The Creation of a Secondary Mortgage Facility in Indonesia

by Michael J. Lea, Alex J. Pollock, and Jay K. Rosengard

INTRODUCTION

During the past four years, joint work by the Ministry of Finance of Indonesia and outside consultants financed by the US Agency for International Development have explored the feasibility and process for establishing a secondary mortgage facility (SMF) in Indonesia. The conclusion of these studies is that the major impediment to expansion of housing finance at more affordable terms for borrowers in Indonesia is the lack of long-term funding for housing. An SMF can facilitate the expansion of housing finance in Indonesia by raising long-term funds from the capital markets through bond issues and lending these funds to primary market lenders (PMLs) on a long-term basis. The creation of a SMF can both foster homeownership and help develop an active bond market.

Since the completion of the first study, the amount of bank lending for housing in Indonesia has increased significantly. At the end of 1993, it was estimated that only 4% of outstanding credit, or approximately Rp 6 trillion (US$ 2.5 billion), was devoted to housing, approximately 3% of GDP. Current estimates suggest that the total volume of mortgage loans has grown to Rp 12 to 14 trillion, or approximately 5% to 6% of outstanding credit and 4.8% of GDP. A significant portion of the growth has taken place in the private sector, which may now account for as much as 50% of outstanding mortgage loans. Several of the largest banks have increased their portfolio holdings to 5% of assets. However, concerns about overheating of the "property sector" expressed by Bank Indonesia have recently resulted in a slowdown in the rate of housing lending.

With increased competition, mortgage lending terms have improved. Private market lenders are making longer maturity loans (up to 15 years with an average of approximately 10 years). However, mortgage rates (18–22%) are high relative to inflation (around 10% per annum) with a spread of four to five percentage points to bank deposit rates (14–16%) creating a significant barrier to affordability.

The major source of funding for the private banks continues to be short-term deposits. As a result there is on-going concern about the potential liquidity risks associated with mortgage lending and a desire for longer term financing. There is also increased interest in off-balance sheet financing (i.e., securitization) reflecting the planned phase-in of higher capital requirements for banks.

WHY HAVE A SECONDARY MORTGAGE FACILITY?

The creation of a government-supported institution (an SMF) to refinance bank-originated mortgages funded through the issuance of bonds would have several beneficial effects. First, it would provide a source of long-term financing for private banks, removing a major obstacle for mortgage investment. Second, it would facilitate investment in mortgages by pension funds and insurance companies, potentially improving their investment performance and increasing the supply of funds available for housing. Third, it would help stimulate development of a bond market in Indonesia, which would benefit private companies and government enterprises in their efforts to raise capital.

There are several reasons why a SMF may be more appropriate than a true secondary mortgage market (SMM) at this time. The first reason is the relative lack of sophistication of Indonesian institutional investors. The Indonesian bond market is thin and illiquid. The government does not issue medium- or long-
term bonds. Bonds are issued mainly by state banks and state enterprises and are purchased and held by institutional investors (pension funds, insurance companies, banks) with little secondary trading. These long-term investors still hold a disproportionate share of their assets in short-term form. It is unlikely that these investors will have a strong interest in and ability to manage more complicated cash flows from mortgage-backed securities (monthly payments of principal and interest along with prepayment) and will prefer simple bullet bond structures.

The second reason is the nascent state of the legal and regulatory system as regards securitization. Land title and registration has traditionally been a problem for existing housing. Title to newly developed housing has benefited from improved processes as part of the country's economic reforms. Foreclosure is feasible and practiced in Indonesia. However, in practice, many difficulties arise and very few mortgages are in fact executed and realized to the satisfaction of the creditor. The ability to transfer ownership of mortgage assets and create bankruptcy remote trusts exists in theory but has not been tested in practice.

The third reason is the lack of performance history on mortgages (default and prepayment) and unknown servicing capabilities of primary market lenders. Most banks have been in the mortgage market for only a few years—too short a time to build up the type of history demanded by rating agencies and investors. Thus it is difficult to assess both the quality of the underlying assets of a MBS as well as the capability of the banking infrastructure to service the needs of MBS investors in a timely and reliable manner.

Creation of an SMF can be viewed as the first step towards the long-term development of a SMM in Indonesia. The SMF can be a catalyst to address the issues of loan standardization, information processing and servicing, as well as a necessary precursor to the sale of loans or MBS directly into the capital markets. In this regard, a SMF can provide a valuable demonstration effect for the rest of the banking system and capital market. As market participants gain experience in originating, servicing and managing mortgage investments, new forms of funding tailored to the needs of lenders are likely to emerge.

WHAT FORM WOULD THE SMF TAKE?

Charter

In order to be viewed as a high quality bond issuer, capable of obtaining competitive yields with minimal government support, the SMF must be viewed as an extremely low-risk operation. Its narrow charter and conservative operations will be its most important assets in establishing a pristine reputation. Creating the SMF as a new and unique type of institution can assist in developing this reputation. As a new institution type, the SMF will not be subject to the sometimes negative perceptions of other financial institutions. The public purpose of the SMF—to enhance the flow of long-term funds to housing and further the development of a long term debt market—can be underscored by establishing the facility as a new and unique class of institution.

It has been recommended that the SMF be a private, limited company (PT) operating in the financial sector. It need not be a bank as it will not accept consumer deposits. It cannot be a finance company because it will need to issue bonds. The SMF will need the designation as operating in the financial sector under Indonesian law so that it will only be taxed on net interest income, so that banks can invest in its equity and so that it can be regulated by the Ministry of Finance, with the assistance of the Bank Indonesia.

An ownership share of Bank Indonesia or other government institution is seen as a necessary prerequisite for institutional investors to purchase the bonds. The proposed level of involvement is 10%. Government involvement at the beginning can ensure that the public purpose of the facility is being properly developed. Such involvement does, however, mean that the facility operates with a perceived or "implicit" guarantee (namely, that the government would honor SMF debt obligations in event of its failure). Bank Indonesia would be expected to divest its shares after the SMF's initial five years of operations.

The SMF would maintain its initial ownership composition for at least the first five years. Individual investors would be limited to a maximum 10% ownership share. It is expected that banks and institutional investors will be interested in being equity investors. An equity contribution by the Asian Development Bank is now being considered as part of the private sector share.

The recommended approximate composition of the six-member Board of Commissioners is:

- One-third from the public sector (e.g., one from Bank Indonesia and one appointed by the Minister of Finance);
- Two-thirds elected by the shareholders; limit of one-third for member borrowers;
- The Chairman of the Board of Commissioners for the first five years will be a representative from Bank Indonesia.

The public sector appointment is justified by the public policy significance of the SMF. The majority from the private sector reflects the fact that private sector institutions will be contributing a majority of the equity. The restriction on shareholder-elected directors reduces the possibility of a conflict of interest between the interests of the SMF shareholders and its borrowers. Having the Chairman of the Board be from Bank Indonesia for the first five
years will facilitate the acceptance of the SMF among bank borrowers and bond investors. It may also facilitate the assessment of the relative risk of potential bank borrowers. After the initial five year period the Chairman may be elected by shareholders.

**Secured Loans**

The SMF will be an impartial lender to all qualified borrowers and will maintain reasonable diversification among its borrowers. All Indonesian mortgage lenders and foreign joint venture mortgage lenders will be able to borrow from the facility if they meet its requirements.

The primary purpose of the SMF is to expand the supply of long-term funds for housing loans. Thus, the collateral supporting the SMF loans will be primarily residential mortgage loans. The definition of residential should include both owner-occupied and rental. The SMF can adjust its over-collateralization requirements to reflect the differences in risk between the two. As many residential projects include small amounts of non-residential space, it is proposed that projects with up to 20% non-residential units be included in the definition of eligible collateral. (It is up to the SMF to decide whether to allow such collateral from any particular lender.) To limit its risk it is proposed that eligible collateral include only permanent long-term mortgage loans, not construction or development loans. To aid in collateral management, it is proposed that lenders be able to include securities of the Indonesian government and state-owned enterprises as eligible collateral. A limit of 20% of such collateral is proposed to ensure the focus of the facility's activities on housing. SMF stock owned by a lender should also be available as secondary collateral for offset against borrowings, if necessary.

In order to make facility loans more attractive to lenders, it is proposed that such loans not be callable by the lender. This feature will allow them to be included in the definition of long-term funds and exempt from Bank Indonesia reserve requirements. In so doing, facility loans will have equivalent treatment to interbank loans. Such treatment is in line with the facility's mission of providing long-term funds and liquidity for lenders.

**Debt Securities**

A key to the success of the SMF is the ability to place its debt securities at rates attractive to institutional investors. A narrow focus of the SMF and a sound asset base will be necessary to obtain funds from these investors. The SMF will have the authority to issue both long- and short-term debt to manage its liquidity and interest rate risk.

A problem in Indonesia for an institution with a dependence on the sale of securities to obtain funds is the high cost of issuance, which currently ranges from 5% to 7% of an issue. In order to reduce these costs, the SMF should have the ability to privately place its debt (approximately 50% of issuance costs are for underwriting and related services).

Commercial banks are likely to be investors in SMF debt securities. To make the securities attractive to the banks, it is proposed that they be accorded a 20% capital risk weight. A 20% risk weight is applicable because the SMF securities are similar to interbank debt and of high credit quality. The high credit quality derives from the fact that securities are backed by the capital of the SMF, the capital of borrowing banks and the mortgages that collateralize their loans. The debt securities of the Federal Home Loan Banks, Fannie Mae, and Freddie Mac all carry a 20% risk weight. The securities issued by Cagamas carry a 10% risk weight.

**SMF COMPARISON**

As part of the analysis supporting creation of the SMF, the consultants examined SMF institutions in the United States and Malaysia, as well as the new secondary market conduit in Hong Kong.

**United States**

In the U.S., the Federal Home Loan Banks (FHLBs) have been making collateralized loans to mortgage lenders since the 1930s. The FHLBs are congressionally chartered entities owned by their more than 6,000 financial institution members (primarily banks and thrifts but also credit unions and insurance companies). The FHLBs were initially capitalized by the U.S. Treasury in 1932. Over time, as new members joined and existing members borrowed, the FHLBs acquired capital from their members that allowed them to retire the Treasury stock. By 1947 the entire Treasury stockholding was retired, and the FHLBs have been wholly owned by financial institutions for 50 years.

As of June 30, 1997, the FHLBs had over $315 billion in assets and $277 billion in debt outstanding, making them on a combined basis the third largest financial institution in the U.S. The bonds are joint and several obligations (not collateralized) of the 12 banks in the system and are rated AAA/Aaa. All borrowings are collateralized by the FHLBs' loans. During their 65-year history the Banks have had no credit losses.

The FHLBs are regulated and supervised by the Federal Housing Finance Board (FHFB), an independent agency whose sole responsibility is their supervision. The FHFB appoints the public sector directors for each bank (approximately 40% of Board representation); shareholders elect the majority of directors.

The FHLBs receive a number of privileges from the government. The most important benefit is an implicit government guarantee on their debt (i.e., the market believes that the government would not let them fail). As a
result, their bonds trade at yields less than corporate AAA and less than 50 basis points over USA government bonds of comparable maturity. FHLB securities also enjoy certain privileges including exemption from SEC issuance requirements, ability to issue in paperless form through the Federal Reserve System, authority of the Secretary of the Treasury to purchase up to $4 billion of their securities and access to examination reports of member financial institutions. FHLB loans are exempt from reserve requirements. The FHLBs are exempt from corporate income tax but must contribute $400 million annually to various housing initiatives and the interest on bonds issued to repay depositors in failed savings and loan institutions, which represents an effective tax rate of about 30%.

Malaysia

Cagamas is the most successful example of a secondary mortgage facility in a developing country. (See the article by Huang Sin Cheng in this issue.) It was incorporated in 1986 and commenced business in 1987, following deliberations between the Central Bank, the financial institutions and consultants from an American financial institution. Cagamas was set up with the blessings of the government to facilitate and encourage homeownership in Malaysia and to contribute to the development of the debt security market. To achieve this, it acts as an intermediary between the primary lenders and long-term investors. By doing so, the company alleviates the maturity mismatch of the primary lenders which grant housing loans with repayment periods of up to 30 years and finance them with funds of mainly less than one-year maturity. Additionally, by purchasing the housing loans, Cagamas also takes over from the originators the interest-rate risks inherent in these loans. The debt securities, particularly fixed-income securities, issued by the company create additional investment options for investors. The secondary mortgage market in Malaysia began with the commencement of operations by Cagamas in 1987, and it is the second largest debt issuer (behind the government) in the country.

Cagamas purchases mortgage loans (the principal balance outstanding) from mortgage originators, with full recourse to the primary lenders, at a fixed or floating rate for three to seven years. This is in effect a secured financing with Cagamas looking first to the credit of the financial institutions for repayment when mortgage loans default. Cagamas issues debt securities to investors in the form of fixed- or floating-rate bonds, Cagamas notes or Cagamas Mudharabah (Islamic) Bonds. Cagamas is the largest non-government issuer of debt in Malaysia. Its securities are rated AAA by the Malaysian Rating Agency and subject to only a 10% risk weight for bank investors. Twenty percent of its shares are owned by the Central Bank and the remaining shares are held by commercial banks and finance companies. At the end of 1995, Cagamas assets exceeded 16 billion Ringgit (US$ 6.5 billion), and its outstanding debt securities exceeded 15.5 billion Ringgit (US $6.3 billion).

Cagamas receives a number of privileges from the Malaysian government. Loans sold to Cagamas are not subject to the high (13.5%) reserve requirements. Its securities are eligible as liquid assets (banks and finance companies must keep an additional 10% of assets in liquid—government or Cagamas securities or cash—form). Cagamas securities carry a risk weighting of 10%, compared with a 50% rating for housing loans. The Cagamas Board is chaired by the Chairman of the Central Bank.

Hong Kong

In 1996 the Hong Kong Monetary Authority (HKMA) completed a study on a proposal to set up a mortgage corporation in Hong Kong. The proposed institution would act in a manner similar to Fannie Mae and Freddie Mac in the United States, purchasing mortgages from PMLs and issuing bonds to finance its assets, with future issuance of mortgage pass-through securities (MBS). The proposed institution would be 100%-owned by the government through the Exchange Fund and capitalized by the government with HK $1 billion (approximately U.S. $130 million). The company would be a limited company with members from the public and private sectors, on the Board of Directors.

Tables 1 and 2 provide a comparison of the key features of these facilities and the privileges they receive from their governments with the proposed SMF.

CURRENT STATUS AND CONCERNS

The Secondary Mortgage Facility has been approved by the expert staff on the Indonesia Monetary Board. In addition, the Ministry of Finance Decree and Bank Indonesia Circulars for the Secondary Mortgage Facility have been drafted and are now undergoing final review by the government of Indonesia.

This review addresses three key issues connected with establishment of the Secondary Mortgage Facility which continue to be of concern to government of Indonesia policymakers.

Issue 1: Will the SMF Fuel Inflation and Contribute to Overheating of the Economy?

Aggregate inflation is typically a monetary phenomenon caused by simulative monetary policy. The activities of the SMF will not result in an increase in the total amount of money outstanding nor necessarily an increase in total credit provided. Rather it will result in banks substituting long-term SMF advances for short-term deposits and expanding mortgage lending relative to other types of lending. The activities of the SMF will not significantly affect the ability of Bank Indonesia to conduct monetary policy.
**Table 1. Comparison of Secondary Mortgage Facilities: Features**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Proposed SMF</th>
<th>Cagamas</th>
<th>FHLB</th>
<th>HKMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization Form</td>
<td>Limited liability company</td>
<td>Limited liability company</td>
<td>Government chartered corporation</td>
<td>Government chartered corporation</td>
</tr>
<tr>
<td>Ownership</td>
<td>90% private 10% central bank</td>
<td>80% private 20% central bank</td>
<td>100% private member-owned (initially 100% government)</td>
<td>100% government</td>
</tr>
<tr>
<td>Ownership Restrictions</td>
<td>10% individual shareholder maximum</td>
<td>N/A</td>
<td>Qualified mortgage lenders voting limits</td>
<td>N/A</td>
</tr>
<tr>
<td>Board of Directors</td>
<td>1/2 government 1/4 private Chair: central bank</td>
<td>1/4 government 1/2 private Chair: central bank governor (size 12)</td>
<td>Approximate 60% private, 40% official (government appointed)</td>
<td>Majority private</td>
</tr>
<tr>
<td>Capital Requirements</td>
<td>40:1 leverage (2.5% capital-to-assets)</td>
<td>45:1 current leverage (2.2% capital-to-assets)</td>
<td>21:1 maximum leverage (4.75% capital-to-assets)</td>
<td>Proposed 20:1 maximum leverage (5% capital-to-assets)</td>
</tr>
<tr>
<td>Principal Asset Characteristics</td>
<td>Collateralized loans</td>
<td>Loans purchased from with recourse and mandatory repurchase</td>
<td>Collateralized loans</td>
<td>Mortgage loan purchases</td>
</tr>
<tr>
<td>Debt Characteristics</td>
<td>Short- and medium-term debt</td>
<td>Short- and medium-term debt</td>
<td>Short- and medium-term debt</td>
<td>Term debt and MBS</td>
</tr>
<tr>
<td>Supervision</td>
<td>Ministry of Finance</td>
<td>Central bank</td>
<td>Special regulator</td>
<td>Monetary authority</td>
</tr>
</tbody>
</table>

**Table 2. Comparison of Secondary Mortgage Facilities: Privileges**

<table>
<thead>
<tr>
<th>Feature</th>
<th>SMF</th>
<th>Cagamas</th>
<th>FHLB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guarantee of Debt by Government</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Back-up Borrowing Authority</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Bonds Favored Investment</td>
<td>No</td>
<td>Yes (liquid asset, treated as government security)</td>
<td>Yes (treated as government security)</td>
</tr>
<tr>
<td>Special Tax Treatment for Facility</td>
<td>No</td>
<td>No</td>
<td>Yes (exempt from federal and state corporate tax with fixed contribution)</td>
</tr>
<tr>
<td>Special Tax Treatment for Debt</td>
<td>No</td>
<td>No</td>
<td>Yes (exempt from some state tax)</td>
</tr>
<tr>
<td>Special Capital Treatment for Bonds</td>
<td>No (20% risk weight like interbank debt)</td>
<td>Yes (10% risk weight)</td>
<td>No (20% risk weight like interbank debt)</td>
</tr>
<tr>
<td>Reserve Requirement for Loans</td>
<td>Exempt</td>
<td>Exempt</td>
<td>Exempt</td>
</tr>
<tr>
<td>Special Advantages in Debt Issuance</td>
<td>Yes (prior approval by SEC) BAEPAM</td>
<td>Yes (exempt from stamp duty, approval by SEC)</td>
<td>Yes (SEC exempt, Fedwire access)</td>
</tr>
</tbody>
</table>

Note: Details on HKMC not yet available.
The impact on property inflation is likely to be slight. Borrowing from the SMF should improve the liquidity position of mortgage lenders, increasing their willingness to invest in mortgages and, therefore, the supply of mortgage credit. This increase in supply, however, need not translate into higher property prices if the supply of housing is relatively elastic with competition in the production of housing. Since the SMF structure involves no direct government subsidy to reduce mortgage rates, the SMF is likely to have only a modest effect on mortgage rates, with any reduction in spreads reflecting an improvement in the liquidity of mortgages and increased competition. The structure of the housing supply industry in Indonesia appears to be relatively competitive. There is no reason to believe that a reduction in mortgage rates related to the improved liquidity of mortgage loans will increase property inflation by allowing suppliers to capture the benefit in the form of higher home prices.

**Issue 2: Will the SMF Cause Increased Real Estate Speculation, Especially in Light of the Current Southeast Asian Currency Crisis?**

This concern has been addressed by limiting qualifying mortgages to those on primary residences or owner-occupied dwellings. Second homes, speculatively owned (non-primary residence) homes and non-residential buildings would be ineligible as loan collateral for or purchase by the SMF. Evidence from the United States and elsewhere indicates that mortgages on owner-occupied dwellings tend to carry significantly less credit risk than those on non-owner-occupied buildings. Limiting the mortgages to owner-occupied loans would further reduce the credit risk of the SMF. SMF underwriting guidelines can require that primary lenders spot check use of funds of borrowers to avoid speculative purchases.

In addition, access to long-term funds may reduce the magnitude of property cycles in Indonesia. During periods of expansion, banks may view the liquidity risk of mortgage lending to be low and increase the growth rate in their mortgage portfolios. During periods of contraction the banks may reduce their volume of long-term lending. This start-stop aspect of mortgage finance can lead to more pronounced cycles in the real sector as developers attempt to get projects on line when funds are plentiful. The volatility in development can lead to upward pressure on materials prices and greater uncertainty premiums for private sector investors.

**Issue 3: What Is the Effect of a Failure of an SMF Borrower?**

This concern emanates from several recent bank failures and the impact on home buyers if a PML that has borrowed from the SMF fails. By design, the SMF can take possession of the loan collateral in the event of borrower failure. In effect, this reduces the assets of the failed bank available to the liquidator (government) to pay depositor claims. Unfortunately, there is no alternative as access to the collateral is necessary to ensure the high quality and thus attractiveness of the SMF bonds.

The discussion of these issues has delayed final promulgation of the documents that would constitute the SMF’s legal basis and allow for establishment and operational development of the SMF. Once the currency turmoil has passed it is hoped that the SMF will become a reality and begin contributing to Indonesia’s financial development.

**NOTES**


2. By way of contrast, Thailand has a ratio to GDP of 13% and Malaysia 22%.

3. BTN, the state housing bank, has a portfolio of approximately Rp 6 trillion.

4. The two largest insurance companies have expressed interest in expanding their high quality bond portfolios. As of 1994, these institutions together held over Rp 9 trillion in assets, the majority of which are invested in short-term bank deposits and government securities.

5. Asset-backed securities, collateralized with credit card receivables and car loan receivables, have been issued. Although several banks are investigating the possibility of issuing mortgage-backed securities, confusion over the nature of bankruptcy remote trusts or special purpose vehicles under Indonesian law and market uncertainties have prevented issuance of MBS to date.

6. In the summer of 1997 in the wake of the Thailand currency crisis, Bank Indonesia announced the temporary suspension of bank property lending.

7. This design lies behind the success of the FHLBs in the US. Despite massive failures of thrift institutions during the 1980s, the FHLBs did not suffer any losses.