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*Economic Policy Reform and
Competitiveness Project*

Report on assistance to the Bank of Mongolia with the development of policies and regulations to support secondary mortgage market development

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ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
BoM	The Bank of Mongolia
CB	Covered Bond
CDS	Credit Default Swap
CIS	Commonwealth of Independent State
CPI	Consumer Price Index
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
FHA	Federal Housing Administration
FRC	Financial Regulatory Commission
GDP	Gross Domestic Product
IFC	International Finance Corporation
IFI	International Financial Institution
IMF	International Monetary Fund
LTV	Loan to Value Ratio
MBS	Mortgage Backed Security
MIK	Mongolian Mortgage Corporation
SPV	Special purpose vehicle
SWG	Standardization Working Group

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SECTION I: INTRODUCTION

The objective of the consultancy was to assist the Bank of Mongolia (BoM) in defining its role at different stages of the secondary mortgage market development by providing recommendations and guidance on potential areas of policy, institutional development and regulatory interventions. The consultancy took place in Ulaanbaatar between May 7 and June 2 of 2007.

Among the activities performed were the following:

- Review the laws governing the activities of the BoM and its internal regulations to determine if, and to what extent, BoM can or should act as a liquidity provider, credit enhancer and regulator to support the development of a mortgage securities' secondary market;
- Determine possible conflicts of interest between supporting the Mongolian Mortgage Corporation (MIK) and the BoM as monetary policy and banking sector regulating authority;
- Assess current commercial banks' mortgage lending activities and practices to identify main weaknesses affecting primary market's pre-conditions that are necessary for the development of the secondary market;
- Review current draft laws on "Securitization", "Mortgages" and "Credit Bureaus" as they affect the development of securities mortgage markets;
- Participate in policy dialogue and technical discussions with monetary policy authorities, members of parliament (MPs), representatives of the banking sector and other stakeholders.

The approach to this consultancy consisted of meeting stakeholders, reviewing and discussing existing and proposed laws and regulations, reviewing economic reports and BoM Quarterly Reports, international financial institutions' (IFIs) documents and reviewing the international experience in secondary market development and evaluating its relevance for Mongolia.

SECTION II: CURRENT DEVELOPMENTS

According to the International Monetary Fund (IMF) Country Report No. 07/39 of January 2007, total deposits in the Mongolian banking system in relation to nominal Gross Domestic Product (GDP) almost doubled from 2000 to 2006, while the money multiplier steadily increased from 1.9 times in 2000 to 4.8 times in 2006. Since 2000, the pace of credit expansion and accessibility to the private sector has outpaced that of deposit increases in the banking system. The pace of credit expansion to the private sector was the fastest in Mongolia during the period covering 2000-2006, increasing almost fivefold in six years, exhibiting a far more pronounced growth than that of other countries of the Commonwealth of Independent States (CIS), such as Kazakhstan and the Ukraine, during this time period. Inflation has been moderate. As measured by the end-of-period Consumer Price Index (CPI), inflation averaged approximately 7.0% during 2000-06 and is expected to remain close to current levels during 2007. The current environment of high liquidity in the financial system explains to a large extent the rapid growth in mortgage lending fueled by a strong demand for housing. According to recent BoM figures this trend continues and is expected to continue in the medium term.

A. Current status of mortgage lending

The Asian Development Bank's (ADB) Housing Finance Sector Project began working with 5 commercial banks in 2002, which resulted in the issuance of Mongolia's first mortgage loans in 2003. The ADB program required participant banks to use standardized forms and documents and to follow specific policies and procedures. As the 5 participant banks drew upon the technical assistance from the ADB program and developed independent mortgage loan portfolios funded by internal bank resources, they deviated from the standardization precedents set forth under the ADB program. The mortgage market has experienced steady growth attracting several other commercial banks to compete, requiring each bank developing their own approach to and standards for mortgage lending.

9 MIK member banks participated in a survey from May 14, 2007 through May 29, 2007 to identify what, if any, market standardization exists among mortgage loan policies and procedures with respect to underwriting, property appraisal, servicing, and loan documentation. An additional analysis of mortgage portfolios sought to identify the presence of product uniformity.

Ultimately, Mongolia's mortgage market today lacks cohesive policies and procedures, which are fundamental to issue uniform loan products capable of being pooled for eventual securitization. Underwriting guidelines vary from bank to bank, sometimes varying within banks depending on the level of decentralization. Collateral appraisals are subjective. Most banks use market value or sales comparison methods for valuing property, however, each bank is responsible for obtaining the market data to apply such methods. Banks often obtain market data from real estate developers, but each bank deals with different developers and therefore different data. No uniform set of criteria against which properties are evaluated exists (i.e. neighborhood, size, number of rooms, amenities, etc.) so it is at the bank's discretion to create such measures. Banks rely upon individual credit loan officers to appraise the value of property, exposing appraisals to subjectivity according to the competence of each loan officer.

In terms of evaluating borrowers' capacity to repay a loan, acceptable debt-to-income ratios range from 25% - 50%. Historical income verification and cash flow projections/income stability assessments are often based on borrower personal records or "black books" because of the prevalence of self-employment and the informality of maintaining business records and

financial statements. The BoM loan information fund was cited as unreliable and often outdated. The credit information bureau is only capable of reporting the current status of a borrower's previous loans, but there is no indication of how the loan performed over its life. Inadequate information impairs the ability to accurately assess a borrower's creditworthiness. Some banks require mortgage borrowers to have both property and life insurance, while some banks require only certain borrowers to have such insurance, and others do not require any insurance in any case. Once a borrower is approved for a mortgage loan, virtually none of the banks use an internal rating system to classify loans within their portfolios based on different levels of risk.

Regarding the uniformity of loan products, terms range from 1 month to 10 years. Some interest rates are fixed for the life of a mortgage loan, but most are adjusted anywhere from twice per year to once after three years of payment. Some banks have a standard interest rate, applied to all mortgage loans over a certain period of time, while others apply risk-based interest rates applying a range of rates depending on specific borrower profiles. Current interest rates available on the market for MNT loans range from 1.4083% per month to 2.5% per month and for USD the range is from .9917% per month – 2.5% per month. Most banks do not have policies restricting or charging fees on prepayments, which weakens the ability to accurately estimate returns and would expose banks to significant risk in a securitized market. Loan documentation is far from standardized within the market and even individual banks lack internal standardization and order of documentation in loan files. All of the banks use the BoM's loan performance classification for their portfolios, however, the timeline and process of handling loans in arrears or those that are substandard, doubtful, and varies immensely, affecting the time and likelihood of recovering losses. The legal and regulatory infrastructure also creates serious obstacles for recovering losses.

There is an evident need for standardization of critical primary mortgage market functions in Mongolia. Despite this lack of market standardization, individual banks have made efforts to standardize procedures and mitigate risks in the face of numerous market constraints. Banks recognize the need to standardize and appear prepared to cooperate to achieve this objective. The ADB program has already made efforts to standardize functions, which could lay the groundwork for further and complete market standardization, assuming all of the necessary support from the BoM and the government is present to enforce and uphold proposed market standards.

B. Emerging initiatives to securitize mortgage loans

Under consideration is a Credit Default Swap (CDS) of Khan Bank for approximately USD 4 million. It consists of an insurance agreement whereby Khan assumes part of the credit risk, a First Loss Participation of the mortgage pool, and transfers the rest to the insurance provider or Second Loss Participation, in this case to the BoM. According to the latest version of this proposal, Khan Bank will pay a premium or a fee for this protection. The First Loss is capped at 10% to be assumed by Khan Bank and a Second Loss of 90% to be assumed by the BoM. In this transaction, Khan Bank will not gain any liquidity as the mortgages remain on the books of the bank, but the Credit Default Swap allows Khan Bank to release capital that is currently tied up in mortgages. Interest rate, pre-payment, exchange and liquidity risks remain with Khan Bank. The benefits of this transactions are described by its promoters as follows: It provides a first precedent on how financial derivatives instruments can be used to measure, assume and lay off credit risk; provides an exercise for estimating first loss for the bank; defines parameters and servicing guidelines that can be used in other transactions; provides an exercise for lender's review and loan due diligence in this case to be performed by the BoM;

and finally provides a possibility for setting up a reserve fund with premiums for future credit enhancements.

A second transaction under consideration is a USD 4 million XacBank Mortgage Portfolio Securitization Transaction, where XacBank transfers a qualified pool of its mortgages to a special purpose vehicle (SPV) set up by MIK. MIK will in turn issue USD-denominated mortgage-backed-securities (MBS) and will place them with investors. MIK's MBS will be pass-through securities in which investors will receive pro-rata shares of the cash-flows generated by the qualified mortgage portfolio consisting of principal, pre-payments and interests. XacBank will continue servicing mortgages and payments to the SVP for a servicing fee. This transaction does not involve any form of BoM participation or guarantee as in the case of the CDS. XacBank will allow MIK to carry out the examination of its portfolio, mortgage issuance and underwriting procedures, and other legal documentations necessary for due diligence. Credit, liquidity and pre-payment risks remain with XacBank and do not constitute a formula for untying capital. While CDS is a 90% BoM and a 10% Bank full recourse transaction for the investors, MBS is a non –recourse transaction.

The two proposed transactions are being followed with growing interest by other commercial banks with a portfolio of mortgage loans; as such transactions offer an alternative to source longer term funding and the ability to release capital that is currently tied up by mortgages.

C. Factors determining future developments of mortgage securities

As securitization initiatives begin to emerge, it is important to consider the factors that will determine the medium and long term evolution of this form of funding in Mongolia. The first consideration is whether there is a real need for capital market funding, because this form of funding is in general more expensive than deposit funding. A typical bank will look to capital markets funding for several reasons. It may be capital constrained as a significant part of its capital may be tied-up in mortgages, or it may be liquidity constraint which is not the case in Mongolia today given the abundant and growing liquidity in the financial system. Finally, the bank may have cash flow risk management needs. This is the case of Mongolian banks. Funding for banks is deposit based and is in general short term. Mortgages on the other hand, currently have an average maturity of 5 years, exposing banks to asset and liability mismatching, restricting their ability to respond to the growing demand for mortgage financing.

On the supply of long term funding the presence of institutional investors, such as pension funds and life insurance companies, does not exist in Mongolia today. Therefore, other possible sources of long term funding include the commercial banks and possibly individual investors, as well as international-individual and institutional-high yield investors, which represent an expensive funding alternative compared with deposit-based funding. Moreover, the structuring of mortgage securities must be target-investor-specific and offer attractive risk-adjusted returns, fulfill investor's portfolio capacity to invest in mortgage securities and must be in compliance with their ability to invest in this type of securities. Typically, pension funds and insurance companies are highly regulated activities and are therefore required by law to invest in high quality, investment grade securities.

There are a number of primary market pre-requisites and market infrastructure requirements underlying the development of a mortgage securities' market. Primary market pre-requisites are weak in Mongolia today. The assessment performed on banks' mortgage lending practices analyzed in a separate EPRC research report and summarized in the previous section, indicated absence of standardization of loan structures and loan documentation as well as diverse underwriting, property appraisal, loan servicing and collection practices. Standardization is an

area that needs to be addressed with high priority and the BoM should play an essential role in the promotion of such standardization.

Infrastructure requirements refer to the enabling legal, tax and informational infrastructure environment. Three significant legal initiatives are underway, which include the draft Mortgage Law of Mongolia, the draft Law on Collateralized Mortgage Bonds of Mongolia or Securitization Law and the Private Credit Bureau draft Law.

The first draft document deals mostly with collateral and related issues such as collateral State registration, lien registration and lien transferability as well as the structure and content of the mortgage note. It also constitutes a valuable attempt to bring standardization and uniformity to mortgage lending. Although significant discussions are taking place among stakeholders, there are at least two significant issues in the current version of the draft law that, if not addressed, may severely impair the establishment and development of the mortgage securities market. The first is the discretionary power of the courts in deciding foreclosures. At present, foreclosures are costly, lengthy and highly dependent on court interpretations. Foreclosures must be streamlined and expedited, and banks should have clear and cost-effective, off-court foreclosure procedures at their disposal. The second issue refers to the differentiation between relevant and non-relevant defaults. Again, it is at the court's discretion to determine if a default is relevant based on whether the defaulted outstanding principal constitutes the majority or the minority of the original loan and whether foreclosure proceedings are pertinent. The law must not differentiate among types of default and must allow servicing banks and borrowers to deal with the issue independently.

The current legislation represented by the Securities Law and the Company Law does not specifically regulate the issuance of mortgage securities. The Securitization draft Law explicitly authorizes banks and housing finance companies sponsored by banks to issue collateralized mortgage bonds subject to the supervision of the Financial Regulatory Commission (FRC) and the BoM as provided by its text, and to suggest rules and procedures for creating and issuing collateralized mortgage bonds. The draft law defines two generic types of securities: Covered Bonds (CB) which are full-recourse and Mortgage Backed Securities (MBS) which are non-recourse, strictly pass-through securities. Primary responsibility for regulating the issuance of mortgage securities rests with the FRC as the regulator of the securities market and agency responsible for protecting investors. Given the dominance of banks in the financial sector, the BoM must play a significant role in reviewing this draft law and make sure that there are no contradictions with the draft Mortgage Law and the Banking Law of Mongolia; specifically when dealing with collateral issues. Finally, the draft law should consider including two other mortgage securities; Agency Bonds which are issued by agencies specialized in mortgage finance at a secondary level, such as MIK and, Mortgage Pay-Through Securities which are multiple securities issued against a single collateral pool.

The Credit Bureau Draft Law addresses the need for the establishment of a broader and more comprehensive alternative to the current BoM credit bureau functions. Effective credit bureaus should be inclusive (credit information provided by banks but also by non-banking institutions, consumer credit companies and public utilities companies such as telecommunications and electric utilities). The independence of credit bureaus is also necessary. This legal initiative, constitutes another building block towards a more transparent and efficient financial system.

The three legal initiatives discussed above constitute new and significant developments in Mongolia and their urgent enactment is necessary to establish the market foundations and the legal framework for mortgage securities to develop. Nevertheless, the level of technical and legal understanding of these draft documents is uneven among stakeholders; particularly among those that participate in the discussions and eventually sponsor them. A significant

effort in public education and discussion is necessary and EPRC through its successful “retreat” programs can make a valuable contribution to increase the understanding of the technical underpinnings and policy objectives of these laws.

SECTION III: POTENTIAL AREAS OF BOM STRATEGIC INTERVENTIONS

The financial sector in general and banking in particular are regulated activities where governments intervene in establishing enabling legal and regulatory environments and institutions. The international trend in financial regulations is to treat housing finance as part of the broader financial markets and no longer is the trend of treating housing finance as special cases for credit allocation. Therefore, policies affecting housing finance are those that also affect banking and other financial institutions. This said, regulators also recognize mortgage lending and mortgage securities as a special asset class of secured lending. In this context, the BoM has a significant role to play in promoting the development of the secondary markets for mortgage securities, by engaging in strategic policy, regulatory and institutional interventions; all within the legal boundaries of the Law of the Bank of Mongolia.

What follows constitutes a summary of five recommended areas of BoM strategic interventions that were discussed with senior staff at the bank. No particular “optimal sequencing” of interventions was proposed, but rather a pragmatic and opportunistic approach by areas that the BoM will address simultaneously. The ultimate objective of these recommendations is for the BoM to create basic market conditions for the private mortgage finance sector to flourish and to avoid crowding-out private participants through discretionary interventions.

A. Strengthening primary market pre-conditions and market infrastructure.

Adequate legal, regulatory and primary market infrastructure has to be in place in order to successfully introduce mortgage securities. Standardization of mortgage instruments and documentation reduce transaction costs due to information asymmetries, reducing the so called “agency problem”.

Mortgages that have similar characteristics can be pooled together to create a larger pool size and more liquidity. This reduces due diligence costs for investors, insurance companies and rating agencies by minimizing information asymmetries. Mortgages with larger volumes are candidates for sale and securitization. Typically, standards are established on interest rates adjustability (i.e. ARM), LTV ratios and maturity. Standardization also refers to documentation such as securing cost effective registration of title and lien, transfer taxes, stamp duties and time it takes to complete registration. Standardized loan application and disclosure forms in common formats, uniform residential appraisal reports, uniform credit reports compiled by credit bureaus, employment verification, income verification (pay stubs, income tax returns), insurance policy for life, property and casualty, representations and warranties given by loan originators, etc all are necessary prerequisites for “completeness” in loan origination.

Consistent underwriting procedures are a key to secondary market development. Investors trust lenders that adequately assess risks and use a consistent set of parameters in evaluating loans. Regulators are also concerned about the safety of loans collateral and credit reputation and payment capacity of the borrower. Property appraisal criteria based on universally accepted valuation criteria is a key to assess the true value of the collateral. Reliable credit reporting compiled and prepared by independent credit bureaus to assess borrowers track record and the capacity to repay the mortgage is also essential. Finally, reliable document warehousing for mortgages between the time a mortgage loan is closed and sold is necessary to minimize transfer risks.

Adequate practices of servicing are necessary for building a viable secondary mortgage securities market. Basic standards for regulating the following activities are necessary:

collecting mortgage payments, accounting for all financial transactions, collecting past due accounts, remitting payment to investors, foreclosing on delinquent properties and disposing of foreclosed real estate.

Lea, M.J. (2000) and Chiquier, L., Hassler, O. and Lea, H. (2004) offer an excellent review of the international experience in developing secondary mortgage securities markets and the importance of establishing primary market pre-conditions.

Recommended BoM actions:

- a. BoM through its Bank Supervision Department and in coordination with MIK and representatives of commercial banks will constitute, a “Standardization Working Group” (SWG) to recommend the adoption of industry standards on mortgage loan structures and documentation. The Supervision Department of the BoM, as a matter of “consumer protection will require that a standard format for the mortgage loan or note contract be mandatory for all the commercial banks. The experience of the ADB program in standardizing mortgage lending practices and documents among the banks that were part of the program should be considered as a possible starting point. International expertise will be contracted to support this activity.
- b. The SWG will also review and discuss the Mortgage Law, the Securitization Law and the Credit Bureau Law with the purpose of harmonizing the legal texts with the standardization agreements that will be enforced by the Supervision Department of the BoM. The SWG will also collaborate with other government agencies and other organizations to advance in four crucial market infrastructure reforms: (1) Streamline, expedite and make cost-effective the existing property title and lien registration process, (2) Standardize property appraisal criteria, (3) Streamline, expedite and make cost effective property collateral foreclosures by reviewing and supporting the approval of the Law on Mortgages, (4) Expedite the enactment of the Credit Bureau law.

B. Flexibilizing Monetary Policy Instruments and Prudential Regulations

The use of monetary policy instruments and prudential ratios can be effective instruments to promote the development of mortgage securities. They can generate secondary market liquidity and free-up capital for the banks, allowing them to increase their mortgage lending without need to increase their capital. The selection of mortgage securities as an eligible instrument for monetary policy and prudential regulation is a decision of the Bank Board and the Governor of the BoM and does not require modification of laws. It only requires amending regulations to be communicated to commercial banks in the form of instructions. To safeguard the integrity of the BoM, only regulated mortgage securities will be eligible. Specifically, the Securitization Law will have to be approved and only regulated Covered Mortgage Bonds and Mortgage Backed Securities will be part of the BoM “incentives” program.

Recommended BoM actions:

- a. Currently, risk weighting for mortgage loans stands at 50%. The following simple and practical modification is proposed:

100% risk weighting for:

- Primary home mortgages with LTV higher than 70%
- Mortgage loans for second homes, rental property and commercial property

50% risk weighting for:

- Primary home mortgage loans with LTV up to 70%

30% risk weighting for:

- Regulated mortgage securities (if and when issued) and primary home loans with acceptable credit enhancement features

LTV requirements and risk weightings will be flexibilized as the process of mortgage standardization and market infrastructure improves. The effect of these recommendations will be to free-up capital for banks that comply with industry standards and practice adequate underwriting and servicing procedures. This will also stimulate the work of the SWG and the implementation of primary markets pre-conditions.

- At present, repo financing operations only authorize the following instruments as collateral: Central Bank Bonds, Government securities, Government and CB bills issued by OECD members, liquid securities with AAA rating, promissory notes accepted by the BoM, time deposits at the BoM and foreign banks, and any other securities that the BoM decides to include. Regulated mortgage securities (if and when issued) will be eligible as collateral for repo operations, bringing secondary market liquidity to these types of securities.
- Reserve requirement is seen mainly as a safety mechanism instead of a monetary policy instrument by the BoM and stands at 5% of deposits. To promote the issuance of regulated mortgage securities (if and when issued); the proceeds for issuing such securities will have no reserve requirements. This measure together with lower risk weighting requirements for these types of securities will further stimulate its use on the part of banks.

C. Accessing long term funding and setting a long term interest rate benchmark

Availability of long term funding is essential for introducing long term mortgage securities. Securities market development must be viewed as a dynamic process in which continued macroeconomic and financial sector stability are essential to build efficient markets and establish credibility for the issuers of long term debt securities. Pre-requisites broadly include credible and sound fiscal and monetary policies, an effective legal, tax, and regulatory infrastructure, smooth and secure settlement arrangements, and a liberalized financial system with competing intermediaries. Where these basics are lacking or very weak, priority should be given to adopting and implementing a stable and credible macroeconomic policy framework, reforming and liberalizing the financial sector, among other reforms. Both domestic and foreign investors will be reluctant to purchase long term securities when there are expectations of high inflation, large devaluations, or high risks of default. Working toward a macroeconomic policy framework with a credible commitment to prudent and sustainable fiscal policies, stable monetary conditions, and a credible exchange rate regime is therefore essential. Such steps will reduce funding costs over the medium to long term, as the risk premium embedded in yields on securities fall. This in turn will increase housing affordability by reducing interest rates and lengthening maturities. Inflationary expectations feed directly into longer-term nominal securities yields and affect not only funding costs, but also, in countries with volatile monetary conditions, it affects the ability to extend the yield curve beyond very short maturities. Thus a credible commitment to contain inflation and monetary stability is critical for medium and long term securities market development. BoM's first and foremost responsibility is mandated in its law and consists on "ensuring stability of the currency and to promote balanced and sustained development of the nation by maintaining the stability of financial markets and the banking system". This fundamental core BoM mission must always be placed above any other particular role that the BoM may be circumstantially be called upon.

The lack of “long term benchmark interest rates” is definitely a deterrent for the development of a long term bond market in Mongolia. To overcome this weakness, some countries have adopted an indexed unit to be introduced in long term financial contracts. In the early sixties, Chile successfully introduced long term mortgage backed securities indexed to inflation. Indexation was the key to attract private deposits in an inflation-prone country. The index was a unit of account adjusted daily to reflect increases in the CPI over the previous month (Unidad de Fomento or UF). The UF allowed banks to lend long term at fixed real rates. By doing so, they were able to automatically capitalize the inflation component of an equivalent nominal interest rate. The introduction of the UF was essential for the development of long term funding in Chile. With a similar rationality, Mexico uses the UDI (Unidad de Inversion). As these units solve the problem of correcting for inflation, they introduce another problem namely, payment shock. If the inflation rate rises faster than wage rates for any period of time, the purchasing power of household declines. If there is a sudden burst of inflation, the mortgage payment burdens of borrowers may become unsustainable. There is also the issue of credibility of the CPI index as a fair indicator of inflation. If credibility is weak or absent, then index units are useless.

For a comprehensive review of key issues that are necessary for developing bond markets, in 2001, Glaessner, T. and Ladekarl, J. completed a study for the World Bank on the subject.

In the case of Mongolia, interest rate periodic adjustments for mortgages are rather discretionary and vary among lenders and for each type of loan. This introduces significant unpredictability in the calculation of loan values and yields turning mortgage loans unsecuritizable. A benchmark long term interest rate or a uniform adjustability criteria that takes into account cost of funds and financial markets long term conditions is definitely needed to standardize interest rate adjustment formulas and eliminate current interest rate uncertainty.

There is also the lack of long term supply of funds. In other countries this supply is normally represented by institutional investors such as life insurance companies and pension funds. Until this class of investors develops in Mongolia, the options for long term funding will be severely restricted to banks, domestic and international individuals and high yield investment funds. Although not a reform to be lead directly by the BoM, the government should seriously consider transforming its social security system by replacing the current pay as you go for an individual capitalization system. The case of Chile offers a good example of a successful mortgage market reform that was carried out almost simultaneously with the reform of the social security system implemented in 1980.

Recommended BoM actions:

It is a common development that emerging countries returning to the international financial markets or entering for the first time start their quest by placing “exploratory” sovereign bonds and establishing a benchmark interest rate. The Republic of Mongolia will test access to international long term funding alternatives by exploring the placement of a long term dollar denominated sovereign bond and obtain a benchmark for a long term interest rate.

The BoM with the assistance of an international financial markets expert and acting solely and exclusively in its role of “fiscal agent” of the government (Article 33), will lead the effort of assessing the viability of such an operation. BoM in coordination with the Ministry of Finance will constitute a “Bond Issue Team” and with the assistance of the international expert will identify and hire an international, highly reputed investment bank as its financial advisor, underwriter and placement agent. The first task of the investment bank will be to assess the

market viability and the expected yield of the proposed long term bond issue and then to structure and place it.

Current economic conditions in Mongolia, as reflected by budget surplus, high international reserves, low inflation and economic growth, constitute a favorable environment for such a transaction. Moreover, the BoM is currently working with credit rating agencies such as Fitch, Moody's and S&P to upgrade its rating. In December 2006, S&P rated Mongolia's sovereign risk as "B plus Positive" which constitutes an encouraging indicator for Mongolia's risk tolerance by investors in the international bond market.

Moreover, "international market timing" seems unusually favorable for a bond issue. There are extraordinary market conditions where the expectations of investors are the inverse of those demonstrated by a normal yield curve. Bonds with maturity dates further into the future are expected to offer lower yields than bonds with shorter maturities. This "inverted yield curve" indicates that the market currently expects international interest rates to decline as time moves farther into the future, which in turn means the market expects yields of long-term bonds to decline. International investors interpret an inverted curve as an indication that the international economy will soon experience a slowdown, which causes future interest rates to give even lower yields. Before a slowdown, investors prefer to lock money into long-term investments at present prevailing yields, because future yields will be even lower.

D. Developing Credit Enhancement Options

Investors and mortgage lenders can cover possible losses due to mortgage lending activities by purchasing insurance. Securitization and the development of secondary markets normally require some form of credit enhancement known as default insurance that protects the investor or the lender when a borrower defaults and when there is insufficient recoverable value in the property securing the insured portion of the loan. It has been recently suggested that the BoM provide a guarantee or insure certain securitization transactions to make them market-viable and to help create the initial "market precedents" for these types of transactions to develop.

Aside from the fact that the current Law of the Bank of Mongolia (Article 10 through Article 23) does not authorize this institution to assume or insure private sector risks, from a strictly economic policy point of view, the BoM should not entertain engaging in this type of transactions in the future. The concept of default insurance explains the economic rationale behind this recommendation. Default risk is fundamentally different from other forms of casualty insurance. The fundamental risk for mortgage default insurance is of "catastrophic" nature because it is not limited to the normal risk that an individual home owner might experience in terms of financial adversity, resulting in foreclosure. Rather catastrophic refers to the widespread foreclosures that may occur as a result of an economic crisis. The horizon of risk under each individual mortgage insurance policy is long because it is maintained through the maturity of the secured loan and is non-cancelable by the insurer despite the likelihood of changing conditions during the life of such loan. Under default insurance there is usually a combination of credit and collateral risks. The event of loss under a mortgage insurance policy is the borrower's failure to make scheduled payments. The risk of actual loss also depends on the occurrence of a second event following borrower's default which is the lender's inability to recover the outstanding debt through the liquidation of the collateral. Finally, default insurance has greater capital requirements than other insurance products such is the need to constitute a Contingency Reserve Fund. Based on these characteristics, insurance policy provisions will require that the loan originator and servicing bank be strictly qualified by the insurer.

Default insurance is especially susceptible to "adverse selection of risk" by the lenders who "purchase" it. This situation is considerably magnified by a "moral hazard" factor if the BoM

is called upon to participate as a default insurer of specific private sector mortgage transactions. By participating, the BoM becomes vulnerable to systemic and open-ended losses if a catastrophic event should occur. This is particularly undesirable at a moment when the BoM has been working with credit rating agencies to upgrade Mongolia's sovereign credit rating. Moreover, a possible BoM participation would severely distort the allocation of risks in the financial system by biasing banks to take excessive credit risks, because they have the incentive to choose, case by case, which loans to "self insure" and which ones to insure with the BoM. Finally, pricing default risks in an environment where there is no historical record of mortgage loan defaults makes a BoM exercise highly academic and unreliable, exposing it to political pressures and "negotiations" to adopt artificial pricings.

For a useful analysis of default risk insurance and its applicability to an emerging country, Struyk, R. and Whiteley, D. (2002) reviewed the implications for Russia of a model such as the US mortgage default insurance program.

Considering that the BoM will not become a default insurer, how may it contribute to establish the enabling conditions for the development of default insurance options?

Recommended BoM actions:

- a. Since there is no experience with mortgage loans for use in determining the price of mortgage default insurance, the BoM with the assistance of international experts, will create a public data base that will permit private insurance companies to quantify relevant default risk factors. Data on loan origination and subsequent foreclosures will be needed from commercial banks. Developing this information infrastructure is particularly important to attract private insurers so they can figure out how to price their services.
- b. Working with commercial banks and MIK, the BoM with the assistance of default insurance experts will determine under which conditions default insurance would be required to avoid banks purchasing insurance only for the most risky loans. A provision about this issue must be contemplated in the draft Mortgage Law. An alternative would be to require insurance for all loans or to reduce risk-based capital requirements for mortgages for insured loans or other loan features, such as over-collateralization, as the standards that in the future will require mandatory mortgage insurance.
- c. Working with MIK, the BoM will approach at least one international private insurance company to work in a specific "pilot MIK transaction" and by doing so start drafting the corresponding default insurance legislation. The Argentinean Banco Hipotecario international bond issue in 1999 constitutes a successful case of placing long term mortgage bonds in the international markets, which were not guaranteed by the government or the Central Bank. The bonds were structured as senior-subordinated collateralized mortgage obligations with credit enhancement from a reserve fund and excess spread account. Most importantly, the bond issue was the first MBS to be insured against political risk by a private insurer (Zurich US). Although this first issue was considered expensive it was nevertheless successful to raise long term funds in the international markets due to the lack of long term funding alternatives in the domestic market.
- d. The BoM will also approach multilateral agencies to explore their support in a program to mitigate risk for specific securitizations, starting with a "pilot MIK transaction". The IFIs that may be contacted will be the EBRD, EIB, IFC and the ADB. Normally, IFI programs cover four types of risks: Political, Contractual/Regulatory, Credit and

Foreign Exchange and they are mostly aimed at protecting foreign investors' participation in local investments. Therefore, their involvement must be conceived as complementary to other forms of insurance.

In a paper written in 2005, Raymond, P. presents a comparative analysis of different IFIs risk mitigation instruments.

- e. The BoM with the assistance of international experts will study the viability and relevance for a Mongolian equivalent of the Federal Housing Administration of the US (FHA) which provides 100% coverage of principal loss and foreclosure processing costs. In any case, this institution would be established as an autonomous government entity under the purview of the Government Budget and completely separate and independent from the BoM. The corresponding Contingency Reserve Fund will also be part of the Government Budget exercise and its amount clearly defined and publicly known.

E. Defining BoM relationship with MIK

International experience shows that government support in developing mortgage capital markets is common. The decision of BoM to sponsor the creation of MIK on the basis of helping jump start the market is consistent with international experience. Similar cases are to be found in Egypt, Jordan, India, Armenia and Malaysia, among others.

It is not clear that an equity participation of the BoM in MIK is allowed in the BoM Law. According to Article 23 of the Law, an exception to activities prohibited that applies to this case says: "acquiring and holding shares in legal entities that have direct relevance to deposit insurance; export finance, clearing and automation of payments, monetary policy implementation and banking data processing, provided that the aggregate value of such shares does not exceed three percent of its capital" It is subject to interpretation if MIK fits this description of exempted legal entities.

Recommended BoM actions:

- a. The effectiveness of BoM as a shareholder of MIK is maximized when its role is temporary and concentrated in the early stages of MIK, supporting the activities of the SWG and MIK in approaching IFIs and private default insurers. The document of constitution of MIK will be amended or a shareholder's agreement will be signed by all shareholders whereby a "sunset provision" of three years will be agreed upon. After three years of MIK operations BoM shares will be purchased at book-value by the remaining shareholders on a prorated basis.
- b. MIK will adopt clear corporate governance principles based on the bank governance guidelines contained in the Banking Law. The intention is to establish accountability and transparency for MIK and avoid potential conflicts of interest between MIK and the BoM as the entity responsible for monetary policy and bank regulation.

SECTION IV: CONCLUSION

The Law of the Central Bank clearly establishes that BoM's first and foremost responsibility consists of "ensuring stability of the currency and promote a balanced and sustained development of the nation by maintaining the stability of financial markets and the banking system". A credible commitment on the part of the BoM to contain inflation and secure financial sector soundness is of critical importance for the medium and long term mortgage securities market to develop. Any other particular activity that the BoM may circumstantially be called upon is either not allowed by its charter or should be avoided; particularly if it consists of providing guarantees or default insurance to cover private sector risks.

Guarantees or default insurance intrinsically promote "adverse selection of risk" by mortgage lenders that benefit from them; a situation that is magnified by a "moral hazard" factor if the BoM participates as a default insurer of specific private sector mortgage securities transactions. By being involved in insuring private sector risks, the BoM becomes vulnerable to systemic and open-ended losses if a catastrophic event should occur. This is particularly unwise when the BoM has been diligently working with credit rating agencies to upgrade Mongolia's sovereign credit rating. Moreover, BoM participation would severely distort the allocation of risks in the financial system by biasing banks to take excessive credit risks, because they have the incentive to choose, case by case, which mortgage loans or mortgage securities to "self insure" and which ones to insure with the BoM. Finally, the exercise of pricing mortgage default risks in an environment where there are no historical records of defaults is academic and unreliable. It is not BoM's mission to be in the insurance business. In doing so, BoM would be exposed to insurmountable political pressures and pricing "negotiations".

Despite its focused and well defined charter, BoM can and should assume a pro-active and very significant leadership role in the development of mortgage securities by creating favorable market conditions for the private mortgage finance sector to flourish and by avoiding crowding-out private sector participants through discretionary interventions.

Five areas of strategic BoM interventions were recommended and discussed with senior management at the BoM: strengthening primary market pre-conditions and market infrastructure; flexibilization of monetary policy instruments and prudential ratios; accessing long term funding and setting a long term interest rate benchmark by working with the Government in a sovereign bond issue; developing credit enhancement options; and; defining its relationship with MIK.

SECTION V: INTERVIEWS AND CONTACTS

- Barry Maddams, Deputy CEO, KHAN BANK
- BATBAYAR Nyamjav, Member of the State Great Hural, State Greta Hural (Parliament) Of Mongolia
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- BATSUKH, A., PhD, Governor, The Bank of Mongolia
- BOLD Magvan, President, XAC BANK
- BOLDBAATAR Sevjid, Senior Officer, Mortgage Department, GOLOMT BANK
- BOLDBAATAR, D., Director, Monetary Policy and Research Department, The Bank of Mongolia
- Cory B. Johnston, Project Development Officer, USAID Mongolia
- DAMIRAN, TS., Member of the State Great Hural (Parliament) of Mongolia, Head of Parliamentary Working Group on Housing Finance
- DUGERJAV Dash-Onolt, Commissioner & Vice Chairman, Financial Regulatory Commission of Mongolia
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- ENKHBOLD Zandaakhuu, Member of the State Great Hural (Parliament) of Mongolia
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- KHISHIGDULAM Shagdarjav, Administrative Assistant, Mongolian Mortgage Corporation
- LKHAGVAJAV Baasansuren, Economist, Monetary Policy and Research Department, Banknote Division, The Bank of Mongolia
- MUNKHJIN, A., Director of the Foreign Relations and International Projects Department, CAPITRON BANK
- NARANTUYA, Z., Executive Vice President, Policy Coordination Department, MONGOL POST BANK
- Niel Isbrandtsen, Advisor, KHAN BANK
- OYUN-ERDENE Lamjav, Vice President & Director, Corporate Banking Department, GOLOMT BANK

- RAGCHAA, KH., General Director, Financial Policy and Coordination Department, Ministry of Finance of Mongolia
- Randolph S. Koppa, CEO, Trade and Development Bank of Mongolia
- Roger P. Nye, President, Global Investment Advisors, Inc.
- SARANTSETSEG Ravjir, Director, Monetary Policy Division, Monetary Policy and Research Department, The Bank of Mongolia
- ULAMBAYAR, L., Deputy CEO, ANOD BANK

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