banks' loan portfolios.
- 16. The banking system as a whole has become more liquid. The ratio of liquid assets to short-term liabilities has increased to over 30 percent in 2010, and the system remains exposed to liquidity risks. The deposits-to-loans ratio has increased substantially since 2008 as banks again rely more heavily on domestic deposits to finance their loans, making the system less vulnerable to volatile funds. Currently, only a few banks have access to international capital markets.
- 17. **Foreign currency lending has increased, recently, and lending to unhedged borrowers renders the system vulnerable to foreign exchange induced credit risk.** The net open position in foreign currency to capital shows an increased exposure of the banking sector to exchange rate risk. So far, the overall impact of any togrog depreciation should be positive, given that most banks hold positive net open positions in U.S. dollars. To prevent the buildup of potential risks, stronger limits on foreign exchange lending are needed.

#### **B.** Stress Testing Vulnerabilities

- 18. The stress test outcomes underscore the fragility of the banking sector and the need to strengthen banks' capital. The tests considered a broad range of possible risks including credit, liquidity, concentration, interbank contagion, foreign exchange, and interest rate risk and comprised both single factor shocks and regression analysis conditioned on macro scenarios. The shocks were calibrated—in agreement with BOM— using a combination of statistical methods and data from Mongolia's 2008–09 crisis.
- 19. As a first step, the impact of the new tighter provisioning requirements on restructured loans and connected lending was assessed on bank CARs. Three medium-

sized banks with a market share of around 5 percent appear critically undercapitalized after the adjustments, with CARs below 4 percent.<sup>3</sup>

# 20. The stress test results indicate that credit risk remains the main vulnerability in the banking system (Tables 4-5). In particular,

- Five banks accounting for 15 percent of system assets would be undercapitalized as a result of a 40 percent increase in classified loans;
- A simultaneous default of the banks' single largest borrower would reduce aggregate CAR by 3.5 percentage points;
- The system is vulnerable to severe shocks to credit quality such as a downgrade of 30 percent of performing loans to substandard, or a simultaneous default of the banks' two largest borrowers; and
- Some banks are heavily exposed to one another via interbank transactions and vulnerable to interbank contagion risk. A simultaneous default of five medium-sized and small banks (accounting for 17 percent of banking system assets) could destabilize two other banks in the system, including a systemically important one.
- The banking system is particularly sensitive to credit shocks that could arise from the construction, mining, and trade sectors. These sectors, together with agriculture and manufacturing, account for 66 percent of lending but for around 80 percent of NPLs. Mongolian banks have large sectoral concentrations and are vulnerable to sector-specific shocks that could arise from a sharp decline in commodity prices and climatic shocks. Large corporate clients borrow across the industry and a single corporate default could potentially destabilize a number of banks. Joint exposures to large common borrowers exacerbate the risk of correlated defaults in the system, as evidenced by the default of a gold mining company in 2008, which undermined the viability of several banks.

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<sup>&</sup>lt;sup>3</sup>An initial set of CAR deductions was performed to account for: (i) breaches of connected lending limits; (ii) frequent loan restructurings; (iii) potential on-lending of interbank deposits; and (iv) loan misclassifications identified in supervisory inspections and audits. The adjustments are somewhat stricter than those envisaged under the new regulation since they assume a provisioning rate of 25 percent on past-due loans, which are likely to also contain restructured loans.

**Table 3. Financial Soundness Indicators** 

|   |      |      |      |       |        | 201  | 0 1/ |
|---|------|------|------|-------|--------|------|------|
|   | 2005 | 2006 | 2007 | 2008  | 2009   | June | Sept |
| Capital adequacy  |      |      |      |       |        |      |      |
| Regulatory capital to risk-weighted assets  | 18.2 | 18.1 | 14.0 | 11.6  | 5.5    | 16.4 | 15.1 |
| Regulatory Tier I capital to risk-weighted assets   | 15.8 | 15.6 | 11.8 | 8.7   | 2.3    | 12.9 | 12.1 |
| Capital (net worth) to assets   | 13.6 | 13.6 | 11.3 | 9.4   | 4.2    | 11.1 | 10.6 |
| Asset quality   |      |      |      |       |        |      |      |
| Non-performing loans (NPL) to gross loans 2/  | 5.6  | 4.7  | 3.2  | 7.1   | 20.0   | 7.7  | 7.7  |
| NPL, incl. past due loans, to gross loans 3/  | 8.6  | 7.4  | 5.3  | 10.6  | 24.5   | 12.0 | 10.3 |
| Provisions to NPL 2/  | 99.2 | 87.8 | 87.1 | 75.8  | 67.4   | 62.3 | 64.0 |
| Provisions to NPL (incl. past due loans) 3/   | 63.8 | 55.6 | 53.1 | 50.9  | 55.0   | 40.2 | 47.4 |
| NPL net of provisions to capital 2/   | 0.2  | 2.5  | 2.4  | 13.7  | 99.8   | 14.6 | 14.6 |
| NPL (incl. past due loans) net of provisions to capital 3/                                  | 13.8 | 14.3 | 14.5 | 41.5  | 169.0  | 35.8 | 28.8 |
| Sectoral distribution of lending 4/   |      |      |      |       |        |      |      |
| Agriculture   | 6.7  | 8.2  | 7.6  | 2.6   | 5.8    | 5.0  | 5.2  |
| Construction  | 8.9  | 9.1  | 15.6 | 14.5  | 14.4   | 15.4 | 11.4 |
| Manufacturing   | 16.2 | 12.8 | 13.0 | 14.5  | 15.5   | 16.5 | 15.0 |
| Mining  | 9.0  | 7.5  | 6.3  | 6.4   | 13.2   | 13.4 | 12.4 |
| Real estate activities  | 4.3  | 4.3  | 1.7  | 5.4   | 7.1    | 7.4  | 13.7 |
| Wholesale and retail trade  | 33.2 | 31.5 | 29.2 | 22.7  | 18.0   | 18.5 | 18.3 |
| Other   | 21.6 | 26.6 | 26.5 | 33.8  | 26.0   | 23.9 | 23.9 |
| Earnings and profitability  |      |      |      |       |        |      |      |
| Return on assets (before tax)   | 2.2  | 2.7  | 2.5  | -1.5  | -5.6   | 1.7  | 1.5  |
| Return on equity (before tax)   | 12.1 | 14.3 | 21.2 | -21.2 | -131.9 | 14.0 | 12.4 |
| Interest margin to gross income   | 39.7 | 37.0 | 42.3 | 11.7  | -42.1  | 14.6 | 14.6 |
| Non-interest income to gross income<br>Trading and foreign exchange gains (losses) to gross | 60.3 | 63.0 | 57.7 | 88.3  | 142.1  | 85.4 | 85.4 |
| income  | 5.1  | 1.3  | 4.8  | 2.4   | 5.3    | 1.8  | 1.8  |
| Non-interest expenses to gross income   | 42.6 | 31.7 | 38.6 | 40.7  | 47.6   | 15.7 | 15.7 |
| Personnel expenses to non-interest expenses   | 41.2 | 42.7 | 44.4 | 45.7  | 47.3   | 47.7 | 47.7 |
| Spread between reference loan and deposit rates   | 15.7 | 11.0 | 6.5  | 6.8   | 7.9    |      |      |
| Liquidity   |      |      |      |       |        |      |      |
| Liquid assets to total assets   | 18.9 | 18.1 | 20.8 | 16.4  | 28.5   | 32.1 | 28.6 |
| Liquid assets to short-term liabilities   | 19.8 | 18.3 | 27.4 | 23.9  | 31.8   | 37.8 | 33.5 |
| Foreign currency loans to total loans   | 47.0 | 23.6 | 23.0 | 33.6  | 38.6   | 35.1 | 33.9 |
| Foreign currency deposits to total deposits   | 39.6 | 32.2 | 25.4 | 25.3  | 34.4   | 35.0 | 33.7 |
| Deposits to loans   | 82.1 | 83.4 | 71.0 | 60.1  | 83.9   | 80.7 | 82.3 |
| Sensitivity to market risk  |      |      |      |       |        |      |      |
| Net open position in foreign exchange to Tier I capital                                     | 31.6 | 34.7 | 35.9 | 0.9   | -22.7  | 6.4  | -0.3 |
| Net open position in foreign exchange to capital  | 27.4 | 29.9 | 30.3 | 0.7   | -9.7   | 5.0  | -0.2 |

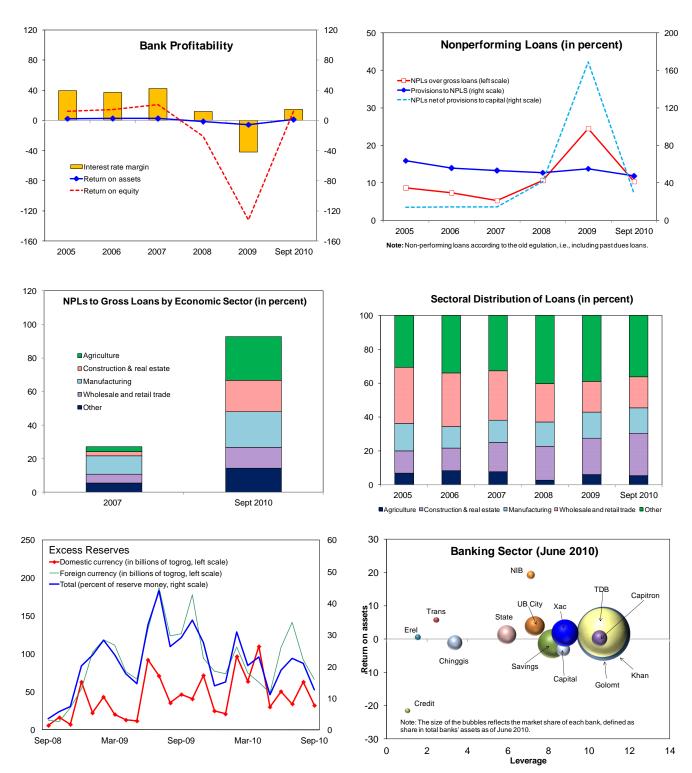
Sources: Bank of Mongolia.

<sup>1/</sup>The FSIs reported for 2010 exclude Anod, Zoos, and Post bank.

<sup>2/</sup>NPL according to new regulation (introduced in 2004), i.e., past due loans are not included.

<sup>3/</sup>NPL according to old regulation, i.e., past due loans are included.
4/The sectoral distribution of loans is based on the quarterly loan report of the Bank of Mongolia, based on a survey.

Figure 3. Financial Soundness Indicators



Sources: Mongolian authorities; and IMF staff estimates.

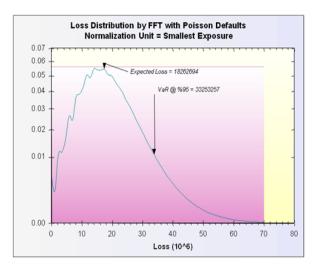
- 21. Direct foreign exchange and interest rate risks are largely contained, but their indirect impact on credit quality can be significant. Long net open FX positions render the banks more exposed to an appreciation of the currency but, on average, the impact of a 20 percent appreciation is small. Interest rate shocks have, on average, only a moderate impact on net interest income, since banks' lending is mainly short-term. A 300 basis point decline in interest rates would lead only to a marginal deterioration in banks' capital position. However, shocks to exchange and interest rates would, indirectly, exacerbate credit risk by curtailing borrowers' repayment capacity.
- 22. **Notwithstanding the presence of liquidity buffers created during the economic downturn, liquidity risks remain.** The banking system as a whole appears relatively resilient to a five-day deposit run that would lead to a total outflow of around 20 percent of deposits. However, stress tests revealed that two small banks—accounting for 5 percent of the system assets—would require liquidity assistance. Aggregate liquid assets would fall to 7 percent of total assets as a result of the shock.
- 23. Both output and inflation shocks emerge as drivers of credit quality in the macro-risk stress tests. High output volatility and high inflation can both strain borrowers' income and repayment capacity and affect the banking system both through direct lending and indirect market-based channels. Economic output in Mongolia is dependent on a narrow range of export commodities and terms-of-trade shocks can lead to credit quality deterioration both by reducing incomes and inducing FX volatility. Inflation risks are high in the current outlook due to buoyant capital inflows and a planned large deficit for the next fiscal year. A significant rise in inflation and a resulting increase in interest rates would weaken borrowers' debt-servicing capacity and heighten credit risk.
- 24. To assess the resiliency of the banking system to macro shocks, banks' NPLs and lending growth were modeled as a function of real GDP growth, inflation, and the fiscal balance. The regression model was used to simulate the distribution of banks' credit losses under a high inflation scenario and a double-dip recession scenario. The high inflation scenario implies an average increase in banks' NPL ratios of around 25 percent, while NPLs increase by 60 percent in the slowdown scenario.
- Simulations of a bank-by-bank stochastic VaR in *Credit Risk Plus* indicated that aggregate CAR would fall to around 5.2 percent in the high inflation scenario and to 4.5 percent in the slowdown scenario, if such shocks were to materialize. The BOM should issue directives to the banks that fall below the stated equity thresholds and take required corrective action to appoint conservators or receivers when necessary. Figure 4 plots the distribution of losses for the average bank under the baseline and the double-dip scenario. While the impact on CARs in the double-dip recession scenario is

<sup>&</sup>lt;sup>4</sup>Credit Risk Plus is a model, originally developed by Credit Suisse Financial Products, based on an actuarial approach, which has become one of the financial industry's benchmarks in the field of credit risk modeling.

- driven mainly by the credit quality shock, CARs decline in the inflation scenario is partly due to higher implied credit growth.
- Overall, the stress test analysis reveals the need to strengthen banks' capital, which was undermined by the 2008–09 crisis. In this regard, it is important to move ahead with the draft Bank Capital Support Program (BCSP), which was submitted to parliament for approval. The various risks in the banking system are correlated. Banks with lower capital buffers are more exposed to credit quality, concentration, and liquidity risks. Across peer groups, several medium-sized and small banks are sensitive to the various shocks that were simulated in the exercise.

Loss Distribution by FFT with Poisson Defaults Normalization Unit = Smallest Exposure 0.08 Expected Loss = 11414342 0.07 0.06 VaR @ %95 = 23348238 0.05 0.04 0.03 0.02 0.01 0.00 10 20 30 40 50 60 70 Loss (10^6)

Figure 4. Banking Sector Loss Distributions



Source: Fund estimates.

Table 4. Selected Stress Test Results, June 2010

(In percent, unless indicated otherwise)

|   | Banking<br>System 1/ |              | Large | banks        | Medium  | n banks      | Small banks |              |
|---|----------------------|--------------|-------|--------------|---------|--------------|-------------|--------------|
|   | CAR                  | Tier 1 ratio | CAR   | Tier 1 ratio | CAR     | Tier 1 ratio | CAR         | Tier 1 ratio |
| Baseline capital adequacy (as reported)                     | 16.3                 | 12.9         | 15.2  | 11.3         | 16.6    | 13.8         | 65.9        | 65.9         |
| Initial Adjustments 2/                                      | 14.7                 | 10.5         | 16.4  | 11.1         | 9.6     | 7.4          | 60.8        | 60.7         |
| Adjusted Base 3/  | 9.4                  | 4.9          | 11.8  | 6.2          | 2.9     | 0.5          | 53.2        | 53.1         |
| A. Sensitivity Analysis                                     |                      |              |       |              |         |              |             |              |
| Credit Risk   |                      |              |       |              |         |              |             |              |
| Increase of adversely classified loans by 40 percent 4/     | 7.8                  | 3.3          | 10.7  | 5.1          | 0.5     | -1.9         | 47.2        | 47.2         |
| Downgrade of 30 percent of standard loans to substandard 5/ | 3.7                  | -1.0         | 6.1   | 0.1          | -2.9    | -5.4         | 51.7        | 51.7         |
| Credit Concentration Risk                                   |                      |              |       |              |         |              |             |              |
| Default of the single largest borrower                      | 5.8                  | 1.2          | 9.4   | 3.7          | -2.9    | -5.4         | 47.0        | 47.0         |
| Default of the 2 largest borrowers                          | 3.4                  | -1.2         | 8.0   | 2.2          | -6.8    | -9.2         | 36.6        | 36.6         |
| Sectoral Credit Risk 6/                                     |                      |              |       |              |         |              |             |              |
| Agriculture   | 8.7                  | 4.2          | 11.0  | 5.3          | 2.5     | 0.2          | 52.4        | 52.4         |
| Mining  | 7.1                  | 2.6          | 9.4   | 3.8          | 8.0     | (1.5)        | 50.4        | 50.4         |
| Construction  | 6.7                  | 2.2          | 9.1   | 3.5          | 0.2     | (2.2)        | 52.7        | 52.7         |
| Trade   | 6.1                  | 1.6          | 8.5   | 2.9          | -0.4    | (2.7)        | 49.5        | 49.5         |
| Manufacturing   | 6.5                  | 2.1          | 9.3   | 3.6          | -0.5    | (2.9)        | 50.1        | 50.0         |
| Exchange Rate Risk  |                      |              |       |              |         |              |             |              |
| 20 percent appreciation                                     | 9.2                  | 4.8          | 11.7  | 6.1          | 2.7     | 0.4          | 51.4        | 51.4         |
| 25 percent depreciation                                     | 9.6                  | 5.2          | 12.0  | 6.4          | 3.1     | 0.7          | 55.3        | 55.3         |
| Interest Rate Risk  |                      |              |       |              |         |              |             |              |
| Interest rates increase by 250 basic points.                | 9.8                  | 5.3          | 12.2  | 6.6          | 3.3     | 0.9          | 55.1        | 55.1         |
| Interest rates decrease by 300 basic points.                | 8.9                  | 4.4          | 11.4  | 5.7          | 2.4     | 0.1          | 50.8        | 50.8         |
| B. Scenario Analysis  |                      |              |       |              |         |              |             |              |
| Interbank Contagion Risk                                    |                      |              |       |              |         |              |             |              |
| First round 7/  | 9.4                  | 5.6          | 9.5   | 5.9          | 0.6     | -0.7         | 33.2        | 33.2         |
| Second round 8/   | 8.7                  | 5.0          | 8.7   | 5.1          | 0.3     | -0.9         | 32.2        | 32.2         |
| Macroeconomic scenarios: fiscal/commodity sha               | ocks 9/              |              |       |              |         |              |             |              |
| Expected losses   | 7.6                  | 3.8          | 10.6  | 5.7          | 0.4     | -1.7         | 44.1        | 44.1         |
| Unexpected losses (99th percentile VAR)                     | 78.6                 | 159.2        | 37.2  | 68.8         | 2501.7  |              | 51.4        | 51.5         |
| Severe shock scenario                                       |                      |              |       |              |         |              |             |              |
| Expected losses   | 6.3                  | 2.4          | 9.1   | 4.2          | -0.4    | -2.5         | 38.0        | 38.0         |
| Unexpected losses (99th percentile VAR)                     | 100.8                | 263.0        | 47.8  | 103.6        | -2155.5 |              | 60.0        | 60.0         |

Source: IMF staff estimates based on data provided by the Bank of Mongolia.

<sup>1/</sup>Excluding the two banks in receivership, Zoos and Anod.
2/Adjusting for intangibles, revaluation reserves, connected lending, and interbank deposits.
3/Reclassification of restructured and past-due loans as substandard.
4/Past-due, substandard, doubtful and loss loans increase by 40 percent.

<sup>5/30</sup> percent of performing loans are downgraded to substandard.
6/Assumed default rate on the sectoral exposure of 20 percent.
7/Assumes banks with CAR below 2 percent default on interbank exposures.
8/Two additional banks default as a result of the first-round shock, triggering a second-round effect.
9/Economic slowdown due to a decline in external demand for Mongolia's main export commodities, combined with a deterioration in the fiscal position due to domestic and external factors (see Appendix for details). The impact on the banks is gauged by modeling the portfolio credit loss distribution using Credit Risk Plus.

Table 5. Stress Test Results: Distribution of Bank CARs, June 2010 (In percent, unless indicated otherwise)

|   | Distribution of banks by<br>CAR<br>(number of banks) |                               |                |               | ution of b<br>CAR<br>rcent of a  | -              | Recapitalization needs 1/ |                         |  |
|---|--|-------------------------------|----------------|---------------|----------------------------------|----------------|---------------------------|-------------------------|--|
|   | <4<br>percent  | 4 percent<br>to 14<br>percent | >14<br>percent | <4<br>percent | 4<br>percent<br>to 14<br>percent | >14<br>percent | in MNT<br>billions        | in<br>percent<br>of GDP |  |
| Reported capital adequacy ratios 2/                         | 0  | 4                             | 10             | 0.0           | 34.4                             | 65.6           | 4.2                       | 0.1                     |  |
| Adj. capital adequacy ratios 3/                             | 3  | 5                             | 6              | 5.2           | 58.0                             | 36.9           | 178.9                     | 2.3                     |  |
| A. Sensitivity Analysis Credit Risk                         |  |                               |                |               |                                  |                |                           |                         |  |
| Increase in NPLs by 40 percent 4/                           | 5  | 4                             | 5              | 15.2          | 76.8                             | 8.0            | 216.5                     | 2.7                     |  |
| Downgrade of 30 percent of standard loans to substandard 5/ | 6  | 4                             | 4              | 39.4          | 56.4                             | 4.2            | 325.4                     | 4.1                     |  |
| Credit Concentration Risk                                   |  |                               |                |               |                                  |                |                           |                         |  |
| Default of the single largest borrower                      | 5  | 5                             | 4              | 15.2          | 80.6                             | 4.2            | 267.5                     | 3.4                     |  |
| Default of the 2 largest borrowers                          | 6  | 4                             | 4              | 39.4          | 56.4                             | 4.2            | 322.1                     | 4.1                     |  |
| Sectoral Credit Shocks to: 6/                               |  |                               |                |               |                                  |                |                           |                         |  |
| Agriculture   | 3  | 6                             | 5              | 5.2           | 86.9                             | 8.0            | 159.5                     | 2.0                     |  |
| Construction  | 5  | 5                             | 4              | 15.2          | 80.6                             | 4.2            | 211.4                     | 2.7                     |  |
| Manufacturing   | 5  | 5                             | 4              | 15.2          | 80.6                             | 4.2            | 215.6                     | 2.7                     |  |
| Mining  | 4  | 6                             | 4              | 13.5          | 82.4                             | 4.2            | 201.2                     | 2.5                     |  |
| Trade   | 5  | 4                             | 5              | 15.2          | 76.8                             | 8.0            | 227.4                     | 2.9                     |  |
| Exchange Rate Risk  |  |                               |                |               |                                  |                |                           |                         |  |
| 20 percent appreciation                                     | 4  | 5                             | 5              | 6.9           | 85.1                             | 8.0            | 180.9                     | 2.3                     |  |
| 25 percent depreciation                                     | 3  | 5                             | 6              | 5.2           | 58.0                             | 36.9           | 179.9                     | 2.3                     |  |
| Interest Rate Risk  |  |                               |                |               |                                  |                |                           |                         |  |
| Interest rates increase by 250 basis points                 | 2  | 6                             | 6              | 4.6           | 58.5                             | 36.9           | 171.7                     | 2.2                     |  |
| Interest rates decrease by 300 basis points                 | 4  | 5                             | 5              | 6.9           | 85.1                             | 8.0            | 189.4                     | 2.4                     |  |
| B. Macro Scenarios  |  |                               |                |               |                                  |                |                           |                         |  |
| High inflation scenario                                     | 5  | 5                             | 4              | 15.2          | 80.6                             | 4.2            | 301.1                     | 3.8                     |  |
| Slowdown scenario   | 5  | 5                             | 4              | 15.2          | 80.6                             | 4.2            | 305.7                     | 3.9                     |  |

Source: IMF staff estimates based on data provided by the Bank of Mongolia.

<sup>1/</sup> Additional capital needed by banks with an asset share of at least 1.5 percent to reach CAR of 14 percent; in percent of 2010 GDP.

<sup>2/</sup> Excluding the two banks under receivership, Zoos and Anod. The large bank group includes the 3 largest banks; the small bank group consists

<sup>2/</sup> Excluding the two banks with asset shares below 1 percent; and the medium bank group includes the rest of the banking system.

3/ Adjusted by the mission to reflect the effects of higher provisioning for restructured loans, connected lending and other data issues.

4/ Past-due, substandard, doubtful and loss loans increase uniformly by 40 percent.

5/ 30 percent of standard (performing) loans are downgraded to substandard.

6/ 20 percent of the sectoral exposure is downgraded to loss.

#### III. STRENGTHENING FINANCIAL SECTOR OVERSIGHT

- 25. The banking system has structural weaknesses, which stem from weak supervision and regulation. In particular, the system exhibits vulnerability to credit risk, which is heightened by large single borrower concentrations, connected lending, under-provisioning, and weak governance. Cross-ownership linkages among banks and between banks and industrial companies create the potential for risk spillovers and connected lending. Some banks have large interbank exposures and reportedly may use such funds to circumvent connected lending and large exposure limits.
- 26. Since the 2007 FSAP, the BOM Bank Supervision Department (SD) made significant progress. Upgrades have been made to the legal framework and risk guidelines have been issued to the banks. In addition, the supervisory office has been restructured with the aim of adopting risk-based supervision. At the same time, special independent audits of some of the banks have been conducted and two banks have merged while another two have been place under conservatorship. The following are current issues facing BOM on regulating and supervising the banking sector:

## A. Licensing and Supervision

• The BOM is the licensing authority and supervisor of banks. Of the 14 commercial banks operating in Mongolia, three are 100 percent foreign-owned; four are partially foreign and partially domestically owned; six are 100 percent locally owned; and one is state-owned. Bank subsidiaries and affiliates are authorized to engage in certain activities under a license granted by the FRC of Mongolia.<sup>5</sup>

#### **B.** Preconditions for Effective Supervision

- Mongolia's business sector is supported by a comprehensive legal structure but weaknesses remain. A legal framework exists for companies, corporate and collateral registries, bankruptcy, taxation, insurance, the securities market and other financial subsectors. Issues that affect the legal framework's efficacy include the lack of testing of the laws, a weak judiciary and amendments to the laws that mute their effectiveness.
- Standards for accounting and valuation are not effectual. An accounting law was passed in 1993 and has been updated sporadically. Mongolia has adopted International Financial Reporting Standards (IFRS). However, due to the limited capacity, costs, and difficulties in implementation, compliance with IFRS is limited. Although lending is collateral-based, there are no standards for property valuation.

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<sup>&</sup>lt;sup>5</sup>The FRC is the licensing and supervisory authority for insurance companies; securities market participants, savings associations, and credit cooperatives.

- Lenders face challenges to access collateral. A registry exists for lenders to record claims on property. Nevertheless, due to debtor challenges and a weak judiciary, pursuing claims through the judicial system can be protracted.
- Imposing discipline in the financial sector appears to be uneven. Although the BOM closed two banks in 2009, its Supervision Department (SD) has had a poor record of enforcing securities laws, and has granted forbearance in many cases, apparently without requiring substantive improvements in the governance or operations of the banks concerned.
- There is a lack of coordination and meaningful information sharing. Despite an existing Memorandum of Understanding (MOU), the FRC (Box 1) and the BOM have yet to implement a minimum coordination for effective supervision.

## **C.** Supervisory Infrastructure

• The SD is still struggling to establish a robust supervisory regime. The SD has received extensive Technical Assistance and advice on how to deal with problem banks, but has yet to become an effective supervisor. Sufficient legal powers for supervision are granted to the SD, but its effectiveness is limited by weak enforcement, political interference, limited capacity, incomplete documentation of procedures, and the lack of effective communication between the three divisions of the bank supervision department.

#### **Box 1. The Financial Regulatory Commission**

The FRC was established in 2006 as the regulator of the securities market, insurance companies, non-bank financial institutions (NBFIs) and savings and credit cooperatives in Mongolia. The FRC currently regulates 387 institutions and has about 90 employees.

Under the recently amended Banking Law, the FRC is required to work with the BOM to jointly adopt regulations on consolidated supervision. The FRC is also required to work closely with the Financial Intelligence Unit (FIU) on AML/CFT initiatives and has recently adopted a regulation regarding reporting requirements for NBFIs. Recently, a joint examination of an insurance company was conducted by BOM and FRC, but more coordination and training for both organizations is needed to implement effective consolidated supervision. It will also be necessary for FRC to work closely with the FIU in implementing effective AML/CFT regimes at organizations under its supervision.

- The chief of the FRC is a member of the FSC, but to date no plan has been developed for the FRC, BOM, and MOF to work together on crisis management or contingency planning. FRC is not given financial institution-specific information on a regular basis but is provided aggregate data by BOM when needed.
- Supervisory summaries and reports prepared by BOM supervisors are not provided to the FRC. As the financial sector in Mongolia evolves, the risk to the system of the entities currently supervised by FRC will increase and there is a pressing need for better coordination between the BOM and FRC.
- Banking supervision continues to be compliance-based and there is no timetable for moving toward risk-based supervision. SD authorities noted that they had not moved toward risk-based supervision because other priority tasks had been consuming their time. The SD does not have a strategic plan for itself and for the oversight of the banking sector although a short-term action plan for 2011 was approved by Parliament. It is strongly recommended that a strategic plan be developed to: (i) enforce the legal framework; (ii) develop supervisory policies and procedures; (iii) enhance laws and regulations; (iv) build capacity of supervisory staff; (v) coordinate with domestic and foreign supervisors; (vi) conduct outreach to the various stakeholders; and (vii) implement technical assistance.
- In January 2010, the revised Law on the Central Bank/Mongol bank and the Banking Law of Mongolia were approved by the Parliament. Many of the

- recommendations from the previous FSAP were addressed in the revisions, but gaps and conflicts—mostly related to corporate governance and internal controls—remain.<sup>6</sup>
- The regulation on classification of assets and establishment of loss provisions—
  reissued in August 2010—is adequate; however, the lack of enforcement renders
  supervision ineffective. The current and previous provisioning requirements for the
  various classifications of assets are shown in the table below. Although the new
  provisioning levels are largely consistent with international practices, the SD's failure to
  enforce the regulation has resulted in inadequate provision levels. Forbearance has been
  granted to a number of banks, as they would recognize net losses if the required reserves
  were enforced. Given the weakness of the sectors where the loan portfolios are
  concentrated (construction, mining, and agriculture); the level of provisions is grossly
  inadequate.

**Table 6. Provisioning Requirements** 

|                                | Performing | Past due | Substandard (in percent) | Doubtful | Loss |
|--------------------------------|------------|----------|--------------------------|----------|------|
| Provision under<br>Current Law | 0          | 5        | 25                       | 50       | 100  |
| Previous<br>Provision          | 1          | 5        | 40                       | 75       | 100  |

• Notwithstanding the increase in the minimum capital requirement, the widespread forbearance renders this effort ineffective. In March 2009, the minimum capital adequacy ratio was raised from 10 percent to 12 percent of risk weighted assets. A few banks have managed to raise capital via subordinated debt issuances, primarily convertible debt raised off-shore. At least three banks have acknowledged capital shortfalls for which the SD has granted forbearance, recognizing that the closure of any bank could result in significant fiscal costs as well as damage confidence in the banking system.

#### D. Consolidated Supervision

• Authority for the SD to conduct consolidated supervision has been incorporated into the new Banking Law. Banks, affiliated companies, and subsidiaries are required to file their financial statements on an individual and consolidated basis. The Restructuring and Policy Division of the SD is working on a reporting format for the submission of consolidated statements. The SD will need to coordinate with the FRC to

<sup>&</sup>lt;sup>6</sup>The law includes: (i) higher penalties for noncompliance; (ii) consolidated supervision; (iii) an improved bank resolution framework that more clearly defines the roles of the conservator and liquidator; (iv) legal protection for bank and nonbank supervisors; and (v) a clear definition of "group of connected parties."

obtain information on the financial condition and the adequacy of risk management and controls of the different entities of the banking group. A significant omission in the legislation addressing consolidated supervision is the application of limits on a consolidated basis—for example: the limit of exposures to a single borrower, the limit of exposures to a bank's related party, and the capital calculation.

#### E. Corrective Action

• Under the legal framework, the BOM has an adequate range of supervisory tools to bring about timely corrective actions. For the most part, the laws and regulations are adequate for the level of development and sophistication of the banking system. However, the failure of the BOM to enforce the laws has contributed to the fragility of the financial system.

#### IV. CRISIS MANAGEMENT ARCHITECTURE

#### A. Crisis Management

- 27. Recent amendments to the Central Bank Law established a FSC to ensure the stability of the financial sector in Mongolia. The council members are the Governor of BOM, the Chairman of the FRC, and a member of the government in charge of financial matters (Ministry of Finance). The mission of the FSC is outlined in a bylaw adopted in April 2010, which describes its main tasks as evaluating the financial sector's safety and stability and warning the public about potential financial crises. Raising public awareness about potential banking crises is a sensitive issue, which should be handled carefully.
- 28. Thus far, the FSC has not been effective as the lack of coordination between the FRC and BOM is adversely affecting the work of the FSC. Although the FSC may provide the appropriate vehicle for crisis preparedness and crisis management, it has only met twice thus far and does not appear to have the institutional strength to perform the tasks necessary for managing another financial sector crisis, should one arise. The most recent appointee for Secretary of the FSC did not have a financial sector background and, although the FSC did meet to discuss the bank restructuring program, it was unable to bring the plan into effect. Since there are no formal rules in place for the sharing of information among members of the FSC, they do not have the right to receive and review information. It appears that members of the FSC work independently with little coordinated planning.
- 29. An effective crisis management process should be developed, making use of a fully functional FSC to coordinate the sharing of information and crisis preparedness by all financial sector agencies. The mandate for the FSC should be clarified to establish its role as the lead organization for financial sector crisis preparedness. Additional information sharing processes need to be put in place so as to allow the FSC to understand the vulnerabilities in the entire financial sector, including the securities and insurance markets.

Contingency plans should be developed to address possible crisis scenarios, aided by crisis simulation exercises.

#### **B.** Bank Resolution Framework

- 30. The Banking Law as amended has greatly increased the Bank of Mongolia's powers to deal with problem banks. Under Article 48 of the Banking Law, BOM is now empowered to appoint a conservator (or take other corrective actions) for a bank that falls below the equity threshold of 12 percent of risk-weighted assets but has equity above 2.4 percent of risk-weighted assets. While a receiver can be appointed for a bank based on a number of factors, receivership is mandatory for a bank that is deemed insolvent, with the law stating that BOM "shall" appoint a receiver when the bank's equity falls below 2.4 percent.
- 31. The powers of the conservator have been further enhanced. Although shareholders have the right under Article 50 of the Banking Law to file a court action appealing the BOM's decision to appoint a conservator, such appeal cannot form the basis for overturning the appointment decision itself. There is no longer any requirement for the BOM to seek shareholder approval to appoint a conservator, and the rights of such shareholders must be suspended during the period of conservatorship. The conservator has significant powers, including implementation of a restructuring plan that can include sale of bank assets to third parties.
- 32. The receiver is provided with adequate powers, including the full range of management and shareholder rights upon appointment. Immediately after appointment, the receiver is empowered to write down shareholder equity and reflect the changes made in the bank's financial statements. A court challenge cannot form the basis for a decision to refrain from the appointment of or discontinue a receivership. Under Article 65, the receiver has the power to transfer assets and liabilities of the bank to others, thereby providing the receiver with the ability to perform purchase and assumption transactions.

#### C. Emergency Liquidity Provisions

33. The overall design of the Emergency Liquidity Assistance (ELA) Facility is appropriate. Under Article 13 of the Central Bank Law, the BOM may extend credit to banks as a lender of last resort under specified conditions. The Law specifically requires the BOM to determine that the liquidity needs of the borrower are of a temporary nature and that the borrower is able to repay the loan and resolve its liquidity problems itself. The assessment of a bank's condition and solvency is done by the Supervision Department of the BOM. The liquidity facilities used by BOM are repo transactions initiated by banks with a fixed rate (policy rate+400 basis points), discrete repo facilities initiated by BOM and executed on an auction basis, a non-collateralized overnight facility used for maintaining reserve requirements, and collateralized loans to banks. The eligible collateral is set by regulation and currently includes Central Bank Bills, Government bonds, short-term securities, and sovereign bonds. The risk management unit of BOM identifies the collateral

to be used for ELA. After the crisis, BOM introduced an intra-day facility for banks to use to allow them to execute transactions in connection with the real time gross settlement system. A more precise regulation should be issued regarding collateral requirement for this facility to contain the risks for BOM.

## **D.** Deposit Insurance

- 34. The Government of Mongolia established a blanket deposit guarantee in 2008, which is now being phased out in favor of a limited deposit insurance scheme. As the financial crisis hit Mongolia in 2008, the authorities took immediate measures to stop the withdrawal of deposits by adopting a blanket guarantee on all commercial bank deposits. The current blanket guarantee provided by the BOM was introduced on November 25, 2008 to calm depositors' fears at the apex of the economic crisis. The guarantee was adopted for a period of four years, with an amendment in March 2009, to include current accounts. The guarantee was amended in June 2010, to eliminate coverage for interbank deposits and expand the restriction on the coverage of deposits of related parties. In addition, guarantees of deposits with interest paid in excess of the Central Bank Bill rate are no longer provided. Currently more than MNT 3 trillion in deposits is covered by the blanket guarantee.
- 35. The BOM should develop enabling legislation and regulations to establish a well-defined deposit insurance system. The mission believes that the blanket guarantee should be transitory. The current plan is for the government to replace the guarantee with a limited deposit insurance scheme. Although the original guarantee did not assess a premium for the coverage, banks now pay an annual fee of 0.5 percent of deposits. The fees paid by the banks for the guarantee can be deposited in a special account at the BOM, which will be utilized as seed money for the new deposit insurance fund.
- 36. The transition from the blanket guarantee should be carefully planned. The BOM and the Ministry of Finance have established a working group to discuss the appropriate design and level of coverage for the new deposit insurance system. There is an early draft of a deposit insurance law. In order to have a successful transition, the BOM should prepare a plan that includes a clear timeline for the transition as well as a strong public relations campaign informing the public about the new deposit insurance scheme. The campaign needs to make clear what deposits are covered by the scheme, for example, only deposits in commercial banks and not deposits in NBFIs' to avoid any confusion by the public about the scope of the protection. A situational analysis should be undertaken before the actual transition to ensure that the banking system is in a sound condition and that strong prudential supervision is in place—that halts the granting of forbearance—so as to avoid moving to limited coverage when there is a significant possibility of bank failures.
- 37. Clear rules and procedures should be in place before any new deposit insurance system is formally adopted. Adequate systems to track the level of insured deposits in the financial sector are necessary, along with models for assessment of the deposit fund's financial needs and methods for the collection of premiums. It is also necessary to assure the existence of adequate financial resources that will allow the fund to meet its insurance

obligations. In addition, the rules must allow prompt enforcement action to be taken against banks that pose a threat to the solvency of the insurance fund or that do not pay the required premiums. A pre-arranged and certain source of back-up funding such as a government guarantee is essential, although the primary responsibility for funding the deposit insurance system should be borne by member banks. Membership in the deposit insurance fund should be compulsory for all banks accepting deposits from the public.

- 38. The Core Principles for Effective Deposit Insurance Systems provide guidance on the design of a limited deposit insurance scheme. The Core Principles have been developed with a broad range of country circumstances and settings in mind. Mongolian-specific country circumstances should be considered in the context of existing laws and powers to fulfill the public policy objectives and mandate of the deposit insurance system.
- 39. The BOM should carefully consider the mandate for the deposit insurance scheme, giving due consideration to the financial and human resources available for the creation of a new deposit insurance agency. Existing deposit insurance systems have mandates ranging from narrow, so-called paybox systems, to those with broader powers and responsibilities, such as preventive action and loss or risk minimization/management, with a variety of combinations in between. The one common responsibility for all deposit insurers is the ability to facilitate a prompt payout for insured depositors once a triggering event occurs, such as the withdrawal of a bank license or declaration of the insolvency of a financial institution. Planning for such a payout requires the commitment of significant resources for the procurement of adequate IT systems, the preparation of framework agreements for the use of contractors and paying agents, and for financial management expertise to collect and properly invest insurance premiums.

#### V. AML/CFT

40. An assessment of Mongolia's compliance with the Financial Action Task Force (FATF) 40+9 Recommendations was conducted by the Asia/Pacific Group of Money Laundering in 2007, which is the FATF-style regional body of which Mongolia is a member. Mongolia has a Law on AML/CFT and a Financial Intelligence Unit FIU was established in 2006. Since the 2007 Assessment, there has been significant progress on establishing an effective AML/CFT regime. Regulations governing commercial bank activity in regard to AML/CFT compliance have been issued. Agreement has been reached with Mongolian Customs officials to establish a system of monitoring cross-border movements of cash. In December 2009, the Criminal Code was amended to specifically define money laundering as a crime with a wide range of predicate crimes, providing for penalties upon conviction. The staff of the FIU was increased in 2010 to six and over 650,000 Cash Transaction Reports have been received and processed by the FIU as of October 2010. The FIU has Memoranda

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<sup>&</sup>lt;sup>7</sup>Know Your Customer, Suspicious Transaction and Cash Transaction Reports, Issuing the List of Terrorist Organizations and Individuals, AML/CFT Supervisory Regulation, and On-Site Supervision of Banks' AML Programs.

of Understanding with the FIUs of eight countries and four local law enforcement authorities.8

41. Challenges remain for the FIU in establishing a fully effective AML/CFT regime.

Despite some progress in banks' operations, financial institutions have weak AML/CFT internal controls. Compliance with the requirement to file Suspicious Activity Reports is a particular problem as relatively few such reports have been filed since 2008. AML/CFT reporting for the insurance sector, securities dealers, and NBFIs is just beginning, with significant additional work needed to create effective AML/CFT processes in those areas. The AML law has some significant coverage omissions such as foreign pawnbrokers, casinos, professionals and politically exposed persons. Staff of the FIU may lack sufficient protection under the existing AML/CFT legislation to carry out their duties without fear of prosecution under other laws. The FIU is working with the Ministry of Justice to amend the law to address many of these deficiencies.

<sup>8</sup>Eighteen on-site inspections have been conducted since March 2009, with follow-up visits to banks when violations are found. In addition, the FIU conducts training for bank compliance officers twice a year.

## APPENDIX I. RISK ASSESSMENT MATRIX

|   | Overall Level of Concern  |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|
| Nature/Source of Main Threats   | Likelihood of Severe Realization of<br>Threat in the Next 3 Years   | Expected Impact on Financial Stability if Threat Is Realized   |  |  |  |  |  |
|   | Assessment: medium  | Assessment: medium   |  |  |  |  |  |
| Macroeconomic risk: Heavy reliance<br>on copper for economic growth and<br>exports, making the economy<br>vulnerable to changes in copper prices.   | Although futures markets     anticipate an increase in energy     prices, copper prices are subject     to sudden movements and difficult     to predict.   | The financial and economic impact of a<br>sudden reversal of copper prices will<br>negatively affect the stability of the<br>financial sector, and macroeconomic<br>performance.   |  |  |  |  |  |
|   | Assessment: medium  | Assessment: medium   |  |  |  |  |  |
| Concentration risk: The industry is heavily exposed to large borrowers; in aggregate, the 20 largest borrowers at each bank (38 different entities) account for approximately 33 percent of net loans outstanding. The ten largest borrowers account for more than 10 percent of net loans outstanding. | In light of the continued concerns about the industry's exposure to high-risk and large borrowers, the probability of further difficulties in the sector is non-trivial. The current financial situation, economic growth prospects and the rising corporate leverage of companies are likely to increase the probability of this risk materializing. | <ul> <li>The threat of a failure of a large company would directly affect the banking system, thus endangering the stability of the financial sector.</li> <li>Difficulties arising from large exposures can affect not only the industry but also the financial system as a whole due to interconnected risks of a conglomerate.</li> </ul> |  |  |  |  |  |
|   | Assessment: high  | Assessment: medium   |  |  |  |  |  |
| Regulatory forbearance: Asset quality is difficult to assess because of permissible restructuring practices, which allow a bank to restructure a loan twice before it appears as "past due."  | Supervisors have exercised regulatory forbearance. The uneven implementation and enforcement of existing regulations is likely to result in weak capitalization.  | The continued lack of proper oversight of<br>under-capitalized banks could potentially<br>lead to a loss of confidence in BOM and<br>financial instability.  |  |  |  |  |  |
|   | Assessment: medium  | Assessment: high   |  |  |  |  |  |
| Inflation to interest rate and exchange rate risks: Higher inflation due to procyclical fiscal measures.  | Inflationary pressures are emerging from higher food prices, increased government wages and pensions, and increasing domestic demand from the construction of the Oyu Tolgoi mine. Planned fiscal spending increases add to inflationary pressures.   | If realized, inflation will affect the real value of assets and liabilities in the banking system, creating severe problems for the stability of the sector.   |  |  |  |  |  |