Indonesian Secondary Mortgage Facility Study

Prepared for Ministry of Finance
Government of Indonesia

by

Michael J. Lea, Ph.D.

and

Robert Blanchard, J.D.

supported by Research Triangle Institute and the

U.S. Agency for International Development

July 1994

Ministry of Finance - Gedung B, 6th Floor, Room 607
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Phone: 3441228 (Direct), 3810162-6 Ext. 7160 (Operator) ; Fax. 365763

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EXECUTIVE SUMMARY

Indonesian Secondary Mortgage Facility Study

In 1993, a study conducted for the Ministry of Finance and financed by USAID reviewed the prospects for development of a secondary mortgage market in the Republic of Indonesia. The principal conclusion of the study was that the major impediment to expansion of housing finance at more affordable terms for borrowers was the lack of long term funding for lenders. The recommended solution was the creation of a secondary mortgage facility ("the Facility") that would raise long term funds from the capital markets through bond issues and lend these funds to primary market lenders on a long term basis.

During the past 12 months, a working group consisting of senior government officials and representatives from a number of private sector organizations in Indonesia have reviewed and discussed this recommendation. A decision was made to move forward with development of a Facility in Indonesia. A second consultancy took place in June 1994 to provide the following:

- Update of the status of the Indonesian mortgage market;
- Development of a set of criteria for assessing the suitability of an existing institution or the desirability of creating a new institution to function as a Facility;
- Review of the legal and regulatory environment affecting the operations of a Facility.

Market Conditions: The volume of housing credit outstanding in Indonesia is quite small but growing rapidly. A number of private banks have significantly expanded their mortgage lending during the last year. As a result of increased competition, mortgage terms are becoming more flexible. Loan maturities, which still average less than 10 years, are now being offered for 15 years or longer. There is increased down market lending as evidenced by a decline in average loan size and increased lending on existing units.

However, as was the case last year, the only source of funding for the private banks is short term deposits. As a result there is continued concern about the potential funding risks associated with increased long term lending. A large volume of long term funds exists in the form of pension and insurance company funds which currently are invested in short term assets. Institutional investors are quite interested in expanding their bond portfolios. Therefore, the overall conclusion from our review of mortgage and capital market conditions is that interest in and need for a Facility remains high.

Operations: The Facility would initially function as a lender to primary market mortgage lenders. It would make overcollateralized loans to such lenders in order to manage its credit risk exposure. Initially the structure of the loans and the bonds would be quite simple but as the Facility, its borrowers and its investors became more sophisticated, many different structures could be utilized. The principal source of funds for the Facility would be proceeds from bonds

sold in the capital markets. In order not to compete with its customers, it is recommended that the Facility not be a retail lender or deposit taker.

In order to minimize its budgetary impact and ensure accountability and efficiency in its operations, the Facility should be a limited liability company with a shareholder-elected Board of Directors. Our interviews indicated that it is essential for the Facility to have some form of government involvement at the outset in order for the large institutional investment funds to purchase its bonds. This involvement can take the form of an equity investment by Bank Indonesia or the Ministry of Finance. However, it is also critical to have private sector involvement. Ideally, this involvement should come from equity investments by its customers (both primary market lenders and institutional investors).

Assessment: In addition to developing a detailed set of criteria to assess potential candidate to be a secondary mortgage facility, the report reviewed the characteristics of three institutions; Bank Papan Sejahtera, Bank Tabungan Negara and Danareksa All three of these firms have strengths and weaknesses as regards the functions of a secondary mortgage facility. Although a detailed review and recommendation is out of the scope of this consultancy it is clear that none of the three candidates is an ideal fit for the function.

The alternative is creating a new, single purpose institution to serve as the Facility. The advantage of this approach is that the institution could be specialized and focused in its mission. It would not compete with its customers or with other parts of a large, well established organization with a different mission. Although there will be start-up costs in terms of resources and time frame to begin operations, the fact that no institution in Indonesia has engaged in collateralized lending or loan purchase suggests that these costs will be borne regardless of the institution selected for the task. A brief review of the institutional categories available for the Facility suggests that a finance company charter would be most appropriate.

Legal and Regulatory Infrastructure: The legal infrastructure necessary to support the Facility entails both the laws external to its operations and the regulatory and contractual principles governing the internal operations of the Facility. A secondary mortgage market requires as its foundation property ownership rights and mortgage lending laws. In addition, pledge laws regarding the use of mortgage instruments as collateral and capital market regulations must to some degree be in place. Based upon the interviews conducted and the review of legal summaries and English translations of Indonesian laws, the External Legal Infrastructure in Indonesia is adequate to support development of the Facility.

The operations of the Facility must also be supported by the organizational structure, contractual relationships among participants and guidelines governing participation in programs sponsored by the Facility. This Internal Legal Infrastructure will need to be developed in conjunction with implementation of the Facility.

The charter of the entity chosen to operate the Facility should limit the activities of the Facility to making loans to Primary Mortgage Lenders collateralized by mortgages, acquiring

mortgages from PMLs and issuing bonds and other mortgage backed securities. The benefits of a single purpose entity strongly suggest that a new institution be organized to act as the Facility.

Over time, uniform contracts should be developed to provide comfort to secondary market investors that legal risks have been mitigated and to enhance the efficiency with which the Facility operates. However, it is not practical to require standardized documents from the outset and the use of standard documents should be phased in over time. Until standard documents are phased in, the underwriting process will require a more intensive review of portfolio documentation and initial spreads and collateralization levels should consider the expense of detailed portfolio due diligence.

The Facility will also need to develop uniform origination and servicing guidelines governing the eligibility of collateral and certain servicing standards. Areas which will require consideration are: real estate appraisals, income to expense ratios, loan to value ratios, loan limits and similar matters. Drawing from resources already developed within the Indonesian bond market and experiences in United States secondary mortgage market, the Internal Legal Infrastructure can be developed within a reasonable time frame.

Conclusion: With the cooperative pooling of resources within the various agencies of the Ministry of Finance, private banking sector and outside financial and legal experts, the development and implementation of a secondary mortgage facility is feasible.

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Indonesian Secondary Mortgage Facility Study

Introduction

In 1993, a study conducted for the Ministry of Finance and financed by USAID reviewed the prospects for development of a secondary mortgage market in the Republic of Indonesia.[1] The principal conclusion of the study was that the major impediment to expansion of housing finance at more affordable terms for borrowers was the lack of long term funding for lenders. The recommended solution was the creation of a secondary mortgage facility ("the Facility") that would raise long term funds from the capital markets through bond issues and lend these funds to primary market lenders ("PMLs") on a long term basis. As noted in the final report, the creation and operation of the Facility would have the following benefits:

- Stimulate increased mortgage lending by private banks;
- Increase the pool of funds to finance housing (through institutional investment funds);
- Provide long-term funding for housing finance;
- Reduce the funding risk for primary market lenders;
- Improve the affordability of housing through reduced monthly payments on mortgages with a longer term to maturity;
- Stimulate the domestic bond market through creation of credible high volume issuer.

During the past 12 months, a working group consisting of senior government officials and representatives from a number of private sector organizations in Indonesia have reviewed and discussed this recommendation. A decision was made to move forward with development of a Facility in Indonesia. A second consultancy took place in June 1994 to provide the following:

- Update of the status of the Indonesian mortgage market;
- Development of a set of criteria for assessing the suitability of an existing institution or the desirability of creating a new institution to function as a Facility;
- Review of the legal and regulatory environment affecting the operations of a Facility.

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[1] Lea [1993].

Mortgage Market Update

The volume of housing credit outstanding in Indonesia is quite small. At the end of 1993, it is estimated that only 4 percent of outstanding credit, or approximately Rp 6 trillion (US$ 2.5 billion), was devoted to residential real estate. Although detailed data on the composition of real estate lending are not available, data from Bank Indonesia shows that total real estate credit outstanding nearly doubled during the 12 month period ending in March 1994.[2] Several of the largest banks have increased their portfolio holdings of residential mortgage loans to 5 to 7 percent of assets and have indicated that they would like to invest as much as 15 to 20 percent.[3] Bank mortgage portfolio performance has been quite good, reflecting in part the recent strong growth in lending. As was the case last year, these banks do not believe that difficulties associated with title and lien registration and foreclosure are major impediments to lending, even for loans on existing housing.

With increased competition, mortgage lending terms have improved. Private market lenders are making longer maturity loans (up to 15 years although the average is still less than 10). In addition, they appear to be expanding down market by providing smaller loans on existing as well as new construction. Private bank loans range in size from Rp 30 million to Rp 400 million with the majority between Rp 60 and Rp 90 million. Mortgage rates remain high (17% - 18%) with a relatively wide spread to private bank deposit rates (13% - 14%). For those households that can afford to purchase a house, however, the real user cost is considerably lower reflecting double digit expected house price inflation in many metropolitan areas.[4]

However, as was the case last year, the only source of funding for the private banks is short term deposits. As a result there is continued concern about the potential funding risks associated with increased mortgage lending. One of the major PMLs reported that it was

[2]There is a need for increased data collection in this growing sector. Data collected by Bank Indonesia do not break out residential and non-residential real estate lending nor adequately separate construction and development loans from permanent loans. This study focuses on private market provision of housing finance. The largest housing lender is the state housing bank, BTN, which targets its loans mainly for lower income borrowers.

[3]For example, both Bank Bali and Bank International Indonesia, two of the largest private lenders, have 6 percent of their assets invested in housing loans. At the end of 1993 their assets were Rp 4 trillion and Rp 7 trillion respectively. Thus, their mortgage loans total approximately Rp 6,700 billion (as contrasted with BTN which has Rp 4.4 trillion outstanding). More importantly the share of assets of each has grown by 50 percent during the past year.

[4]The real user cost of capital for owner-occupied housing is the real after-tax financing rate for a combination of debt and equity as determined by the loan-to-value ratio.

exploring the feasibility of issuing a bond collateralized by mortgage receivables. However, they noted that the estimated cost (5 to 7 percent of the issue) and uncertainty over the regulatory treatment of the security were significant impediments to issuance.

The Indonesian bond market remains thin and illiquid. New issues, mainly by state banks and state enterprises, are purchased and held by institutional investors (pension funds, insurance companies, banks) with little secondary trading. The investors interviewed for this study reported significant interest in new bond issues. Although they appear to recognize the desirability of long term fixed rate assets, their current preferences are 5 to 7 year floating rate instruments. Two of the major investors, Astek and Taspen, expressed significant interest in expanding their high quality bond portfolios. These institutions together have over Rp 9 trillion in assets, the majority of which are invested in SBIs and short-term bank deposits.

The overall conclusion from our brief review of mortgage and capital market conditions is that interest in and need for a Facility remains high.

Operations of the Facility

Mission: In order to develop criteria to assess potential candidates for a secondary mortgage facility in Indonesia it is important to describe its operations and organization. The ideal Facility would be a single purpose organization with the mission of providing liquidity to PMLs. Its functions would be to lend to or buy loans from PMLs financed primarily through bond issuance. Its other sources of funds would be deposits from PMLs and equity. It should be single purpose in order to develop the expertise necessary to carry its mission and to avoid the possibility of diverting its resources and expertise into other, less policy relevant, lines of business.

Assets: As a lender the Facility would provide loans to PMLs collateralized (or secured) by their mortgage loan portfolios. In the event of a default on a loan to a PML, the Facility would have the right to service (collect the loan payments) or liquidate (sell) the collateral in order to satisfy the loan. In order to safeguard against a decline in the collateral value (e.g., if interest rates rise and the loan rates are fixed or if house prices fall and the incidence of borrower default increases) and account for the potential costs associated with servicing or liquidating the collateral, the Facility would make overcollateralized loans. For example, the Facility may make a Rp 700 million loan to a PML backed by a mortgage portfolio of Rp 1 billion. Such a loan is said to be overcollateralized as there is Rp 1.42 of collateral for every Rp 1 of loan.

As with any lending situation, the Facility would underwrite the borrower and the collateral before making the loan. The Facility must develop standards to assess the financial strength of the PML (e.g., capital adequacy, liquidity, incidence of non-performing loans).[5] It also would set standards for the collateral it would accept (e.g., loan type, borrower underwriting standards (maximum loan-to-value and payment-to-income ratios), loan size). It would use these guidelines to determine whether to lend and the degree of overcollateralization of the loan. Thus a PML with strong financial performance and conservative borrower underwriting would receive a loan with a lower overcollateralization level than a weaker or more aggressive PML. The terms of the loans will be dictated by the characteristics of the bonds the Facility issues. Initially it may make long term (e.g., 10 year) floating rate loans. Over time, fixed-rate and indexed loans could be offered as well as loans with amortization features and prepayment options which more closely match the characteristics of the mortgage loans.

An alternative to collateralized lending is loan purchase. This alternative is significantly more complicated than collateralized lending. The Facility must be able to service the loans and underwrite (i.e., check the documentation and characteristics) of its purchases. It would be exposed to greater default risk and subject to greater operational expense (e.g., it would have to service the loans or arrange for and monitor a third party servicer). This option could be developed over time as PML balance sheet needs and Facility capabilities evolve. In order to avoid competing with the institutions to which it is lending as well as to minimize its operational expense, the Facility should not be a retail lender (i.e., its customers should be other banks and not the public).

In conjunction with the single purpose nature of the Facility its other assets should be limited to those necessary for liquidity management including cash, investment securities (preferably limited to issues by the government or state owned enterprises) and deposits in banks.

Liabilities: The Facility will issue bonds to finance its lending activities. In order for its loans to be attractively priced, it should be a stand-alone bond issuer (i.e., not dependent on an external guarantee). The structure of the bonds will depend on market demand. Because of the limited experience of Indonesian institutional investors with bonds, the Facility will have to

[5] The loan would be the obligation of the PML. Thus, the facility is underwriting the ability of the PML to repay the loan. In addition, the PML would service the collateral securing the loan. Financially sound servicers are less likely to allow servicing (and thus collateral value) to deteriorate than their weaker brethren.

educate its bond purchasers about the characteristics and likely performance of the bonds. Initially the bonds should be as simple as possible (e.g., bullet or interest only structure). As the Facility is established and investors grow more sophisticated the characteristics of the bonds can change (e.g., amortizing, indexed, with options).

In order not to compete with its customers, the Facility should not be a retail deposit issuer. Its funding should come from institutional investors. In addition to bonds, it could maintain deposits for the PMLs to which it lends (perhaps offering cash management services as well). The Facility's equity requirements should be in line with the low risk of its operations. Because its loans will be collateralized with residential mortgages, a minimum capital-to-assets ratio of 2 percent would be appropriate.[6]

Ownership: In order to minimize its budgetary impact and ensure accountability and efficiency in its operations, the Facility should be a limited liability company with a shareholder-elected Board of Directors. Our interviews indicated that it is essential for the Facility to have some form of government involvement at the outset in order for the large institutional investment funds to purchase its bonds. This involvement can take the form of an equity investment by Bank Indonesia or the Ministry of Finance. However, it is also critical to have private sector involvement. Ideally, this involvement should come from equity investments by its customers (both PMLs and institutional investors).

One approach to capitalization could be that used by the U.S. government to privatize Fannie Mae in 1968. The government provided the initial equity for the company but its customers (loan sellers) were required to purchase a small, fixed amount of stock in order to obtain their loans. Over time the government's equity stake was substantially diluted and it was eventually sold. The stock purchase requirement also was dropped (and ownership was opened up to other investors through the stock exchange).[7]

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[6]Currently residential mortgages carry a full capital-to-assets (CAR) weight of 8 percent in Indonesia. One way to incent greater mortgage lending is to reduce this weight. For example mortgage loans carry a CAR weight of 4 percent in most other countries. A reduction could be justified on the basis of reduced funding risk once the facility were established. In the U.S., the overcollateralized loans (advances) made by the Federal Home Loan Banks carry a 1.6 percent weight (as interbank loans). Cagermas, the secondary market facility in Malaysia, has a 1.75 capital-to-assets ratio. Its assets are loans purchased with full recourse from banks.

[7]This requirement still exists for the Federal Home Loan Banks which are mutual organizations (owned by their customers).

Operations (Risk Mitigation): The Facility will be exposed to and have to manage a variety of risks. The three major forms of risk are credit risk (the risk of borrower default), funding risk (the risk of a mismatch between its assets and liabilities) and operations risk (the risk of a mismatch between its costs and revenues). The proposed structure of the Facility will allow it to operate with low risk in all three areas. The ability to secure its loans with PML mortgage portfolios, on an overcollateralized basis, will significantly reduce its credit risk. It will further minimize this risk through diversification (e.g., limiting PML loan size and the size of individual loans that serve as collateral) and through its underwriting of the collateral and institution.[8]

The Facility will manage its funding risk through matching the characteristics of its loans and funding instruments.[9] However, because of the differing needs of its borrowers and investors, it will be exposed to some mismatch between its assets and liabilities. For example, its borrowers may prefer amortizing loans while its investors prefer non-amortizing securities. This type of risk is quite manageable. In fact, the Facility should develop an expertise in this type of risk management. As a specialized institution with capital markets access it should be able to develop the loan and securities products necessary to manage funding risk. Its exposure to funding risk can be limited by regulation (particularly during the time it has government involvement).[10]

As a wholesale institution the Facility should have a low ratio of operating expenses to assets and thus minimal operating risk. It will be critical for the Facility to develop automated systems for cash flow management and well as systems and procedures for underwriting and monitoring the borrower and the collateral.[11]

Market: Ultimately, the success of the Facility will depend on its ability to offer attractive funding to PMLs and attractive securities for its investors. The demand for Facility loans will be a function of their characteristics and price. The major characteristic driving the demand for Facility loans will be a long term maturity. The Facility could offer a variety of loan terms to its

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[8]The credit risk inherent in mortgage lending will stay with the PML which has a comparative advantage in underwriting and management due to its retail orientation.

[9]There are several components to funding risk including interest rate risk (potential mismatch of rates on assets and liabilities), options risk (reinvestment risk due to prepayment of loans), spread risk (potential change in asset and liability spreads over time) and liquidity risk (risk of loss due to cash shortfalls).

[10]Regulation could take the form of additional capital requirements based the interest rate sensitivity of its equity similar to those now used in the U.S. or requirements for a degree of matching between assets and liabilities as is the case with European mortgage banks.

[11]Overcollateralization reduces the need for large scale collateral underwriting and monitoring. The specific tasks involved are outlined in the legal infrastructure section below.

borrowers ranging from 1 year to 15 years or more.[12] In addition, the Facility could offer loans with other characteristics generally unavailable to depository institutions, including amortizing, fixed rate and prepayable loans.

The pricing of the loans will depend on two factors, the Facility's funding costs and the spread it requires to cover its operating costs, risk and return for its shareholders. Its funding costs will depend on the demand for its bonds. If the Facility is initially partially owned by the government, it should be able to issue bonds at yields comparable to state banks and enterprises. As such, its funding costs should be significantly less than those of private banks financing with bonds.[13] The greater the perceived involvement the lower the required yield (but the greater the risk to the government). Over time, as the Facility becomes established and more familiar to investors, the government involvement can be reduced with minimal impact on funding costs.[14]

The spread over the funding rate required by the Facility can be quite modest. As a wholesale institution, the Facility will have a relatively low operating cost. The risk premium for its activities can also be relatively low as much of the credit and funding risk can be eliminated through proper structuring and underwriting. There is, of course, a trade-off between the structure of its loans and the appropriate pricing. Loans with lower levels of overcollateralization will be more attractive to PML borrowers but riskier to the Facility. In addition, in order to be attractive to borrowers (and pass the benefits of its status on to the ultimate recipients of the funds), the Facility should price on the margin. In other words, its spread should reflect the incremental costs and risks of new loans. This means that the Facility will initially operate at a loss until its volume of business is sufficient to recoup its start-up (fixed) costs.

What does this mean in terms of likely pricing? As shown in Table 1, the Facility could provide loans at very attractive (floating) rates to its borrowers today.

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[12] A one year minimum is suggested to avoid having the facility compete for short-term funds with its borrowers. The maximum depends on both the characteristics of the loans and the bonds. If the facility makes non-amortizing loans to PMLs it could issue comparable maturity non-amortizing bonds. If the facility makes amortizing loans but issues non-amortizing securities, the maturity on the bonds can be significantly less than that of the loans.

[13] One issue in the Indonesian bond market is the lack of a reference rate, reflecting the fact that the government does not issue domestic debt. Rates on floating rate bonds are currently set as a spread over the average 3 month state bank deposit rate. State enterprises pay an average of 50 basis points over this rate; private issuers pay 150-200 basis points above.

[14] This has been the case with the Caisse de Refinancement Hypothécaire in France. Its bond issues carried a government guarantee for the first five years which was then dropped (as planned). The CRH bonds now trade at lower spreads to comparable maturity government bonds than they did with the guarantee (reflecting the greater liquidity). For more detail see Stone and Zissu [1994].

Table 1
Representative Pricing

Source	Rate
Bond Rate	13%
Facility Spread	0.5%
Bank Loan Rate	13.5%
Mortgage Rate	16.5%

The bond rate reflects a 50 basis point spread over the state bank deposit rate. The Facility spread of 50 basis points reflects its low cost and low risk structure. The bank loan rate is less than or equal to its deposit costs. Finally, the spread between the bank mortgage rate and its funding cost (through the Facility loan) is lower than average reflecting the reduction in funding risk obtained through the provision of long term financing.

Candidate Assessment

The description of the facilities operations suggest criteria used to assess potential candidates for the role of a secondary mortgage facility in Indonesia. These criteria are shown in Table 2.

Table 2
Indonesian Secondary Mortgage Facility Candidate Assessment

Candidate

	Ideal	**BPS**	**BTN**	**Danareska**	**De Novo**
Mission					
Single/Multi-purpose	single purpose				
Compete/Complement	complement				
Lending					
To banks	yes				
For mortgages	yes?				
For other purposes	no				
Past performance	low defaults				
Funding					
Bond Issuer	yes				
Deposit Issuer	no				
Government Support	yes				
Operational					
Monitoring Banks	yes				
Monitoring Mortgages	yes?				
Servicing Mortgages	no				
Funding Management	yes				
Efficiency	low operating cost ratio				
Other					
need for restructuring	no				
human resources	available				
ownership	private/public				
charter	bank/finance co.				

Three candidates were suggested by the Ministry of Finance: Bank Papan Sejahtera ("BPS"), Bank Tabungan Negara ("BTN") and Danareksa. BPS was originally a finance company created by the government to fund middle income housing. As of December 31, 1993, BPS had Rp 458 billion in assets of which Rp 289 billion were in mortgage loans. 40 percent of its liabilities were in the form of bonds. BPS is jointly owned by Bank Indonesia (18%), foreign investors (25.5%) and domestic investors (the largest being Real Estate Indonesia at 17% and PT Bank PDFCI at 15%). As a result of the change in banking law in 1992, the company is now a commercial bank. It now has 6 branch offices and is building up its deposit funding base (2 percent of liabilities).

BTN is the government housing bank. As of December 31, 1993, BTN had Rp 5.8 trillion in assets of which Rp 3.6 trillion were in mortgage loans. It has an extensive branch network (42 branches) and funds itself primarily through deposits (Rp 1.7 trillion), bonds (Rp 1.6 trillion) and Bank Indonesia (Rp 1.0 trillion). Its mission is to provide low rate credit for housing to lower income households.

Danareksa is a state owned investment bank. It has three major responsibilities: securities underwriting (primarily for state-owned but more recently including private companies), asset management and leasing and venture capital investment. Danareksa has Rp 807 billion in assets. Although it has extensive experience in the capital markets it has not been an issuer of bonds or a lender.

All three of these firms have strengths and weaknesses as regards the functions of a secondary mortgage facility. A detailed review and recommendation is out of the scope of this consultancy. However, it is clear that none of the three candidates is an ideal fit for the function. Both BPS and BTN are commercial banks with deposit taking branches and direct lending activities. As such they compete on a retail basis with the same banks to which they would lend as the Facility. This creates a difficult conflict of interest for these institutions (particularly for BTN which has access to government low cost funds and a low income mandate). In addition these banks have a retail, customer oriented culture whereas the Facility will need an institutional client oriented culture. Danareksa has such a culture and capital market expertise. In addition, it does not compete with the commercial banks that would be the primary clients of the Facility. However, it has no experience in lending or bond issuance or housing finance.

These limitations suggest that a second option should be considered; creating a new, single purpose institution to serve as the Facility. The advantage of this approach is that the institution could be specialized and focused in its mission. It would not compete with its customers or with other parts of a large, well established organization with a different mission. Although there will be start-up costs in terms of resources and time frame to begin operations, the fact that no institution in Indonesia has engaged in collateralized lending or loan purchase suggests that these costs will be borne regardless of the institution selected for the task.

If the government of Indonesia decides to create a new institution as a secondary mortgage facility, there are two major questions it must address. First, what type of institution will it be; bank or finance company? Second, what should the ownership composition be?

Indonesian law allows only two types of financial institutions; banks and finance companies. The former are primarily regulated by Bank Indonesia with detailed regulation and supervision of their operations, reflecting the fact that they take deposits from the public. The latter are regulated by the Ministry of Finance and allowed considerably more flexibility in their operations owing from the fact that they do not take deposits. As noted above, it preferable that the Facility not be a retail deposit taker so as to avoid competing with its customers. In addition, the Facility will need to be creative in the design of its loans and bonds. Therefore, the more flexible finance company charter may be a more appropriate vehicle.

The ownership composition question depends on two factors; the degree of government involvement necessary to facilitate investor purchase of its bonds (at yields close to those obtained by state enterprises) and the extent of private sector interest in the Facility (i.e., can it make money). The ownership structure discussed above provides one answer to this question. The initial capitalization of the Facility could be primarily from government sources. These funds would be used to begin operations and support the first few bond issues. Modest additional funds could be obtained from the likely borrowers and bond purchasers of the Facility. This approach would enhance favorable acceptance of the bonds. As the Facility made loans and issued bonds, its customers could be required to purchase small of amounts stock (either fixed or as a function of the size of their transaction). In this way, the government's involvement (and risk exposure) would be gradually reduced. Bond holders would increasingly look at the quality of the Facility's operations and collateral to determine its creditworthiness. Private shareholders would expect a market rate of return on their investment (a below market return could be viewed as an additional cost of borrowing and an above market rate of return could be viewed as a reduction in the cost of borrowing).

Regardless of whether the Facility will be a de novo institution or created from the restructuring or redirection of an existing institution, it will have to develop procedures and guidelines, hire and train staff, market its services and educate its potential customers and bond purchasers. In addition, it will have to manage the risks inherent in the Indonesian mortgage market and produce securities that conform to existing capital markets regulation. These factors produce the external and internal infrastructure that must be developed in order to ensure success.

Legal and Regulatory Infrastructure

The legal infrastructure necessary to support a secondary market Facility for mortgages entails both the laws and regulations external to the operations of the SMF (referred to herein as the "External Legal Infrastructure") and the regulatory and contractual principles governing the internal operations of the SMF (referred to herein as the "Internal Legal Infrastructure"). Based upon the interviews conducted and the review of legal summaries and English translations of Indonesian laws, the External Legal Infrastructure in Indonesia is adequate to support development of the SMF. The Internal Legal Infrastructure for the SMF must be built. However, drawing from resources already developed within the Indonesian bond market and experiences in United States secondary mortgage market, the Internal Legal Infrastructure can be developed within a reasonable time frame.

External Legal Infrastructure

A secondary mortgage market requires as its foundation property ownership rights and mortgage lending laws. Indonesian law recognizes several different levels of property rights to land ranging from the right to own and develop (Hak Milik) to a possessory use right (Hak Pakai).

Mortgage Lending Law: Two devices are commonly used in Indonesia to encumber real property rights as security for money loaned by Primary Mortgage Lenders. The hypothec, or hipotik, is provided for by statute and is used to encumber land rights known as Hak Milik, Hak Guna Usaha, and Hak Guna Bangunan. A registered fiduciary transfer is utilized to encumber the Hak Pakai rights to property.

Foreclosure of a lien against real property requires a court judgment and foreclosure sales must be conducted through the Government Auction Office. Interviews with representatives of private banks disclosed that the majority of defaulted mortgages are voluntarily resolved. Where judicial foreclosure was required, banks reported that the foreclosure process ranged from six to twelve months to complete with the expenses of foreclosure averaging between 10% and 20% of the amount of the mortgage.

Current default experience of private banks is extremely low (less than 1% of outstanding balances thirty days past due). This low level reflects the rapid recent growth in mortgage

lending. As a certain level of defaults is inherent in mortgage lending, defaults will rise in the future. Moreover, a dramatic increase in the volume of mortgage loans created by a successful Facility will increase the number of defaults. The rate of defaults will also likely increase as the portfolios age and as funds become available to lesser credit quality borrowers.

A significant increase in defaults could overload the judicial system and Government Auction Offices, the efficiency of which was criticized by some of the parties interviewed. Consideration should be given the adoption of laws permitting nonjudicial foreclosure sales by the Primary Mortgage Lender, subject to certain home borrower protections. However, in general, the foreclosure system currently available should be adequate to support operations of the Facility.

Land Registration: Existing law requires that rights to real property be registered. The registration law appears legally adequate to support the operations of the Facility. However, various market participants have expressed concern regarding the efficiency of the registration process, in practice. Banks routinely do not record mortgage liens reportedly due to the cost.[15] There is a risk that transfers or other encumbrances could take priority over the unrecorded mortgage. At least as to new originations, it may be appropriate to require mortgage registration. It may not be practical to record existing inventory and overcollateralization levels should consider the risks associated with unrecorded documents.

A task force is currently studying the land registration system and technological upgrades to the registration system should be planned to support the increased volume of registrations which will be generated by the development of the mortgage market.

Pledge Law: As security for advances from the Facility, Primary Mortgage Lenders will be required to pledge mortgage loans as collateral. The existing Indonesian pledge law is contained in the Civil Code. In addition, the ELIPS Project is considering a new draft Secured Transactions law.

[15] The costs noted by banks interviewed included both filing and notarial fees. There appears to be little competition among notaries, allowing monopoly pricing of services. An expanded pool of notaries or a more simplified form of signature attestation for mortgages (e.g. by bank guarantee) could significantly reduce recording expense.

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Under existing law and the ELIPS draft a security interest in "instruments" is perfected by the secured party taking possession of the instruments. Thus, transfer of possession of the mortgage instruments from the Primary Mortgage Lenders to a custodian or trustee will be required to perfect security rights of the Facility. Notification to or acknowledgment of the home borrower regarding transfer of a mortgage loan as security may also be required to perfect rights to collect home borrower payments.[16] Subject to establishing the internal infrastructure to accommodate the need for a custodian, existing pledge laws, as well as the ELIPS draft, are adequate to support secondary market transfers of mortgage loans as security for advances from the Facility.

Capital Market Regulation: Bonds are currently issued in Indonesia in both a listed market and an over-the-counter market. By decree, listed securities must be issued by companies in existence at least three years. This restriction apparently does not apply to over-the-counter securities. If there are practical impediments to issuing bonds in the over-the-counter market, consideration should be given to exempting government sponsored companies from the three year requirement for listing on the Jakarta stock exchange.

BAPEPAM is in the process of developing regulations governing the operation of the Indonesia capital markets. Care needs to be taken in the drafting of these regulations so as not to impede the development of a secondary market for mortgages. While it may be appropriate for bonds of the Facility to be registered with, or approved by, BAPEPAM, capital market regulations should not treat the Facility as a Mutual Fund or other pooled investment vehicle subject to regulation. Such regulation is unnecessary considering the assets the Facility will hold and its single purpose status.

The practice in Indonesia has been to issue bearer securities. Due to the fraud and forgery risks associated with bearer securities, a clearing mechanism for the safekeeping and transfer of bonds of the Facility will need to be established as part of the Internal Legal Infrastructure. The draft capital market law has provisions relating the licensing and operation of Clearing, Settlement and Depository Agencies, which will help development of the infrastructure to more efficiently clear secondary market trades.

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[16] As to new originations notification could be incorporated into the loan documentation. However, with respect to existing inventory the cost of pre-default notification may not be justified and initial overcollateralization levels should consider this risk.

In preparing new laws and decrees consideration should be given to secondary market enhancements. As the Facility and capital markets develop, regulations should be adopted which encourage open participation in the funding process. Although underwriters may be helpful in the development of the secondary market, the Facility should not be restricted to placing bonds through underwriters and eventually an auction bid process should be open to investors and dealers.

Bonds issued by the Facility need to be legal investments for pension funds, insurance companies, banks and all other institutional investors. If necessary, investment restrictions applicable to pensions should be amended not only to allow investments in the Facility but also other mortgage backed securities which may be developed in the future.

As a secondary market for bonds develops, safeguards against manipulative practices by dealers may need to be developed to help ensure that the benefits of the Facility reach the home borrower. These may include regulations requiring large position reporting, record keeping, public access to market information, and fair sales practices. The nature and extent of regulation required will depend upon how the market develops.

Conclusion: The External Legal Infrastructure in place in Indonesia is adequate to support operation of the Facility. The ELIPS project, capital market law and project to upgrade the land registration offices will enhance the development and efficiency of the Facility. Other enhancements should be considered as the market develops.

Internal Legal Infrastructure

The operations of the Facility must be supported by the organizational structure, contractual relationships among participants and guidelines governing participation in programs sponsored by the Facility. This Internal Legal Infrastructure will need to be developed in conjunction with implementation of the Facility

Single Purpose Charter For Facility: The charter of the entity chosen to operate the Facility should limit the activities of the Facility to making loans to Primary Mortgage Lenders collateralized by mortgages, acquiring mortgages from PMLs and issuing bonds and other mortgage backed securities. The entity should be a limited liability company chartered as a

commercial bank or finance company, but under either charter would be restricted from being a Primary Mortgage Lender and would not take deposits (other than from PMLs).

If an existing multi purpose entity were used for the Facility, complex arrangements would be required to segregate its activities and collateral from non-Facility related activities and liabilities. The single purpose nature of the Facility greatly simplifies Internal Legal Infrastructure and provides secondary market investors with assurance that external liabilities and activities will not disrupt the Facility. As a consequence, investors are better able to underwrite the risks of investment in bonds issued by the Facility. The benefits of a single purpose entity strongly suggest that a new institution be organized to act as the facility.

It is anticipated that the initiation of the Facility will require the participation of the Indonesian Government, directly or through Bank of Indonesia. At an initial stage this involvement will be necessary to ensure purchase of the bonds by large institutional investors. It is equally important to have private sector ownership to enhance accountability and efficiency.

Primary Mortgage Lenders utilizing the Facility could be required to maintain an equity ownership position in the Facility. The initial target could be for Primary Mortgage Lenders to own approximately 75% of the Facility equity and the Indonesian Government 25%. As the Facility becomes accepted in the marketplace, ideally the Primary Mortgage Lenders and other market participants would increase their percentage ownership of the Facility, decreasing the position of the government. The government's ownership interests could be gradually diluted by requiring users to purchase a fixed amount of stock along with their borrowing. In so doing, the users would have an incentive to make sure that the facility operates safely and profitably. With respect to the initial capitalization, which will likely be required from the Indonesian Government, the government might explore options to raise this capital from the private sector underwriting industry and institutional investors. For example, capital might be raised through selling the exclusive overseas underwriting rights for distribution of the Facility's Bonds in foreign markets. Through such private sector involvement, the on-budget impact of the initial capitalization of the Facility might be minimized or eliminated.

Standardized Legal Documentation: Uniform contracts provide comfort to secondary market investors that legal risks have been mitigated and enhance the efficiency with which the Facility operates. The following discusses documentation which will need to be developed.

The relationship between the Facility and its investors will be governed principally by the terms of the bonds and an indenture between the Facility and an indenture trustee on behalf of the bond holders. A decision will have to be made to determine whether the bonds will be unsecured obligations of the Facility or secured by a pass through of the collateral obtained from the PMLs. Collateralizing the bonds may be a benefit in marketing to investors, particularly for overseas markets and as governmental involvement is phased down. If the bonds are collateralized, the trustee would also generally act as the custodian of the collateral. An offering circular or prospectus will need to be developed which describes for investors the Facility, the terms of the bonds and risks associated with purchase of the Facility's bonds.

The relationship between Facility and each Primary Mortgage Lender will be governed by a series of agreements, which should be uniform among PMLs to the greatest extent possible. These agreements will likely include the following:

- Master Loan and Pledge Agreement -- contract would permit advances to be made from time to time against delivery of mortgage collateral, subject to compliance with the origination guidelines discussed below.

- Servicing Agreement -- PML would agree to continue to service loans so long as the PML is not in default. The Facility would have the contractual right to appoint a substitute servicer upon a default by the PML.

- Custodial Trust Agreement -- A custodian would hold original mortgage documents pledged as collateral. However, PMLs meeting high credit standards may be authorized to act as their own custodian.

- Lock Box Agreement -- Monthly payments from home borrowers would be directed to a segregated account for each PML separate from other collections of such banks. Again, PMLs meeting high credit standards may be authorized to maintain their own lock box accounts.

With respect to the relationship between the home borrower and the Primary Mortgage Lenders, a standard form Promissory Note and Hypothec should be developed for use by all PMLs. However, it is not practical to require standardized documents from the outset and the use of standard documents should be phased in over time. Until standard documents are phased

in, the underwriting process will require a more intensive review of portfolio documentation and initial spreads and collateralization levels should consider the expense of detailed portfolio due diligence. Standard loan application forms and borrower disclosure statements should also be developed.

The Facility will need to develop uniform origination and servicing guidelines governing the eligibility of collateral and certain servicing standards. Areas which will require consideration:

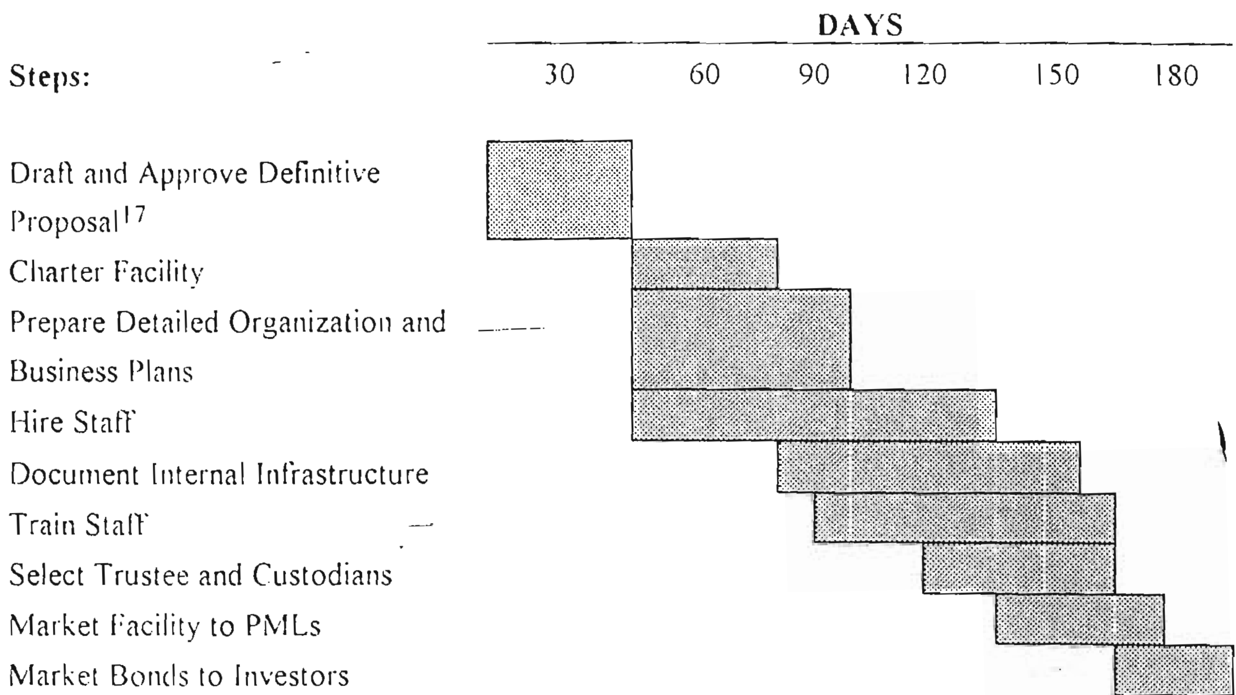
- Real estate appraisal guidelines
- Borrower qualification standards
  - * Maximum income to expense ratios
  - * Credit history
- Loan qualification standards
  - * Maximum loan to value ratio
  - * Maximum loan limit -- loan limits should be set in the aggregate and as a percentage of a particular portfolio to avoid concentration risks
  - * Property types -- owner occupied/rental unit/second home
  - * Lien priority
- Lending Bank qualifications
  - * Minimum capital/credit underwriting standards
  - * Loan underwriting procedures/training
  - * Participation limits
- Fair Settlement Procedures -- Regulations may need to be adopted to protect home borrowers from potential abuses by PMLs to ensure that the benefits of an efficient mortgage market are realized by consumers as well as the PMLs. These may include required consumer disclosures, mortgage servicing protections (safeguarding escrowed funds), anti-tying and anti-kickback rules to guard against potential monopoly pricing abuses.
- Servicer qualification standards and facilities (data processing compatibility requirements)
- Custodian qualifications (safekeeping facilities and data processing capability to transfer mortgages and servicing in the event a Lending Bank defaults)

Conclusion: The Internal Legal Infrastructure will need to be developed for the operation of the Facility However, drawing from resources already developed within the Indonesian bond

market and experiences in United States secondary mortgage market, the Internal Legal Infrastructure can be developed within a reasonable time frame.

Implementation Plan

The following Implementation Plan outlines the general steps required to establish the facility and representative time frames to accomplish the objectives. With the cooperative pooling of resources within the various agencies of the Ministry of Finance, private banking sector and outside financial and legal experts, the development and implementation of a secondary market facility for mortgages is feasible. The actual timing of implementation may vary dramatically from the represented time frames, depending upon available resources, leadership and motivation.



[17] The Definitive Proposal, by Ministry of Finance decree or similar policy statement, would specify the entity to be created for the Facility, the SMF objectives and authorize implementation and funding of the proposal.

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