A Puzzle of High Interest Rates in Mongolia[1]

From the beginning of the transition period, lending and deposit rates in Mongolia have been persistently higher than those in the majority of countries in the Central and Eastern Europe and Baltics (CEEB), the Commonwealth of Independent States (CIS),[2] and emerging Asia.[3] Although high interest rates have declined significantly in transition countries as inflation came down, this has not been the case yet in Mongolia. Most transition countries, that experience financial crises, had their interest rates converged to lower levels some time after the financial crises in late 1990s. Since the transition process in Mongolia has been delayed, it may well be that the convergence process to lower interest rates has also been delayed and started only recently. Interestingly, while interest rates remain high, the intermediation spread in Mongolia has declined to the same level as in its peer countries after 2005.[4]

This note attempts to analyze why deposit and lending rates in Mongolia have remained high in the recent environment of low inflation and declining intermediation spread. In particular, it investigates the following questions: Does the combination of high lending and deposit rates and low intermediation spread in Mongolia give rise to any concern? Is it natural that lending and deposit rates are coming down very slowly? Equally important, should the Bank of Mongolia (BoM) adopt policy measures and should the banking sector and market forces lead the way?

The note proceeds as follows. Section I provides a background of the banking sector in Mongolia. Section II compares lending and deposit rates in Mongolia with those in selected transition and emerging Asia countries. Section III discusses whether interest rates in Mongolia may create concerns regarding the health of the banking sector. Section IV proposes possible policy measures that may help to reduce interest rates.

I. Background

Mongolia's transformation process, while started in the early 1990s, was less painful than that in many other transition countries, particularly compared to the CIS countries. The initial output loss was relatively small, though growth lagged that of the more successful CEEB countries.

[1] Prepared by Elena Loukoianova.

[2] Excluding Turkmenistan.

[3] Countries in Emerging Asia include Cambodia, China (mainland), Lao, and Vietnam.

[4] Intermediation spread is defined here as the difference between lending and deposit rates.

However, the transition in Mongolia was slowed by a series of financial crises in the 1990s.[5] Although they were triggered mainly by outside events, a host of factors contributed to and aggravated them: the government or political groups influenced banks' loan decisions, leading to inherited and directed loans; the weak governance structure of banks resulted in connected lending with asset stripping by major shareholders; and banks themselves lacked experience and skills. Furthermore, inappropriate legal settings for enforcement of loan repayments encouraged "intentional bankruptcy" by borrowers. The BOM, instead of strictly applying supervision rules, tended to provide emergency credits under favorable terms to the ailing banks. Meanwhile, the saving cooperatives were not supervised at all and openly ignored legal restrictions.[6]

After the serious banking crisis in 1998-99, the government adopted and successfully implemented a comprehensive plan to strengthen the banking system. The strategy sought to restructure ailing banks, reduce government ownership, improve the BOM's ability to enforce compliance with prudential regulations, and strengthen market discipline and incentives for sound bank management. Despite partial implementation, the plan was successful in restoring confidence in the banking sector, fueling remonetization. All state owned banks were privatized by 2007. Most leading banks, which have grown rapidly in recent years, maintain relatively good financial positions, and there has been some improvement in loan techniques at some individual banks as well as in the application of prudential regulations by the BOM.

However, lending and deposit rates are still high. Despite improvements in some banks, lending practices of smaller banks generally seem still weak, with limited capacity to monitor credit history of borrowers in many institutions. Despite low inflation rates, deposit rates are stubbornly high, and banks are reluctant to decrease them, because (i) deposits constitute a big part of funding for some banks; and (ii) credit cooperatives, with which banks compete for depositors, still offer unrealistically high deposit rates. Therefore, borrowing rates for all but the best customers remain very high, discouraging productive activity in favor of short-term trading. However, this situation seems to have started changing slowly in 2007, as big banks lowered slightly deposit rates in June.

II. Are Interest Rate Are High in Mongolia?

A simple comparison of nominal and real interest rates between Mongolia and its peer countries provides an answer to this question—"Yes."

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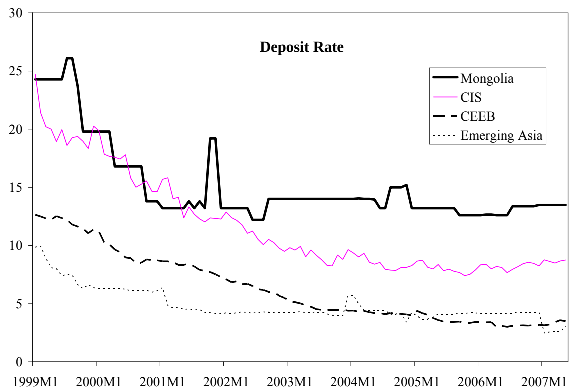
[5] Banking crises occurred in 1994, 1996, and 1998-99.

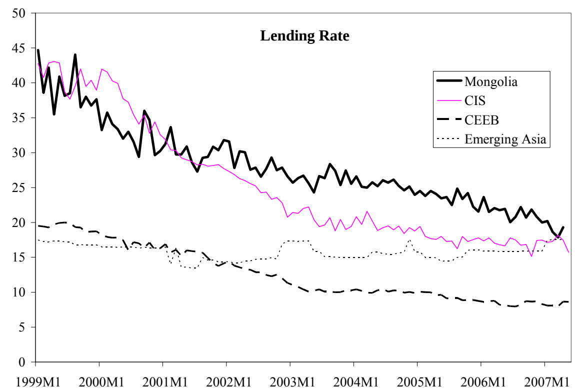
[6] IMF, 2005.

A. Level of Interest Rates

Nominal average deposit rate in Mongolia has been the highest among the CEEB, the CIS, and emerging Asian countries since 1999. An average deposit rate in Mongolia has stabilized in 2002, despite continuously declining inflation. Although an average lending rate in Mongolia has been declining since 1999, it is still the highest among the same groups of countries (Figure 1).

Figure 1. Average Nominal Deposit and Lending Rates in Mongolia and Comparator Country Groups, 1999-2007.





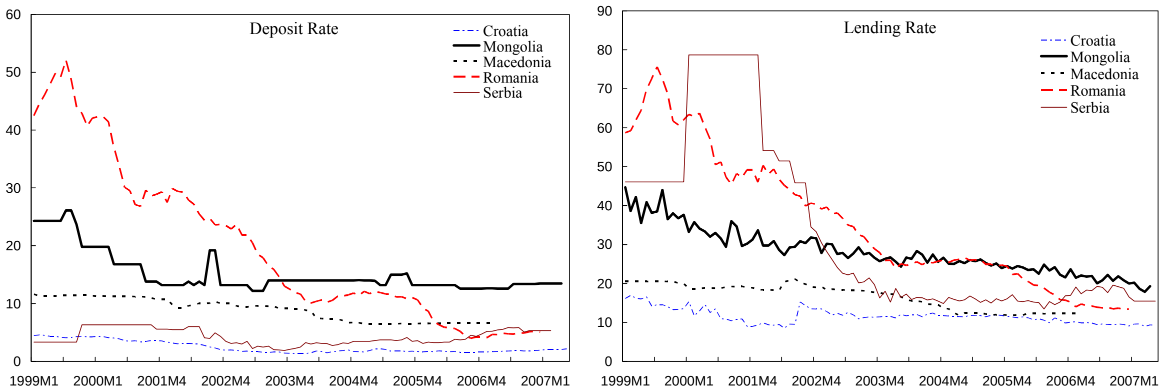
Source: IMF, International Financial Statistics; and staff calculations.

Comparison of average deposit rates for Mongolia and selected transition and emerging Asian countries provides the same empirical observations (Figure 2).[7] The average deposit rate in Mongolia has been the highest compared to Croatia, Macedonia FYR, Romania, and Serbia since 2003, after a sharp decline of deposit rates in Macedonia FYR. In 1999-2007, average deposit rate in Mongolia has been the highest compared to Cambodia, China, Lao, and Vietnam. Similarly, compared to the same group of the CEEB countries, the average lending rate in Mongolia has been the highest since mid-2003, after those rates went down sharply in Macedonia FYR and Serbia. Among the same group of countries in emerging Asia, average lending rate in Lao became highest in 2003, average lending rate in Mongolia has continued to decline, while still being higher than that of other countries in comparison.

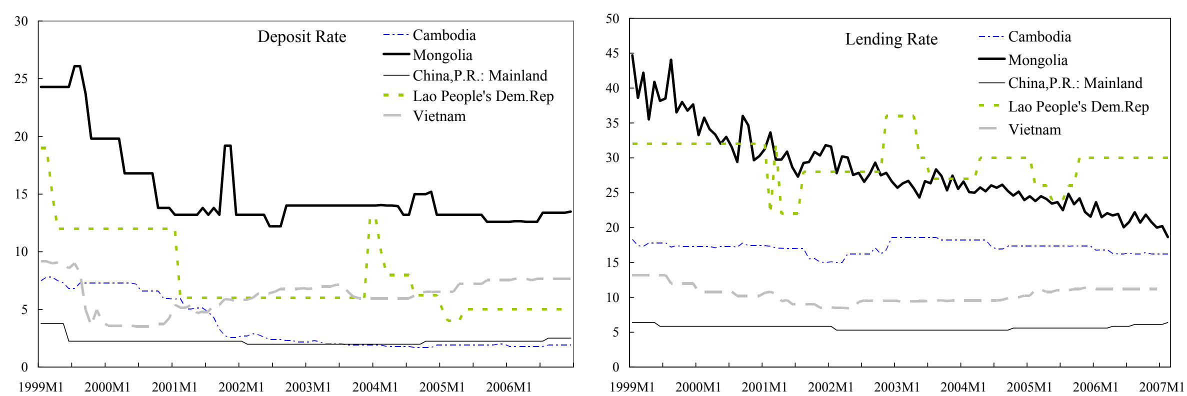
[7] Averaging of data may reduce information. Therefore, it is important to look at the data of individual countries.

Figure 2. Average Deposit and Lending Rates in Mongolia and Selected Countries, 1999-2007
(Annual percentage change)

Mongolia versus Selected CEEB Countries



Mongolia versus Selected Emerging Asia Countries



Source: IMF, International Financial Statistics.

In real terms, the difference between deposit and lending rates in Mongolia and comparator country groups is even larger. Inflation in Mongolia stabilized since 2002 and has been declining since 2005. From 2006, inflation rate in Mongolia has been lower than that in the CIS, and comparable with that in the CEEB and emerging Asia (Figure 3). However, although low inflation squeezed real interest rates on average in comparator countries, Mongolian banks have continued enjoying high real deposit and lending rates in 2002-07 (Figure 4). Indeed, in April 2007, average real lending rate in Mongolia was 14.1 percent, compared to 7 percent in the CIS and 4 percent in the CEEB. However, the same rate was approximately the same on average in the emerging Asian countries, thanks to a high real lending rate in Lao. In the same period, average real deposit rate in Mongolia was 8.3 percent, while the same rates in other transition countries were close to zero or even negative.

Figure 3. Inflation Rate in Mongolia and Comparator Country Groups, 1999-2007
(Percentage change, y-o-y)

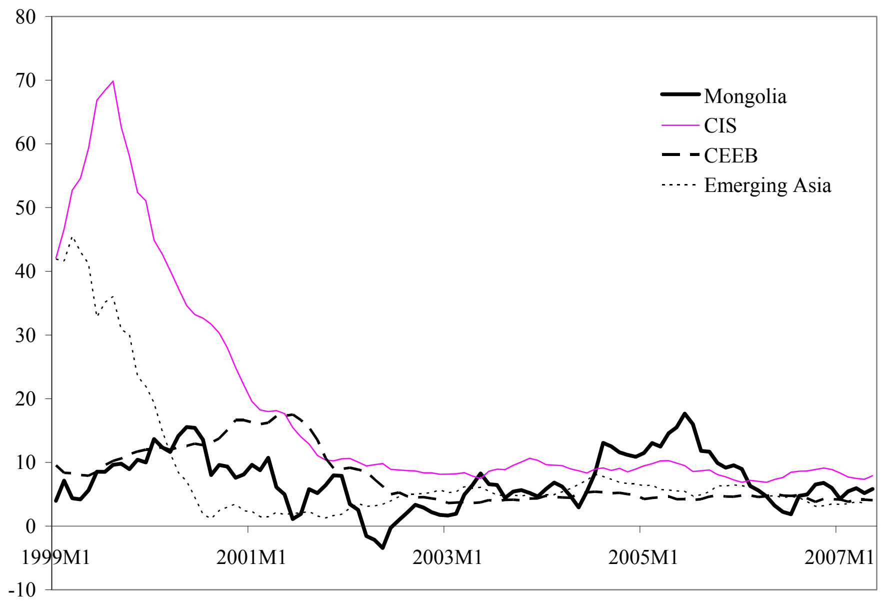
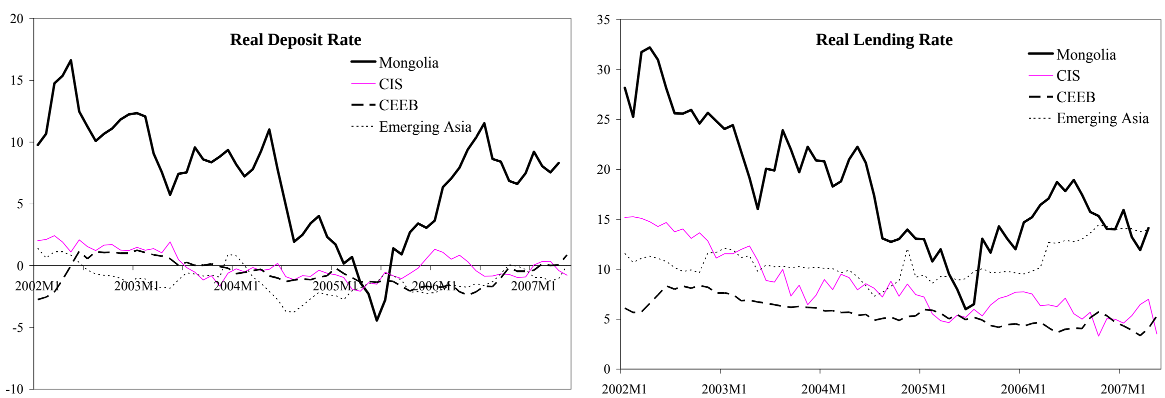


Figure 4. Real Deposit and Lending Rates in Mongolia and Comparator Country Groups, 2002-07.



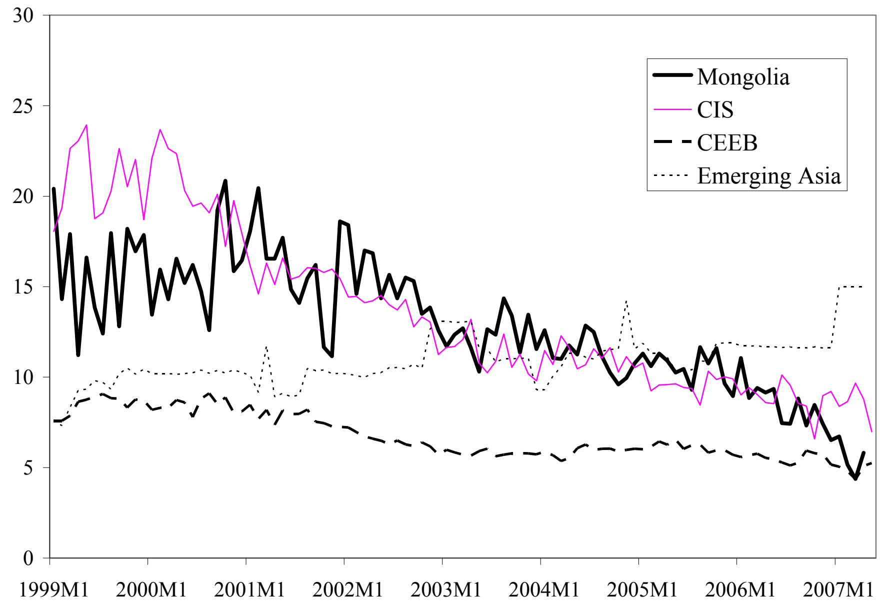
Source: IMF, International Financial Statistics; and staff calculations.

B. Interest Rate Spreads

However, intermediation spread in Mongolia has been steadily declining since 1999. It has reached the CEEB average intermediation spread in early 2007 and since mid-2006 has become lower than that in the CIS and emerging Asia (Figure 5).

Persistently high deposit rates, together with declining intermediation spread, suggests that commercial banks in Mongolia may have started to take more risk in their lending decisions, while financing most of their costs by deposit taking.

Figure 5. Intermediation Spread in Mongolia and Comparator Country Groups, 1999-2007



III. ARE THERE ANY CONCERNS ON THE HEALTH OF THE BANKING SECTOR?

Mongolia may stand at a turning point, when lending and deposit rates are about to start going down rapidly, as happened in the recent past in most transition countries in the CEEB and the CIS. Indeed, Mongolia has been slowed down in its transition by its remote location, financial crises, and severe winters in early 2000s. This may have kept lending and deposit rates on high levels longer than in other transition countries.

Recent developments in the banking sector may indicate that the natural process of convergence of lending and deposit rates to low levels is just about to start or already started in Mongolia. In the second quarter of 2007, large banks in Mongolia reportedly started to lower their deposit rates gradually, after reducing lending rates. Moreover, reported lending rates may provide somewhat distorted picture, as commercial banks offer much lower rates to their best customers.[8] This may put pressure on smaller banks to follow the lead, which will help them to improve their financial positions.

On the other hand, recent research has shown that traditional financial statistics and banking prudential ratios, while being suitable for developed countries, may not be effective indicators in assessing bank performance and strength of the banking sector in emerging market countries. Indeed, large volatile macroeconomic imbalances may threaten domestic

[8] Based on FSAP mission meetings with selected commercial banks.

banks in emerging market countries more severely in two ways: by depleting the sources of bank funding and/or impairing the quality of banks assets. Rojas Suarez (2007) proposed an alternative set of indicators to analyze the health of the banking sector in emerging market countries, which includes (i) deposit rates, (ii) intermediation spread, and (iii) growth of loan portfolio.

These three indicators can provide effective assessment of the degree of risk taking activities by banks, when the growth of loan portfolio of some banks is more rapid than that of other banks; deposit rates are higher than those offered by other banks in the system; and intermediation spread is lower than that of the system average.

Empirical analysis demonstrates that in contrast to the interpretation of intermediation spread in industrial countries, low spreads in emerging market countries have not always indicated an increase in bank efficiency. Instead, low spreads together with high deposit rates have often reflected high-risk taking behavior of weak banks. Indeed, attempting to increase their market share, banks in emerging market countries may rapidly expand their loan portfolio through loans to risky borrower and charge a high lending rate. Funding these loans may be obtained, at least in part, by offering high deposit rates and thus, attracting more deposits. Consequently, intermediation spread in risky banking institutions becomes low and even declines during periods of excessive risk taking.[9]

Mongolia has experienced high credit growth to the private sector, which accelerated again in 2005, and subsequently in 2007. In part, it can be explained by catching up of the real economy after a series of financial crises and economic slowdown caused by severe winters in early 2000s. However, while the real economy annual growth rates were 6-8 percent in the last two years, the credit to the private sector grew on average by 31 percent in 2005 – March 2007. In the first quarter of 2007, the credit growth to the private sector accelerated to 57 percent on average (Figure 6). The correlation between the real lending rate and credit growth to the private sector in 2005-March 2007 was -0.6,[10] indicating that credit expansion and credit demand have been sensitive to real lending rates: when the real lending rate declined, banks gave more loans to the private companies, and vice versa, with an increase of real lending rates, credit growth slowed down.

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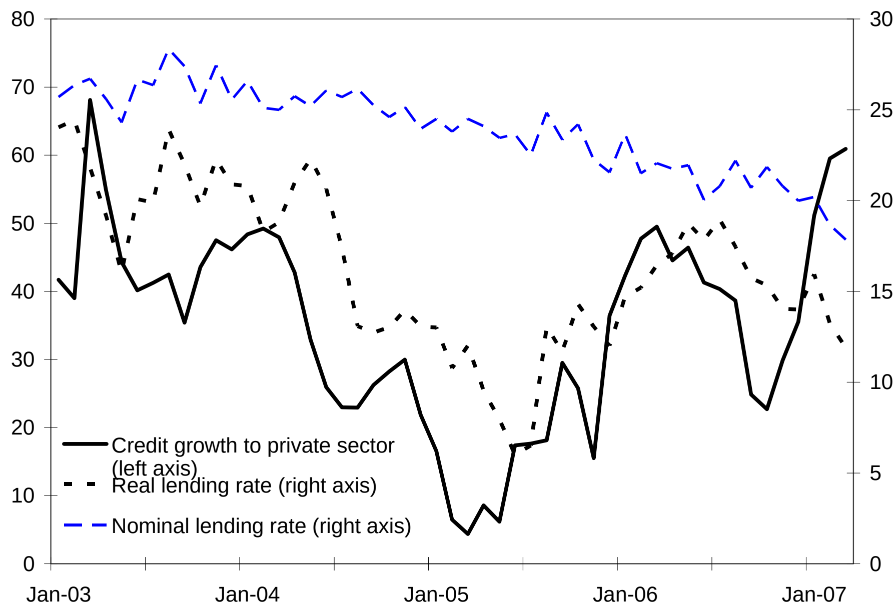
[9] Rojas-Suarez, 2007.

[10] Correlation between these two variables in December 1996 – March 2007 was -0.49.

Figure 6. Mongolia: Credit Growth to the Private Sector and Real and Nominal Lending Rates, 2003-07.
(Annual percentage change)



Source: Bank of Mongolia; and staff calculations.

All three alternative indicators of degree of risk taking for emerging market countries seem to highlight warning signs for the health of the banking sector in Mongolia. First, the deposit rate—both in nominal and real terms—in Mongolia has been significantly higher than that in its peer countries and almost did not change since 2002, despite the gradual decline in inflation rate. Second, the intermediation spread in Mongolia has been low since mid-2006, and has recently become lower than that in the CIS and emerging Asia. Third, credit expansion has speeded up in the last two years. Therefore, at least some banks in Mongolia may have started taking excessive risk in the environment of declining inflation and high economic growth.

The largest banks in Mongolia with alternative funding options and recently improved risk management practices may not be at risk. Those banks also have been improving the quality of their loan portfolios. In addition, large Mongolian banks have an option of raising cheaper funding in international capital markets, thus they are not so dependent on deposits.

However, weaker banks may start facing difficulties in meeting their prudential requirements soon, if the combination of high deposit rates and low intermediation spread prevails for some time. Smaller banks in Mongolia may not have an access to international capital markets, making deposits—including interbank deposits—the main source of funding. However, offering high lending rates attracts risky borrowers. In the absence of comprehensive credit bureau, it is virtually impossible to make a borrowers' quality check, which may lead to an increasing default rate on loans, and thus, the inability of banks to meet their liabilities on deposits.

IV. Growth in Credit to the Private Sector in Selected Transition Countries

Since mid-1990s, transition countries, including Mongolia, have experienced rapid growth in credit to the private sector. This may reflect two very different developments. First, a genuine deepening after structural reforms and rapid development of the financial sector; second, cyclical excessive credit growth that fuels strong domestic demand, leading to overheating and deterioration in the external current account.[11]

This section investigates whether Mongolia is undergoing financial deepening or experiencing excessive credit growth. This is done by employing one possible analytical tool, which attempts to assess an "equilibrium" level of credit to the private sector, based on structural as well as economic "fundamentals." However, the findings of the econometric analysis must be interpreted with caution, however, given that the estimations are imprecise.

The section uses estimates of an econometric model of structural determinants of banking credit to the private sector (BCPS).[12] The model relates the BCPS to GDP ratio to:

- The public debt-to-GDP ratio (*PublicDebtY)*, as an indicator of how much private sector credit is being crowding out;
- Per capita GDP (*GDPPC*), as an indicator of the total economic development of a country;
- Inflation, as an indicator of economic stability;
- Indices of financial liberalization (*LibIndex*),[13] bank entry requirements (*EntryRestrictions*), and quality of governance (*Inst*);
- The origin of the country's law (German, French, or English) (*GermanOrigin*);
- A trend, introduced to control for any omitted trend variable (the coefficient is, however, fairly small).[14]

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[11] IMF, 2004.

[12] Cottarelli, Dell'Ariccia, and Vladkova-Hollar, 2003.

[13] For all countries except Mongolia, the value of the financial liberalization index is for 2002 (the latest available).

The model was estimated for 24 emerging market and developed economies, using annual data for 1973–1996 and a random effects GLS estimation procedure.

$$BCPS = -0.133^{*} PublicDebt_{it} + 0.069^{*} \ln(GDPPC)_{it} + 0.037 LibIndex_{it}$$
$$+ 0.00(1 - HighInfl) * (1/Infl_{it} - 1/InflThreshold) + 0.004^{*} (HighInfl) * (1/Infl_{it} - 1/InflThreshold)$$
$$+ 0.087^{*} Inst_{it} - 0.014 EntryRestrictions_{i} + 0.298^{*} GermanOrigin_{i} - 0.294 - 0.012t^{*}$$

* - indicates significant at 10%

The estimated coefficients were then used to evaluate the equilibrium level of the BCPS variable for selected CEEB countries and Mongolia for 2006. Various sources were used to obtain country data.[15] The predicted or equilibrium level of private credit in 2006 was well below actual levels in all countries in the sample except Albania. This may imply that rapid credit growth in these countries is an indication of possible overheating of the economy.

The speed with which credit growth takes place warrants careful management and supervision as it may give rise to macroeconomic and financial instability. Strong demand supported by bank lending may lead to overheating and deterioration in the current account, as well as put pressure on the exchange rate. External bank borrowing to fund domestic credit growth may lead to increased vulnerability to disruptions in international capital markets. Moreover, some macroeconomic vulnerabilities may at least in part be attributable to buoyant credit growth. Also, rapid credit growth may weaken the quality of bank assets, especially in the environment of weak credit bureaus. If loan evaluation standards would be relaxed, risk perception would become more optimistic and non-performing loans would roll

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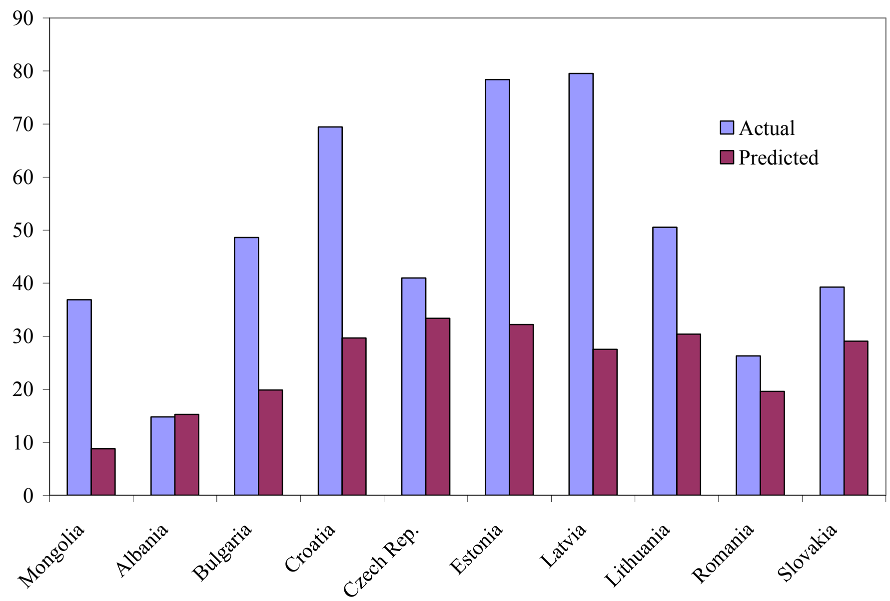
[14] *HighInfl* is a dummy for inflation above the threshold level. (1/*Infl*-1/*InflThreshold*) measures how far below or above the threshold inflation is for country *I* at time *t*. The *LibIndex* represents an index of the financial liberalization of the domestic financial system and the capital account, which is expected to have a positive impact on financial deepening over the long run. *EntryRestrictions* is an index of banking sector liberation that measures the stringency of specific legal requirements for obtaining a license to operate a bank; it is expected to have a negative impact on financial deepening. The quality of governance (*Inst*) index is included to control for information on which lending decisions are based; it is expected to have a positive impact on financial deepening as more information reduces the risk premium over risk-free assets. The origin of a country's law also seems to have a significant effect on financial deepening. In particular, German civil law systems have more protection of private property, better enforcement of contracts, and well-developed banks. To account for this, *GermanOrigin* was included in the model.

[15] The macroeconomic data for 2006 were taken from the WEO and IFS. The financial liberalization index for Mongolia for 2006 was constructed by the FSAP team, and for the rest of the countries it is taken from Cottarelli, Dell'Ariccia, and Vladkova-Hollar (2003) for 2002. The quality of governance indicator was calculated as a simple average of the six World Bank governance indicators. The bank entry restrictions were calculated based on Barth, Caprio, and Levine (2002), greater values indicate greater stringency. This index is available at: http://www.worldbank.org/research/interest/prr_stuff/bank_regulation_database.htm. For Mongolia, this index was approximated and is subject to revision after consultation with the BOM staff.

up. This type of interaction between deteriorating macroeconomic stability and weakening bank balance sheets may lead to bank stresses or even result in a systemic banking crisis.

Therefore, it is particularly important to closely monitor rapid credit growth in countries where the banking sector is still relatively unsophisticated, with inadequate risk management, poor information on borrowers, and large concentration risk due to lack of diversification in the economy. Some of these factors (concentration and credit risks) are issues in Mongolia, as well as potential maturity mismatches. In these cases, reinforcing prudential regulations with strict provisioning requirements and accumulating more information on borrowers by setting up credit bureaus should have high priority.

Figure 7. Mongolia and Comparator Countries: Bank Credit to Private Sector, 2006
(Percent of GDP)



V. Proposed Policy Measures

The BOM could provide some assistance to the banking sector in lowering consumer interest rates if needed. In this regard, proper functioning of an existing credit bureau is a necessary condition for good risk management in the banking system. Also, the BOM may support creation of a private credit bureau, which may serve to a wider network of customers, including credit cooperatives. Once credit bureaus work properly, risks of more rapid credit growth would be contained even if lending rates continue to decline.

At the same time, the BOM should remain vigilant and continue its efforts to improve supervision and regulation of the banking sector. Indeed, the BOM should evaluate possible warning signs of the alternative indicators of the degree of risk taking by banks. The situation of high deposit rates and low intermediation spread may lead to a collapse of weaker banks and even contagion in depositors' run. Thus, the BOM should have in place a contingency plan for deposit insurance and other safety nets.

Functioning of credit bureaus and appropriate supervision are longer term measures, which address causes of overheating of the economy and potential banking crises. The BOM would need time to implement these measures. In parallel with the implementation, the BOM should also continue its work on improving the quality of banks' risk management.

In the short term, the BOM may experience pressure from the government to address the issue of high lending rates and bring those rates down. There are certain short-term measures that can be implemented, especially under the pressure of potential overheating of the economy. These include, for example, administrative measures of direct control on the lending rates and ceiling on credit growth. However, direct control on the market driven parameters addresses the consequences but not the underlying causes of the problem of high interest rates and rapid credit growth and can be effective only for a short time period. The experience of other countries demonstrates that these measures are inefficient, as the pressure on interest rates and rapid credit growth simply shifts elsewhere within the economy, creating distortions in other sectors.

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