

The Role of Mortgage Liquidity Facilities in Housing Finance: Lessons Learned from Egypt, Tanzania, Nigeria and Malaysia



1. Introduction

The central question which this case study aims to address is what is the role of a Mortgage Liquidity Facility (MLF) in housing finance in Africa? Traditionally, MLFs have been designed to provide funding and capital market access to primary mortgage lenders. MLFs either purchase loans on a full recourse basis from primary mortgage lenders or lend to them on an over-collateralised basis for mortgages pledged to the facility¹.

MLFs are said to be generally more appropriate for emerging markets and can play a vital role in the establishment of a more developed secondary mortgage market, including securitisation. Generally, MLFs are less complex than securitisation. They involve lower levels of risk transfer (the risk of default remains with the bank/lender), and the bonds issued are not directly linked to the underlying mortgages². As the market matures, MLFs have an important role to play in assisting the market to achieve a higher level of sophistication. They can also be used to promote mortgage securitisation once the proper conditions are fulfilled. The two instruments can however co-exist, leaving users and investors free to choose between different combinations of features, risks and prices. MLFs are seen as ideally suited to the relatively early stages of market development³.

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2. The primary and secondary mortgage market and the role of the MLF

2.1 The primary mortgage market

The primary mortgage market is the market where borrowers and mortgage originators come together to negotiate

Across Africa, practitioners are grappling with the challenge of creating an enabled housing finance environment. While these challenges may seem insurmountable, there is a growing track record of novel solutions and initiatives, pioneered by policy makers, financiers, developers and households themselves, suggesting that there are new opportunities for making the housing finance sector work for the poor in Africa. This case study is part of a broader series that CAHF has commissioned in order to support professional development and inform a broader research and dialogue process. The case studies vary, addressing themes as diverse as housing microfinance, mortgage liquidity facilities, cement block-banking, home loan guarantees for the informally employed, and infrastructure financing, highlighting experiences from countries across the continent. We hope this series contributes to more precise and successful endeavours that realise the opportunities in this market.

The Centre for Affordable Housing Finance in Africa (CAHF) is a not-for-profit company with a vision for an enabled affordable housing finance system in countries throughout Africa, where governments, business, and advocates work together to provide a wide range of housing options accessible to all. CAHF's mission is to make Africa's housing finance markets work, with special attention on access to housing finance for the poor. We pursue this mission through the dissemination of research and market intelligence, supporting cross-sector collaborations and a market-based approach. The overall goal of our work is to see an increase of investment in affordable housing and housing finance throughout Africa: more players and better products, with a specific focus on the poor.

¹ Hedstrom 2011 *Support Development of a Government-of-Haiti-Led Action Plan for Expanding the Availability of Housing Finance*

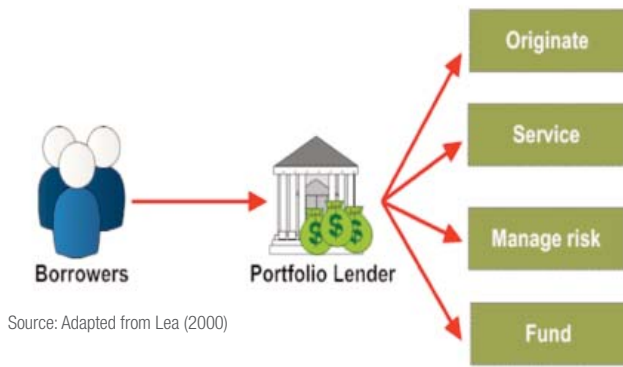
² Assessment of Options for Stimulating Housing Finance in Haiti 30.

³ The International Bank for Reconstruction and Development / The World Bank 2011 *Developing Kenya's Mortgage Market* 58.

⁴ Hassler O and Walley S 2012 *Mortgage Liquidity Facilities* 8.

terms and effectuate mortgage transaction. Mortgage brokers, mortgage bankers, credit unions and banks are all part of the primary mortgage market.

Figure 1: The Portfolio Lending Model



Source: Adapted from Lea (2000)

The traditional source of finance for housing in developed and developing markets is deposits in banks and savings institutions. Products, sometimes referred to as home loans, are offered by commercial banks, savings banks and specialised mortgage banks. Products are made available to the banks' customers and are subject to terms and conditions. In several countries, banks have become the dominant mortgage lenders⁴. The traditional model of mortgage lending is the portfolio lending model in which one institution performs the major functions of origination, servicing, funding and portfolio risk management⁵.

Portfolio lenders are usually deposit taking institutions (commercial banks, savings banks, savings and loans, building societies), contract savings institutions or European-style mortgage banks⁶. The portfolio lending model (depository system) is often referred to as a retail approach as institutions deal directly with the public. Portfolio lenders in many developing countries are hesitant to enter the market at any significant level. This reluctance may reflect concern about risk management, particularly credit risk in markets with weak legal foundations for collateralised lending, the relatively high cost of making smaller loans, and potential political risk over rising rates and enforcing liens⁷.

2.2 The secondary mortgage market and the role of the MLF

2.2.1 The unbundling of the mortgage value chain

A major emerging characteristic of mortgage markets is functional separation (or unbundling) where the functions of origination, servicing, risk management and funding are unbundled and provided by different specialised entities⁸.

Figure 2: Unbundled Home Mortgage Delivery



Source: Lea (2009)

In this model, mortgage origination is no longer confined to retail branches of financial institutions. The institution that originates the loan may or may not be the one that services it⁹. In the unbundled system, there is a wide variety of investors in housing loans. These range from depositories to mutual funds. Investors provide funds to the housing market by funding whole loans or investing in mortgage bonds or mortgage-backed securities¹⁰. Credit risk management is also often specialised and provided by third parties such as mortgage insurance or bond insurance companies (public or private) for the benefit of investors¹¹. Secondary market development is a necessary major catalyst for unbundling, as it creates incentives for specialised origination and servicing as well as third-party credit enhancement¹².

⁴ See Hedstrom *Support Development of a Government-of-Haiti-Led Action Plan for Expanding the Availability of Housing Finance Assessment of Options for Stimulating Housing Finance in Haiti* 17 where the author notes that, "this is due to several factors, including deregulation, which allowed the banks to offer new products, and the conversion of building societies to commercial banks. Banks demonstrated an increased interest in retail lending as much of their commercial business was lost to the capital markets."

⁵ See Lea M 2000 *The Role of the Primary Mortgage Market in the Development of a Successful Secondary Market* 2 where the author states that, "these intermediaries may utilize the services of third-party vendors, such as mortgage issuers, appraisers and credit agencies. However, a single firm accomplishes the primary functions."

⁶ *ibid.*, 2.

⁷ Hedstrom *Support Development of a Government-of-Haiti-Led Action Plan for Expanding the Availability of Housing Finance Assessment of Options for Stimulating Housing Finance in Haiti* 18.

⁸ Lea M "Structure and Evolution of Housing Finance Systems" in: Chiquier L and Lea M (eds) *Housing Finance Policy in Emerging Markets* (2009) 42.

⁹ *ibid.*, 44.

¹⁰ *ibid.*, 44.

¹¹ *ibid.*, 44.

¹² *ibid.*, 46.

2.2.2 MLFs as a form of secondary market

Proposals for the development of secondary mortgage markets often focus on mortgage securitisation¹³. However, “mortgage securities, which involve a sale of mortgage loans and a transfer of risk, are only one form of secondary market structure. A secondary mortgage facility [MLF] which purchases mortgages from or makes collateralised loans to primary mortgage lenders, funded by general obligation bonds, is also a form of secondary market. The adoption of one or both forms of secondary market depends on the needs of primary market lenders and the state of development of accounting and legal systems in [the country], as well as the housing and bond markets¹⁴.”

MLFs are typically government owned, structured as a public–private partnership (PPP), or government supported. They issue general obligation bonds in capital markets and use the proceeds to refinance the portfolios of primary mortgage lenders.

The primary function of a MLF is to act as an intermediary between primary mortgage lenders and the bond market, with the objective of providing long term funds at better rates and under better terms and conditions than primary mortgage lenders might be able to obtain if acting alone¹⁵. MLFs can also provide temporary liquidity support to lenders through collateralised short term operations such as repurchase agreements.

The need for a MLF arises because of the maturity mismatch between the liabilities and assets of primary mortgage lenders. Capital market funding is an important way to overcome such mismatches and in some cases it can be the only route for institutions with small or no deposit bases¹⁶. In several countries, the instruments to raise funds directly from the capital markets are not available, or they might be too costly or complex. Whilst large commercial banks may not need an external source of cash, they still have to be able to manage their liquidity if they extend long term loans using their deposits. Holding marketable bonds or being able to pledge loan portfolios for short term advances are ways to address this requirement¹⁷.

2.2.3 The benefits of establishing a MLF where a developed secondary market is not in place

There are several benefits associated with the establishment of a MLF in developing countries where a developed secondary market is not yet in place. These include¹⁸:

- 1) **Acting as an intermediate step on the path to a full secondary mortgage market:** Whether it is the lack of legislation, absence of credit bureaus or rating agencies, many countries are not able to make the leap directly from funding mortgages through short term deposits to refinancing them on secondary mortgage markets using covered bonds or securitisation. MLFs provide an interim step which connects capital markets to the mortgage markets but with limited complexity or risk transfer.
- 2) **The provision of secure long term funding at attractive rates:** By lowering the cost of funds, this can lead to the lowering of mortgage rates, the improvement of affordability and the extension of the range of potential borrowers.
- 3) **The availability of fixed rates provides a degree of certainty:** In emerging markets where interest rates and inflation can still be relatively volatile and dampen confidence in the markets, the availability of long term fixed rates can help provide a degree of certainty.
- 4) **Greater competition in the mortgage market:** MLFs enable a more diversified set of lenders to develop and can be a driving force for competition in the primary market. This promotes efficiency and affordability.
- 5) **Leverage of existing funding sources:** Typically a primary mortgage lender will also be a deposit taker, often carrying a large supply of short term liabilities. Whether it is for regulatory reasons, economic instability, an inflationary environment or general risk averseness, the short term liabilities are not always easily converted into longer term assets. MLFs provide a backup and allow for better management of the balance sheet. The short term deposits can therefore be used for long term lending, safe in the knowledge that the MLF will be there as a lender of last resort.
- 6) **Standardisation in the market:** By acting as a central refinancing platform, MLFs are able to act as a force for standardisation in the market, pushing primary mortgage lenders to adhere to best practice, thereby making them more accessible to investors.
- 7) **Provide long term investments to institutions with long term liabilities:** MLFs may act to deepen the financial market by providing a long term investment to institutions with long term liabilities. Pension funds, social security funds or insurance companies with long dated liabilities are not always able to match these liabilities solely using public debt issuance. MLFs act as an efficient way of connecting long term investors with the institutions generating long term assets.
- 8) **Tool for the delivery of policy objectives:** MLFs can be used as a tool for delivering policy objectives such as promoting affordable housing or the promotion of local currency lending. If managed carefully MLFs can be used to pursue affordable housing objectives without necessarily distorting the objectives of market based pricing. The MLF may be able to set specific criteria for the refinancing of loans to particular groups of society such as low income groups.

¹³ See United Nations Human Settlement Programme *Housing Finance System in South Africa* (2008) 41 where it is stated that, “currently, the most popular approach to financing housing in large volume is through the system of secondary mortgage markets. A secondary mortgage market involves the sale of mortgage loans (or loan portfolios) or mortgage-backed securities backed by specific pools.”

¹⁴ See Lea M “The Applicability of Secondary Mortgage Markets in Developing Countries” in: Lea M (ed) *Secondary Mortgage Markets: International Perspectives* (1998) 20.

¹⁵ Hassler O and Walley S 2012 *Mortgage Liquidity Facilities* 1.

¹⁶ 1.

¹⁷ 2.

¹⁸ Kuen “Meeting the Needs of Homeownership” 2 – 4.

2.2.4 The preconditions for establishing a MLF

Ideally the mortgage market would already benefit from the presence of a credit bureau, efficient mortgage and land registration systems, efficient judiciary, appraisal industry and the other institutions which help lower transaction costs and lower risk¹⁹. However, in reality many of these market features and institutions only develop once mortgage lending is underway. MLFs fulfill a critical catalytic role of providing long term funds which allow loans to be made. This in turn acts as an inducement for the creation of the required risk management infrastructure²⁰. Nevertheless, ideally before a MLF is established, the following should be in place:

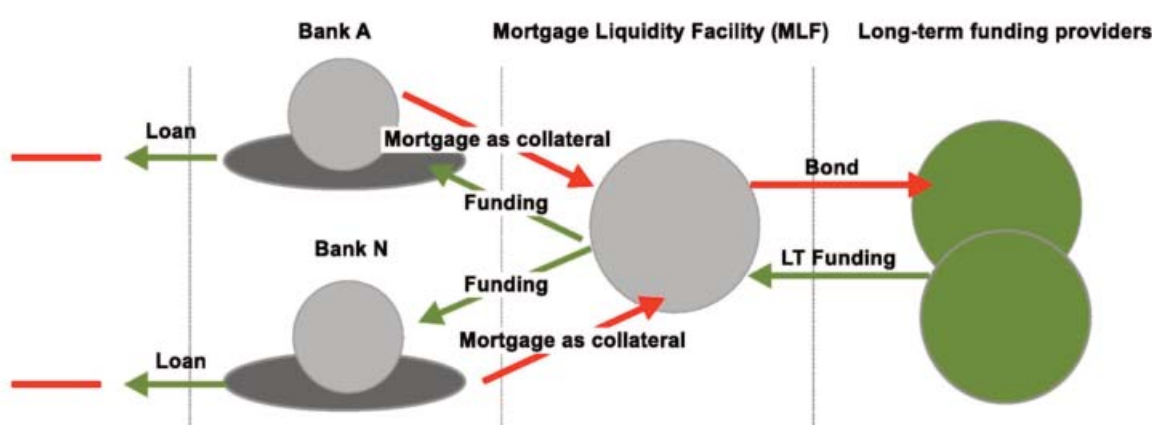
- Motivation for financial institutions to refinance or sell their mortgage loans (lender demand as a result of being capital or liquidity constrained or due to cash flow risk management needs);
- Investor demand and the ability to invest in mortgage-related securities;
- A sufficiently developed private bond market capable of supporting cost-effective credit rating, bond underwriting, and servicing infrastructures;
- A stable macroeconomic framework;
- A sufficiently homogenous pool of mortgages underwritten under sound origination standards;
- Appropriate project design/business and implementation plan including financing structure;
- Commitment by the Central Bank and/or Government to initially take a minority ownership in the MLF to lend credibility to the MLF in its operations;
- Strong regulation and oversight by relevant authority.

When establishing a MLF, there is no need for (1) the ability to create bankruptcy-remote structures such as special purpose vehicles (SPVs); (2) a specialised legal framework and willingness of authorities to grant exemptions; (3) a tax framework capable of treating securitisation in a tax-neutral manner; (4) a specific accounting framework; and (5) the ability to transfer/assign security interest at a low cost, all of which are required for securitisation.

2.2.5 How do MLFs work?

MLFs usually do not engage in any other activity apart from providing funds to primary lenders. Figure 3 below provides a stylised representation of the general mechanisms of a MLF.

Figure 3: The mechanics of a MLF



Source: Adapted from Genesis Analytics (2009)

2.2.5.1 Taking mortgage loans as security

MLFs take the underlying mortgage portfolios of mortgage lenders as security. This is done in one of two ways.

- (i) By extending wholesale loans to the mortgage lenders collateralised by the lenders' mortgage portfolios; or
- (ii) By directly buying mortgage portfolios "with recourse" from the originator that is bound to replace any loans which go into default with performing credits.

MLFs usually have strict lending requirements for:

- (i) The refinanced originators which are required to meet safety and soundness criteria to be eligible to the facility, and are subject to concentration limits;
- (ii) The quality of underlying assets (typically mortgage rank, Loan-to-Value ratio, credit scores, residential purposes etc.)²¹

¹⁹ *ibid.*, 5.

²⁰ *ibid.*, 5.

²¹ Hassler O and Walley S 2012 *Mortgage Liquidity Facilities* 6.

MLF's primary exposure is to the mortgage lenders themselves. It is only in the case of the mortgage lenders default that the loan portfolio would be required as additional security²².

Security over the mortgage collateral can be obtained by the MLF in a number of ways.

Firstly, the assets may be pledged or listed. This is a promise by the primary mortgage lender that it has wholly allocated certain assets as collateral against the loan advances from the MLF. This method may be risky as, in the case of bankruptcy, it may not be clear who has the rights to the mortgage assets²³.

Secondly, the underlying mortgages may be earmarked and ring-fenced. A full pledge is safer than a preferred lien in the case of insolvency²⁴. This is a very different concept from a "true sale" which is required in the case of securitisation.

Purchasing the mortgage loans is the most secure delivery method²⁵. The MLF as the legal owner of the mortgages has the right of disposal if necessary. However, MLFs often give the originating institution the right of first refusal to repurchase the assets, which in any case it would still be servicing²⁶.

Full recourse means that, if the mortgages used as collateral go bad, the primary mortgage lender has to replace them with an equivalent asset. If this proves difficult it may be able to use a substitution asset with an appropriate discount²⁷. MLFs must be protected against a fall in the value of the collateral. This may happen because of market fluctuations or because the replacement of defaulting loans in the cover pool does not happen continuously. MLFs typically address this issue by requiring the over-collateralisation of refinance loans by underlying mortgages. Over-collateralisation levels are usually 120% of the level of advances²⁸.

2.2.5.2 Issuance of bonds

On the liability side, MLFs only engage in one activity. This is the issuance of general debt obligations, usually on the capital market. MLF bonds have special features. They do not need to be collateralised and when they are rated, they usually receive the highest grade available²⁹.

This reflects the low risk nature of the MLF, which benefits from a number of safeguards to protect it against the risks it faces, namely, a default by the refinancing institution and a deterioration of the portfolio of loans it is holding as collateral against its loan to the primary mortgage lenders (PML). Safeguards take the form of over-collateralisation, the ability to call for more capital on its shareholders, recourse requirements on the collateral it receives, and in some cases government backing in the form of guarantees for the MLF itself or its bond issuance³⁰.

Unlike covered bonds or securitisation, the bonds issued by MLFs **do not need a specific legal and tax framework**. MLF issued bonds do not require exemptions to the general bankruptcy law or the design of a true sale mechanism. Additionally, in contrast to securitisation, they do not require a large volume of seasoned loans, which is a necessary requirement to value the risks (default, prepayment) which are transferred to investors³¹. MLFs also do not require credit enhancement structures which can be expensive, or the equally expensive transaction and deal structuring costs which are characteristics of securitisation.

²² *ibid.*, 6.

²³ *ibid.*, 7.

²⁴ *ibid.*, 7. The authors note that, "in the French system, a higher degree of security is conferred to CRH by law. The mortgages are assigned to the CRH liquidity facility using promissory notes which automatically transfer ownership rights of the mortgages to the MLF in case of the originator's default. This system is completely immune to third party claims on the assigned assets."

²⁵ *ibid.*, 7.

²⁶ *ibid.*, 7.

²⁷ *ibid.*, 7.

²⁸ *ibid.*, 8.

²⁹ *ibid.*, 8.

³⁰ *ibid.*, 8.

³¹ *ibid.*, 8.

2.2.5.3 Balance sheet management

A critical operational feature of an MLF is the way assets and liabilities are matched. Typically, in emerging markets, the duration of the bonds is shorter than the mortgages they refinance. This has led to the adoption of several balance sheet management approaches (Box 1).

Box 1: Approaches to balance sheet management

A frequent approach (Jordan, Palestine, Malaysia) is for the MLF to turn over its debt by extending medium term refinance loans. In this case, the PMLs would typically reset the interest rates on their mortgages in line with the new funding rate following each change. This means PMLs do not incur interest risks in this situation. They would only face a minimal liquidity risk in the case of the MLF being unable to refinance the loans if it was unable to roll over its debt.

In Malaysia, the rate resetting on the mortgage loans is disconnected from the refinancing, which creates at the minimum a basis risk for the lenders. But the gap between bonds – generally with a bullet repayment profile – and mortgage loans – amortizable on long periods – can stay open. This results in balance sheet mismatches for the lenders or the MLF, and a need to manage the mismatches, in particular the interest rate risk. Therefore, this situation is only viable in mature markets where hedging instruments are available.

The two possible solutions are either to keep the mismatch at the originators' level – this is the case of the French Caisse de Refinancement de l'Habitat (CRH) – or to transfer it onto the MLF's balance sheet. This is the option used by the US Federal Home Loan Bank system, the two oldest examples of such facilities. Finally, an important concern can be the “pipeline” risk stemming from the time discrepancy between bond issues and the disbursement of advances. MLFs must be reactive issuers, and need to have access to the bond markets on tap.

Source: Hassler and Walley (2012)

2.2.5.4 Pricing

The intermediation role carries a price which varies from one country to another, depending on the size of the balance sheet, the risks transferred to the MLF, and its corporate structure. In the case of the CRH in France, a small organisation based on the principles of mutuality, which manages large assets and does not incur financial risks, there is no fee on the loans, so the banks receive the funds at the same rate at which the bonds are issued. The only profit it makes is from the investment income derived from its capital, to which users must subscribe. Younger facilities without large scale benefits charge up to 1% over their cost of fund. The Tanzanian Mortgage Refinance Company currently charges 1.5%³².

2.2.5.5 Governance and public support

The ownership structure of MLFs is usually structured in one of two ways. This is either through the use of a cooperative approach (joint ownership) or through government participation.

The cooperative approach: Joint ownership, spreading of risk and stronger capitalisation enables MLFs to attract more favourable credit ratings than individual primary mortgage lenders would be able to attain on a standalone basis. There is often substantial state involvement in the creation of MLFs and as such, during the initial phase of the MLF, the State or a State related institution is often the main equity holder. As the MLF matures, although government may continue supporting it, “once the operation is underway, private equity provides greater flexibility. A good level of capitalisation is especially important in order to maintain a good credit rating³³.”

Government support: Where the government does not participate in the MLF as a shareholder, it usually takes a lead role in the creation of the MLF in line with its overall housing policy, the objectives of which may include³⁴:

- Improving affordability through the lowering of mortgage interest rates;
- Increasing the level of home-ownership;
- Implementing the social agenda for housing which may include social conditions for refinancing of subsidised loans to specific population segments.

The typical enhancement provided by government during the initial phase of the MLF is to guarantee the bond issuance of the MLF³⁵. In some cases, MLFs also enjoy special regulatory or tax treatment.

³² Interview with Mr. Oscar Mgaya (TMRC CEO) on the 07/08/2015.

³³ Hassler O and Walley S 2012 *Mortgage Liquidity Facilities* 10.

³⁴ *ibid.*, 12.

³⁵ *ibid.*, 12. This provides added security for the bond investors and allows the MLF to begin operations and have some initial working funds which it can lend out.

2.2.6 Mortgage securitisation

Mortgage securitisation has its origins in Europe in the late 18th Century³⁶. Today, mortgage securitisation is a common form of housing finance in several developed and emerging markets. This concept has been well received by governments that recognise the potential of securitisation to increase the flow of funds to the housing sector whilst at the same time diversifying the risks of housing finance³⁷.

Securitisation creates a wholesale or secondary mortgage market through the “pooling” of mortgage loans for sale to investors in the form of Mortgage-Backed Securities (MBS). MBS are usually sold to financial institutions operating in the secondary market and do not remain on the balance sheets of the mortgage originators. An increasing number of financial institutions use securitisation to transfer the credit risk of the assets they originate from their balance sheets to those of other financial institutions³⁸. Mortgage securitisation is an off balance sheet approach and is generally costly to establish and manage. However, it does substantially minimise the exposure of capital market investors to the originating bank³⁹.

2.2.6.1 Asset securitisation simply explained

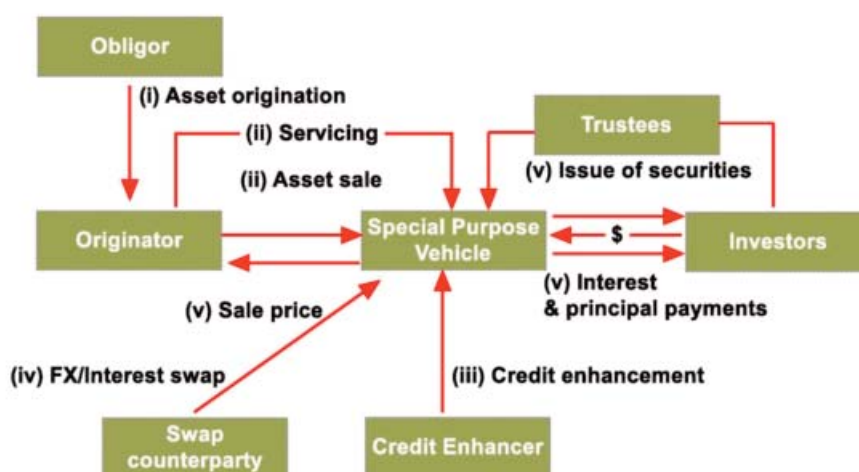
Securitisation is the conversion of receivables and cash flow generated from a collection (pool) of financial assets such as mortgages, vehicle finance, credit card receivables and other assets into securities that are backed by these assets. Therefore, securitisation is the pooling of homogenous, financial, cash-flow producing illiquid assets and issuing claims on those assets in the form of marketable securities. The idea behind securitisation is to create a capital market product. It results in the creation of a “security” which is a marketable product. Asset Backed Securities (ABS) are considered to be both a fixed income⁴⁰ and a derivative instrument⁴¹.

Unlike conventional private debt securities (PDS) that continuously expose investors to the credit risk of the issuer, asset securitisation is intended largely to confine investment risk to the performance risk of the financial assets that support payments on ABS. This is achieved by isolating the financial assets from the entity that originates the assets. Another basic feature of ABS that differentiates it from conventional PDS is the continuous repayment of principal (including prepayment) exhibited by many types of ABS such as those involving residential mortgage loans, consumer loans, among many others. In the case of PDS, the repayment of principal usually occurs at the maturity of the securities⁴².

2.2.6.2 The securitisation process

Figure 4 below presents a simplified overview of the process flow and key participants in a common securitisation transaction⁴³.

Figure 4: The Securitisation Process



- (i) **Asset origination:** The assets that underlie securitisation transaction will first be originated when an entity (“originator”) makes a loan or otherwise extends financing to a borrower (i.e. the “obligor”).
- (ii) **Asset sale and servicing:** In order for ABS to be issued, the originator transfers those assets to another entity which, for reasons discussed below, will usually be a “bankruptcy remote” special purpose vehicle (or “SPV”). The SPV is also referred to as “purchaser” as it purchases the assets to be securitised and the “issuer” as it funds this purchase through the issuance of asset backed securities into the capital market.

³⁶ Phang S *Housing Finance Systems: Market Failures and Government Failures* (2013) 72.

³⁷ *ibid.*, 7.72.

³⁸ Jobst A “Back to Basics: What is Securitisation” 2008 *Finance & Development* 48.

³⁹ See Genesis Analytics 2009 *Study to Examine the Use of Retail Funds for Mortgage Lending* 33.

⁴⁰ ABS qualify as a fixed income instrument because they generate a coupon income (not necessarily fixed) periodically.

⁴¹ ABS qualify as a derivative as they are a derived instrument from a plain vanilla instrument (a straightforward financial instrument such as a standard fixed-interest product with no sophisticated add-ons) being the underlying pool of assets.

⁴² See Asset Securitisation Consultative Committee and the Securities Commission 2002 *Report on Asset Securitisation in Malaysia: The Way Forward* 4.

⁴³ See Asset Securitisation Consultative Committee and the Securities Commission 2002 *Report on Asset Securitisation in Malaysia: The Way Forward* 7 – 8.

The transfer of assets normally occurs in the form of an equitable assignment although in some cases a legal assignment or novation. In novation, the existing agreement between originator and obligor is terminated and a new agreement between the SPV and the obligor is substituted. This effectively transfers all the originator's rights and obligations to the SPV. Novation ensures the "clean" transfer of assets to the SPV. On the other hand, under a legal or equitable assignment, the originator merely assigns its rights over the assets to the SPV. In the case of a legal assignment, notice of the assignment is given to the obligor in addition.

After the assets are transferred, the originator or other entity will provide collection and management functions in connection with those assets. These activities are generally referred to as servicing activities and the entity performing these functions, is commonly referred to as the "servicer".

The transfer of assets from the originator to the SPV generally needs to be conducted in a manner that results in a **"true sale"**, and not, in substance, merely a secured financing. A true sale is necessary in order to remove the assets from the possible bankruptcy estate of the originator. Therefore, if the originator were to become bankrupt or insolvent, a trustee or receiver of the bankruptcy or insolvency estate would not be able to reach the transferred assets to satisfy the claims of the originator's creditors if the sale is achieved. To the extent this legal isolation is accomplished, investors need to look only to the assets themselves, and not to the originator for repayment on the ABS.

- (iii) **Credit enhancement:** Depending on the nature of the transaction and the assets involved, the asset pool is usually supported by one or more types of credit and/or liquidity support ("credit enhancement" and "liquidity enhancement," respectively) in order to improve the credit risk profile for the ABS being issued. A variety of internal and/or external credit supports are employed such as, subordination, third party or parental guarantees, letters of credit or excess servicing.
- (iv) **Interest rate and currency swaps:** Often the assets underlying a fixed -rate ABS issuance bear interest at a floating rate. It is also relatively common for the underlying assets to be denominated in one or more currencies that differ from the currency in which the ABS bond payments are made. In order to hedge against potential mismatches from interest rate and currency exchange rate movements, the sponsor of a securitisation transaction will typically arrange for the issuing entity to enter into interest rate swaps, currency swaps and other hedging and risk-management arrangements with another entity, namely a swap counter-party.
- (v) **Issuance of securities and interest and principal payments:** The SPV, which is often organised in the form of a trust or limited company, will then issue debt securities (i.e. ABS) in the capital market (i.e. the "issuer"). As in the case of PDS, a credit rating is obtained prior to the issuance of the ABS. Proceeds from the sale of the securities issued by the SPV plus any surplus (which may arise during the term of the ABS) are paid back to the Originator. The cash flows from the assets are used to pay interest and redemption amounts to the investors.

2.2.6.3 The benefits of securitisation to its participants

The originators of ABS MBS securitise their assets for a number of reasons. The following, provided by the IFC Technical Working Group on Securitisation in Russia, is a non-exhaustive list of common reasons for securitisation⁴⁴:

- Raise funding in the form of the purchase price to be paid by the SPV upon the sale and transfer of the securitised assets;
- To limit the credit exposure to assets. Following securitisation, the originators credit exposure is typically limited to any credit enhancement it may provide. In the case of banks, this may allow them to obtain regulatory capital relief whilst at the same time, retaining the ability to extract future profits from the assets;
- To improve balance sheet efficiency. A true sale securitisation may move the assets of the Originator's balance sheet, contributing to an improvement of the relevant balance sheet ratios.
- To tap different funding sources. Securitisation allows originators to diversify their funding sources and to tap capital markets without having to issue securities on their own.
- To reduce funding costs. The weighted average cost of the securitisation may be lower than the Originator's current bank or other debt. This is often the case if the credit quality of the securitised asset is higher than the credit quality of the Originator's balance sheet as a whole; and
- To match assets and liabilities. Securitisation provides a more flexible method by which assets and liabilities can be matched.

Investors in ABS or MBS also benefit in a number of ways including the following:

- Through AMS or MBS investors can invest in asset classes and risk tranches of their choice and generate the associated returns. This offers investors the opportunity to optimise the structure of their portfolios and access markets which they otherwise would not have been able to invest in;
- ABS and MBS have historically been less volatile than corporate bonds;
- ABS and MBS have been known to offer a yield premium over comparably rated government, bank and corporate bonds;
- ABS and MBS are usually not susceptible to event risk or the risk of a rating downgrade of a single borrower.

⁴⁴ See IFC Technical Working Group on Securitisation in Russia 2004 Securitization Key Legal and Regulatory Issues 3.

2.2.6.4 Preconditions required for securitisation to be successful

There are a number of preconditions which are necessary for securitisation to be successful. These include:

- 1) A developed primary market with standardised documentation and underwriting practices, high-quality servicing and collection and professional standards of property appraisal;
- 2) Critical mass of eligible mortgage loans;
- 3) Lender demand as a result of being capital or liquidity constrained or due to cash flow risk management needs;
- 4) Ability to create bankruptcy-remote structures such as special purpose vehicles (SPVs);
- 5) Developed capital market;
- 6) Investor demand and the ability to invest in mortgage-related securities;
- 7) Adequate legal, tax and accounting framework for securitisation;
- 8) Facilities for lien registration and enforcement⁴⁶; and;
- 9) Ability to transfer/assign security interest at a low cost.

In order to be successful, there needs to be sufficient investor demand for MBS and these investors need to have the ability to invest in such. This demand often comes from institutional investors such as life insurance companies or pension funds. These types of institutional investors have long-term liabilities and often seek longer-term assets to match their cash flow and investment needs⁴⁷.

MBS must offer attractive risk-adjusted returns to institutional investors. Institutional investors usually look to mortgage securities as an alternative to government bonds that provide a benchmark yield, as they typically represent a default-free, liquid-investment alternative⁴⁸. MBS can also be an alternative to corporate bonds, offering greater security reflecting their collateral.

It is important that investors have a capacity for MBS. In markets in which governments are issuing debt excessively, the capacity of institutional investors to purchase MBS may be limited or nonexistent as the government may actually crowd out other issuers.

Finally, investors must actually be able to invest in MBS. They require the legislative and regulatory authority to invest in such assets, and the regulatory treatment (for capital adequacy, liquidity and asset allocation purposes, eligibility for technical reserves) must be well defined⁴⁹.

⁴⁵ Hedstrom P 2011 *Support Development of a Government-of-Haiti-Led Action Plan for Expanding the Availability of Housing Finance Assessment of Options for Stimulating Housing Finance in Haiti iv*; Chiquier L et al. 2004 Mortgage Securities in Emerging Markets; Lea M "Prerequisites for a Successful Secondary Mortgage Market: The Role of the Primary Mortgage Market" 2000 *Housing Finance International* 15.

⁴⁶ Mortgage securities are backed by mortgage loans. There must be an accurate and timely recording of the lender's interest in the collateral. Recording of liens must also involve modest cost.

⁴⁷ *ibid.*, 7.297.

⁴⁸ *ibid.*, 7.297.

⁴⁹ *ibid.*, 7.300.

Even if there are willing originators and investors, there are a number of infrastructure requirements underlying the development of mortgage capital markets⁵⁰. Key amongst these requirements is an adequate legal, tax, and accounting framework for securitisation and secured bond issuance. A number of legal issues arise in most securitisations and there are several underlying requirements that must be in place (see Box 2 below).

Box 2: Underlying requirements⁵¹

An adequate legal, tax, and accounting framework for securitisation and secured bond issuance

The accounting and tax treatment of mortgage securities for both issuers and investors must be clear and complete—in particular, for the creation of bankruptcy remote-issuance vehicles (Special Purpose Vehicles [SPVs], Special Purpose Corporations, Fonds Commun de Créances, Mutual Debt Funds, and so forth). Adequate disclosure of information on the collateral and the issuer is necessary to assess risk.

Facilities for lien registration

Mortgage securities are backed by mortgage loans. There must be an accurate and timely recording of the lender's interest in the collateral. Recording of liens must involve modest cost as well.

Ability to enforce liens

Because investors can be last-resort bearers of the credit risk attached to underlying mortgages, the enforceability of the lender's security interest is a major determinant of the attractiveness of mortgage related securities. If liens are not enforceable, there is little to distinguish mortgage loans from unsecured debt (only, perhaps, a belief that the likelihood of default on an owner occupied dwelling is less than that of a consumer debt). Lack of enforceability causes mortgage lending to be perceived as not safe a field of activity in many developing countries as in mature markets.

Ability to transfer (assign) security interest

In the case of securitisation, there is a transfer of the lender's beneficial interest to the investor. The legal system must recognise and record the transfer and it should involve only a modest cost. In the case of mortgage bonds, the ability to transfer beneficial interest is important in the event of bankruptcy of the issuer.

Protection of investors against bankruptcy of originator or servicer

The credibility of the legal provisions ensuring bondholders that the collateral backing their assets would stay out of the reach of other creditors in case of insolvency proceedings is of the essence. For securitisation purposes, the concept of an SPV or other construct that isolates the collateral pool from the issuer or servicer is essential to obtain off -balance-sheet accounting and capital treatment for the issuer. The concept of a bankruptcy remote-issuance vehicle is critical for the development of securitisation and is often lacking in country law, notably in civil code systems.

In order to determine whether a market is ready for securitisation and whether the requisite legal and regulatory framework is in place, a positive answer or a workable solution with respect to several legal questions / issues is a prerequisite for a successful securitisation. Set out below is a list of some of the key issues that may arise or must be considered. The list also summarises the requirements which a legal system should meet in order for securitisation to be legally feasible⁵².

Issue 1 – Valid transfer: Generally, only assets capable of being transferred can be securitised. Any obstacles to a valid transfer (prohibition of assignment of receivables or data protection or banking secrecy rules), where these can prevent the validity of a transfer, reduce the scope of assets eligible for securitisation;

Issue 2 – Ability to effect a true sale: The sale and transfer of assets to be securitised should be irreversible. It should not be affected by insolvency of the Originator. Importantly, it should not be subject to a re-characterisation or insolvency claw-back⁵³;

Issue 3 – The transfer should not be overly costly or cumbersome: For instance, any cumbersome perfection requirements, such as the need to notify the obligor of the assignment in order for the assignment to be effective, or the need to register the transfer, may reduce the scope for securitisation and increase transaction costs;

Issue 4 – Effecting assignments of receivables without notification to the obligor: Effecting assignments of receivables without notification to the obligor should be possible. The Originator should be allowed to service the securitised assets for the purchaser;

⁵⁰ IFC Technical Working Group on Securitisation in Russia 2004 *Securitization Key Legal and Regulatory Issues*

⁵¹ Chiquier L et al. "Mortgage Securities in Emerging Markets" 300 – 301.

⁵² IFC Technical Working Group on Securitisation in Russia *Securitization Key Legal and Regulatory Issues* 12 – 13.

⁵³ The so-called 'claw-back provisions' are provisions found in certain Company Acts which can void certain transactions entered by a company prior to winding up. In the event that a transaction is void then the money can essentially be called-back from the other transacting party, and added to the pool of funds for division amongst the creditors.

Issue 5 – Efficient enforcement of ownership rights: The purchaser should be able to enforce its ownership rights with respect to the securitised assets efficiently and should be allowed to appoint a back-up Servicer if necessary;

Issue 6 – Effective security arrangements: The parties should be able to enter into effective security arrangements, to provide credit enhancements, mitigate commingling risk and/or install a security trustee. Cash, bank accounts and marketable securities as well as securitised assets should be capable of being effectively pledged. The pledge should be capable of giving the pledgee an enforceable, first ranking right in the insolvency of the pledger or Originator (or, as the case may be, Issuer). Enforcement of security must be transparent and relatively efficient;

Issue 7 – Ability to achieve insolvency remoteness of the SPV (Issuer): In order to achieve insolvency remoteness of the SPV (Issuer), limited recourse provisions and nonpetition covenants agreed between the parties should be enforceable;

Issue 8 – Subordination arrangements should be enforceable: For example, an agreement whereby the rights of investors in a “junior” tranche of asset-backed securities are subordinated to the rights of investors in “senior” tranches should be enforceable in the insolvency of the SPV (Issuer).

The primary tax objective in a securitisation transaction is to achieve tax neutrality. What this means is, that as far as possible, the securitisation transaction should not lead to any additional tax liabilities arising or to any acceleration of tax liabilities than would have been the case had the securitisation not taken place. Securitisation should be capable of being treated in a tax-neutral manner. Any transfer taxes or stamp duties, or similar levies increase transaction costs and make securitisation less attractive. It is therefore vital that the participants do not suffer any adverse income tax or VAT consequences as a consequence of securitisation.

2.2.6.5 Key obstacles to the successful use of securitisation in developing countries

A true secondary mortgage conduit, which actually buys the mortgages from the primary lender and issues securities against pools of acquired mortgages, has far more complex demands than a Mortgage Liquidity Facility. Whilst securitisation has potential in several developing countries, a number of obstacles continue to impede the successful use of securitisation. These include but are not limited to:

- **Lack of an appropriate legal and regulatory framework**
- **High issuance costs:** in several contexts, the economics of securitisation may not yet make sense. This is due to the fact that lenders would have to be prepared to offer significant premiums on the securities above the risk free T-bill rate to attract investors. This cost is likely to be in the form of credit enhancements such as over-collateralisation, quality of secured assets, a liquidity facility for the SPV or other mechanisms limiting some of the risk.
- **Lack of detailed portfolio data:** the lack of mortgage data continues to limit the analysis that can be done by investors on possible mortgage portfolios to be securitised. Without access to good data, investors are likely to assume the worst case scenario and demand a higher level of risk mitigation. This makes securitisation more expensive for issuers.
- **Risk management issues:** there may be danger associated with separating the origination, servicing and risk taking functions. Different actors operate under different sets of motives which can be to the detriment of the mortgage borrower if not carefully managed.
- **Prudential risks:** securitising the best assets from a bank's portfolio leaves a bank with more funding and capital but a higher proportion of non-performing loans. This has prudential implications for the regulator who may have concerns about banks weakening their balance sheets in this manner.
- **Lack of ‘feed stock’:** in order for securitisation to work, market liquidity needs to be generated through regular issuances in large amounts. The size of the mortgage market in several developing countries may not be sufficiently large to generate the necessary economies of scale and the volumes of issuance that would lead to a liquid MBS market. This would be reflected in the pricing of MBS which would be even more expensive than they would otherwise have been⁵⁴.

⁵⁴ The International Bank for Reconstruction and Development / The World Bank Developing Kenya's Mortgage Market 50.

2.2.7 The Malaysian experience – Cagamas Berhad

A case study looking at the role of a MLF in housing finance would not be complete without an examination of the experience of Cagamas Berhad, Malaysia. Cagamas⁵⁵ is an intermediary that was established by Bank Negara Malaysia in 1986 as part of the national plan to promote homeownership through a liquid funding system that would help financial institutions to overcome the maturity mismatch in their financial position due to the use of short term deposits to finance long term housing loans⁵⁶.

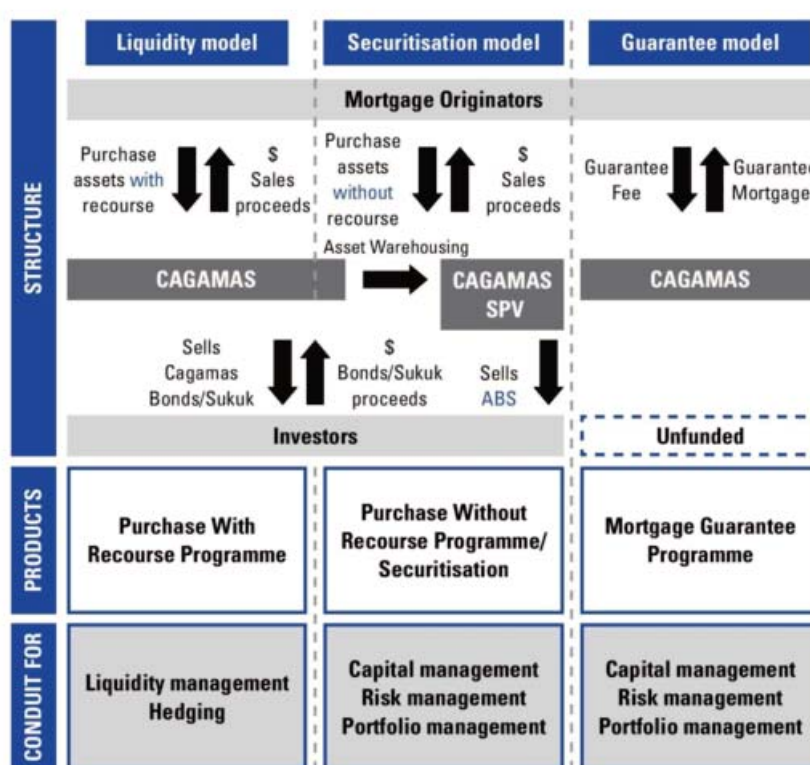
Cagamas currently engages in two primary business activities to provide liquidity to the financial system, namely:

- Purchasing eligible housing loans and debts from primary lenders; and
- Issuing corporate debt securities⁵⁷.

Cagamas began operations in October 1987. It did so by offering to purchase housing loans with recourse for a specific period. What this meant was that banking institutions had the option to repurchase loans sold to Cagamas if, at the end of the review period, they did not agree with the new interest rates offered by Cagamas⁵⁸. While the Purchase With Recourse (PWR) scheme was not considered to be true securitisation, this liquidity model suited local conditions at the time. In the 1980s there was a lack of banking information and statistics on credit risk, default rates and prepayment rates for housing loans, which constitute prerequisites for selling loans outright without recourse in the asset-backed securities market⁵⁹.

Over a 25 year period, Cagamas has evolved through four distinct phases⁶⁰. It has contributed to the building of a sustainable housing finance system in Malaysia by continuously applying innovations to its business model to meet the liquidity and capital needs of financial institutions. Today, Cagamas is a full-fledged mortgage corporation that encompasses a liquidity model, a securitisation model and a guarantee model to promote home ownership.

Figure 5: The Cagamas Liquidity, Securitisation and Guarantee Models



Source: Cagamas

2.2.7.1 The Cagamas liquidity model

In 1986, the Malaysian economy was in the beginning stages of emergence from a recession and incentives were given to the construction sector, including housing, to stimulate economic growth. At this time, there were legal constraints in effecting a true transfer of property rights in Malaysia's real estate laws. In order to overcome this problem, Cagamas adopted a simpler form of purchasing home loans from their originators with full recourse and the issuance of unsecured bearer bonds backed by pools of housing loans⁶¹.

⁵⁵ Malaysia National Mortgage Corporation.

⁵⁶ Sheng A, Kuen T W and Leong C C (undated) The Case for a China Mortgage Corporation 7.

⁵⁷ Fah C T "Promoting a Secondary Mortgage Market and Debt Capital Market" in: Housing the Nation: Policies, Issues and Prospects (2013) 23.

⁵⁸ Ibid., 7.11.

⁵⁹ Ibid., 7.11.

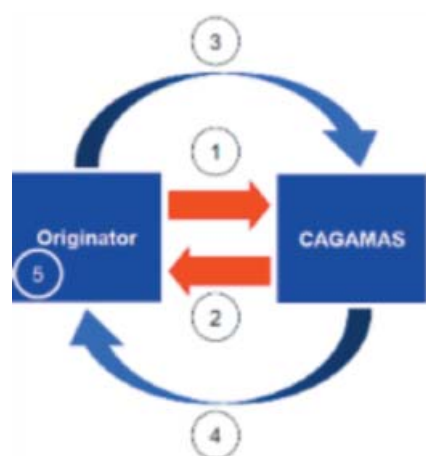
⁶⁰ Ibid., 7.11 – 13.

⁶¹ Sheng A, Kuen T W and Leong C C (undated) The Case for a China Mortgage Corporation 7.

This approach was a feasible interim step towards the development of a secondary mortgage market for a number of reasons⁶².

- Firstly, in the early days, there was a distinct lack of statistics and a track record of loan performance to fulfill rating agency requirements in assessing the credit risks inherent in 'pass through' securitisation.
- Secondly, for primary lenders, which were commercial banks, finance companies and the Government Housing Loan Division, liquidity was an issue, not capital adequacy.
- Thirdly, for loan originators, selling their housing loans to Cagamas at a fixed or floating rate with options for periodic review enabled them to eliminate both the liquidity and interest rate risks.
- Finally, the longer term Cagamas bonds (mainly of three and five-year maturities) together with the shorter term Cagamas notes (of less than one-year) helped to fill the void in the market for institutional investors which included financial institutions, insurance companies and pension funds.

Figure 6: Purchase with Recourse Structure (PWR)



- 1 Originator sells loans/financing to Cagamas on a with recourse basis.
- 2 Cagamas pays cash or bonds as consideration for loans / financing.
- 3 Post sale, Originator continues to service customer and remits repayment to Cagamas.
- 4 Cagamas pays servicer fee to Originator upon receipt of loan / financing collection.
- 5 Originator remains responsible for any losses by borrowers arising from defaults by borrowers and obliged to repurchase the loans / financing upon maturity.

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2.2.7.2 Securitisation model

In addition to funding, the Purchase without Recourse (PWOR) scheme under the securitisation model enables housing-loan originators to transfer credit and interest/profit rate-risk in their entity to provide full capital relief and to improve returns on assets and risk-weighted capital. The PWOR scheme has a much faster turnaround time of three weeks compared to three months required for other types of asset-backed securities (ABS) issuance. The PWOR scheme also offers flexible transaction types⁶³.

In 2004, Cagamas incorporated a wholly-owned subsidiary, Cagamas MBS Berhad (CMBS) as a SPV for the primary purpose of purchasing Government Staff Housing Loans (GSHL) and to issue residential mortgage-backed securities (RMBS). CMBS launched the country's first RMBS issuance backed by RM1.9 billion portfolio of residential mortgages services by pensions of retired public-sector employees in 2004⁶⁴. The Cagamas MBS issuances were structured with no cross-collateralisation against other securities. The objectives of the securitisation programme are to inter alia: increase the depth and breadth of the domestic capital market, promote asset-backed securities (ABS) as a new tool for raising funds from the capital market and, create a pricing benchmark for Malaysia's ABS market⁶⁵. Figure 7 presents the transaction structure of Cagamas MBS' securitisation.

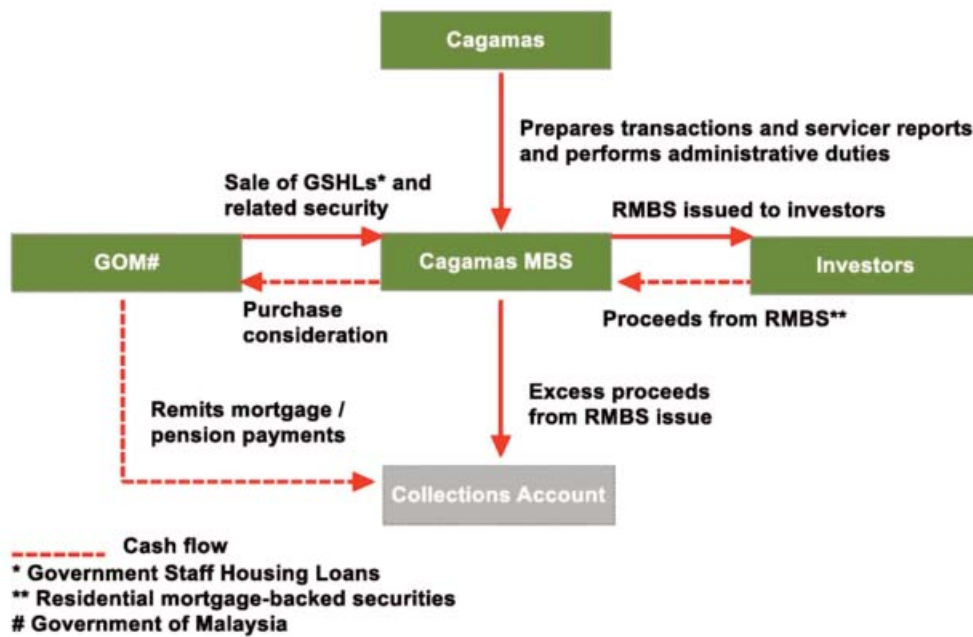
⁶² *ibid.*, 7.7.

⁶³ Kuen "Meeting the Needs of Homeownership" 14.

⁶⁴ Fah "Promoting a Secondary Mortgage Market and Debt Capital Market" 32 – 33.

⁶⁵ Leong C C 2014 *Development of Securitisation in Malaysia – Cagamas Experience* Presentation to the Indonesia International Conference on Islamic Finance 4 November 2014.

Figure 7: Transaction Structure of Securitisation



Source: Cagamas

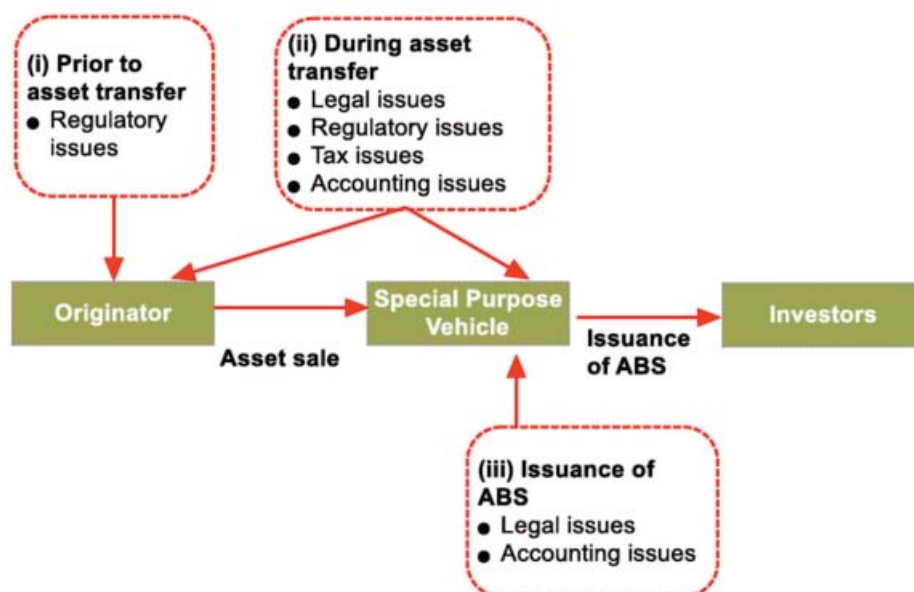
2.2.7.3 Guarantee model

Under the guarantee model, the Mortgage Guarantee Programme (MPG) enables housing loan originators to transfer out some of their credit risk, free up capital for more financing and manage the portfolio concentration risk. Through the reduction of credit risk on their housing loan/financing portfolios, banks can improve their capital adequacy ratios⁶⁶.

2.2.7.4 Impediments to securitisation transactions – findings and recommendations

Any country considering the introduction of ABS or MBS should carefully consider the impediments to securitisation transactions that may exist. There is certainly a lot to be learnt from the findings and recommendations of the Malaysian consultative committee. As this is a complicated and detailed subject and falls outside the scope of this case study, it will not be discussed in detail here. However, it is important to emphasise once again that securitisation is far more complex than the provision of liquidity through a MLF. Key amongst the requirements for securitisation is an adequate legal, tax, and accounting framework. In Malaysia, the consultative committee found that the impediments faced in securitisation could be categorised based on the three key stages of a securitisation transaction, namely: Stage 1: Prior to the transfer of assets by originator to SPV; Stage 2: During the process of asset transfer from the originator to SPV; and Stage 3: When issuing asset-backed securities.

Figure 8: Impediments Faced



⁶⁶ Kuen "Meeting the Needs of Homeownership" 14.

2.2.7.5 Key lessons learnt from the Cagamas experience

The Cagamas model provides important lessons for other developing countries that are considering the establishment of a secondary mortgage market. The government's support and involvement in Cagamas, including its share ownership was vital in alleviating the default risk concerns of investors. The adoption of the PWR scheme helped to overcome the moral hazard in the early stage of secondary mortgage market development. This gave Cagamas the time to build its credibility as a safe and regular issuer of debt securities before it introduced the PWOR product⁶⁷.

It must however be emphasized, as stated by Dr. Hoek-Smit that, "looking at liquidity facilities as a stepping stone for securitisation is misleading. They may help in standardising underwriting/origination standards and therefore make the industry ripe for possible securitisation. Cagamas went from refinancing with recourse to non-recourse refinancing of loans, making the market ready for securitisation. Liquidity facilities should make sense in their own right. They address different types of risks, have a different cost structure and have different legal requirements from securitisation platforms or conduits. Indeed, most countries do not need a government sponsored conduit to initiate securitisation. Market entities can do this very efficiently once the demand is there and the tax and regulatory environment allow for it⁶⁸."

3. The Role of MLFs – Three African Country Case Studies

3.1 Why the experience in Egypt, Tanzania and Nigeria should be compared

MLFs have been created with the assistance of the World Bank in Egypt, Tanzania and Nigeria. Whilst the market, socio-economic and level of development of these three African countries differs, all three are very different to Malaysia.

3.1.1 Macro-economic stability

Stable and growing economies encourage the growth of the housing finance system through lower inflation, lower interest rates and lower systemic risk⁶⁹. On the other side of the coin, housing finance does not work in unstable, volatile economies. Instability inevitability leads to less credit availability, less formal housing built, affordability problems for housing consumers, and greater risk for all concerned. In a word, macro-economic instability creates a negative circle where less housing finance leads to less residential investment and slower growth in the economy⁷⁰. A lower frequency and severity of economic downturns make household income more stable and may contribute to a willingness to assume higher debt burdens and increased attractiveness of flexible mortgage rates. Any long term finance requires confidence in the value of money. High interest rates make housing finance unaffordable⁷¹. At the same time, unemployment and volatile interest rates create credit risk. Financial depth, approximated by private credit to GDP, has a strong statistical link to long-term economic growth; it is also closely linked to poverty reduction.

Low bank intermediation is associated with higher interest rates and bank spreads. As indicated in Table 1 below, lending rates are particularly high in both Tanzania and Nigeria. In Tanzania, the lending rate has been rising steadily since 2010 and now stands at 16.20% (2014). The deposit rate increased sharply from 6.80% in 2011 to 9.90% in 2012. The deposit rate was 9.90% leading to an interest rate spread of 6.30% in 2014. Nigeria's lending interest rate stood at 16.50% in 2014⁷² and is the highest lending rate of all four countries included in this study. With a deposit rate of only 9.30%, Nigeria also has the highest interest rate spread. In Egypt, both lending and deposit interest rates have decreased (2013 – 2014). The lending interest rate was 11.70% (2014) and the deposit interest rate 6.91% (2014) leading to an interest rate spread of 4.79%. In stark contrast with Egypt, Tanzania and Nigeria, the lending interest rate in Malaysia was only 4.60% in 2014, the deposit interest rate was 3.00% and the interest rate spread a low 1.50%.

The key economic indicators (2013 and 2014) listed in Table 1 show the fundamental differences between these four countries.

⁶⁷ *ibid.*, 7.6.

⁶⁸ Email correspondence with Dr. Hoek-Smit (06/08/2015).

⁶⁹ Buckley R, Chiquier L and Lea M "Housing Finance and the Economy" in: Chiquier L and Lea M (eds) *Housing Finance Policy in Emerging Markets* (2009) 24.

⁷⁰ *ibid.*, 7.25.

⁷¹ *Hassler Developing Housing Finance: Building Blocks, Challenges and Policy Options*.

⁷² For any business that lends money, the interest rate spread is what the company charges on a loan compared to its cost of money. A bank runs on interest rate spreads, paying a certain rate on savings and CD deposits and making loans at higher rates than it pays to savers. Publicly traded financial companies such as banks often report the net interest rate spread earned on quarterly and annual financial reports. The World Bank supplies interest rate spread data from countries around the world showing the difference between the average lending rate and deposit rate.

Table 1: Key Economic Indicators

Country	Date	GDP growth	GDP per capita (current US\$)	Inflation, consumer prices (annual %)	Lending interest rate (%)	Deposit interest rate (%)	Interest rate spread	Domestic credit provided by financial sector (% of GDP)	Domestic credit to private sector by banks (% of GDP)
Egypt	2013	2.10%	\$3 314	9.42%	12.29%	7.68%	4.60%	86.19%	27.80%
	2014	2.20%	\$3 436	10.14%	11.70%	6.91%	4.79%	92.82%	27.30%
Tanzania	2013	7.30%	\$927	7.90%	15.80%	9.80%	6.00%	18.20%	12.80%
	2014	7%	\$998	6.10%	16.20%	9.90%	6.30%	20.30%	13.80%
Nigeria	2013	5.40%	\$2 966	8.50%	16.70%	7.90%	8.80%	21.90%	12.60%
	2014	6.30%	\$3 185	8.10%	16.50%	9.30%	7.20%	21.60%	14.50%
Malaysia	2013	4.70%	\$10 538	2.10%	4.60%	3%	1.60%	142.60%	123.90%
	2014	6%	\$10 830	3.10%	4.60%	3%	1.50%	145.30%	124.60%

Source: WDI

3.1.2 Capital market development

Stock market capitalisation of about 50% of GDP and more is an indication of a well-developed stock market. Malaysia has a well-developed stock market which is also relatively deep equity market by regional standards. By the end of 2012, market capitalisation reached 156.20% of GDP. As noted in the Bursa Malaysia⁷³ 2014 Annual Report, market capitalisation stood at RM4.3 billion in 2014, down slightly from RM4.4 billion in 2013. Nigeria has one of the most liquid capital markets in Africa and is second only to South Africa. There were almost 200 listed companies on the Nigerian Stock Exchange (NSE) as of December 2014. In comparison, the Tanzanian capital market is still in its early stages of development and there are only a limited range of financial instruments and securities. The market is regulated by the Capital Markets and Securities Authority which was established under the Capital Markets and Securities Act, 1994. The Tanzanian government has succeeded in placing medium to long-term bonds on the market. However, challenges remain. There is a very limited secondary market for government bonds. Securities are traded on the Dar es Salaam Stock Exchange which was established as a company limited by guarantee in 1996. The stock exchange is constrained by the limited number of stocks and low liquidity. With respect to bond issuance in Egypt, the African Economic Outlook notes that, "Egypt is not a frequent bond issuer; the last internationally traded bond was issued in 2010 and had low liquidity. There is also low liquidity in the local debt-instrument market because banks tend to buy and hold treasury bonds and bills⁷⁴."

Table 2 below provides a snapshot view of the stage of development of the stock market and capital market in Egypt, Tanzania and Nigeria.

Table 2: The Stock Market and Capital Market in Egypt, Tanzania and Nigeria

Country	Stock Market	Listed companies	Liquidity	Market Cap.	Dominant sector	Daily trading volume
Egypt	Egyptian Exchange	240: 216 on main market; 24 listed on Nilex	Liquid	US\$73.7bn on main market; \$158m on Nilex	Telecoms, construction, financials	137.3 million shares
Tanzania	Dar es Salaam Stock Exchange (DSE)	13 domestic plus seven cross-listed	Low	US\$7.10bn (domestic)	Food and beverages, banks	785,048 shares
Nigeria	Nigeria Stock Exchange (NSE)	199 (primary listings only)	Very liquid in African context	US\$78.60bn (primary listings only)	Banks, food & beverages, materials	324 million shares
Country	Capital Market	Development	Liquidity	Maturity range	Municipal bonds	Corporate bonds
Egypt	Yes	Developed	Liquid	91-day to 20-year	No	Yes
Tanzania	Yes	Relatively underdeveloped	Limited	35 days – 15 years	None	Very limited issuance and liquidity ⁷⁵
Nigeria	Yes	Advanced in African context	Very liquid in African context	91-day to 20-year	Yes	Yes

Source: KPMG Egypt Snapshot 2014 Q3; Tanzania Snapshot 2014 Q3; Nigerian Snapshot 2014 Q3

⁷³ Formerly known as Kuala Lumpur Stock Exchange.

⁷⁴ AfDB, OECD and UNDP 2015 *African Economic Outlook Country Note Egypt 2015 7*.

⁷⁵ In an interview with Mr. Oscar Mgaya (TMRC CEO) on the 07/08/2015 it was confirmed that the last time a corporate bond was issued in Tanzania was four years ago.

Figure 9: Governance Indicators (2013)

Governance Indicator	Country with max score	Country with min score	WORST PERFORMERS				BEST PERFORMERS			
			Egypt's score		Tanzania's score		Nigeria's score		Malaysia's score	
			Value	Rank	Value	Rank	Value	Rank	Value	Rank
Voice and accountability	Norway (1.8)	Korea Dem. Rep (-2.2)	-1.04	19	-0.2	42	-0.7	27	0.3	37
Political stability	Greenland (1.9)	Somalia (-2.7)	-1.62	7	-0.2	41	-2.1	4	0.1	48
Government effectiveness	Finland (2.2)	Somalia (-2.2)	-0.89	19	-0.7	29	-1.0	16	1.1	82
Regulatory quality	Singapore (2.0)	Korea Dem. Rep (-2.5)	-0.70	26	-0.3	41	-0.70	25	0.6	72
Rule of law	Norway (2.0)	Somalia (-2.4)	-0.60	34	-0.4	39	-1.2	12	0.5	64
Control of corruption	Denmark (2.4)	Equatorial Guinea (-1.6)	-0.60	32	-0.8	22	-1.2	9	0.4	68

Source: World Governance Indicators (2013)

3.1.3 Legal framework for property rights

The legal regime to acquire and transfer ownership rights in real estate should encompass (1) the accessibility of ownership rights over the land and the buildings on it; (2) the right to sell, lease or encumber; and (3) the right to enjoy property without being hindered by third parties. These rights must be checked by the (constitutional) right of the state to acquire property for public needs⁷⁶.

Several authors have raised the fact that unresolved title issues may be a bigger issue than a lack of liquidity in building both the primary and secondary mortgage markets. In an interview with Dr. Friedemann Roy, he stated that, “unresolved title issues are a bigger issue to resolve. If a country is not prepared to tackle the property rights and titling issue then it is premature to be thinking about establishing a MLF⁷⁷.”

An example of the problems experienced in several African countries is provided by Nigeria. Ownership rights under the current Land Use Act 1978 have been a major difficulty in Nigeria. The Act vests ownership of all land to the Governors of each state and is a significant deterrent to housing and housing finance in Nigeria⁷⁸. The Governor of each state has the rights and privileges to allocate land through the leasehold system. The lease is usually for 99 years less one day. The right to occupancy is legalised with a Certificate of Occupancy issued to the beneficiary. This often delays and adds significant costs to the registration system. Indeed, as set out in the Doing Business 2015 report, it takes up to 61 days to submit an application for processing Governor's Consent and obtain the Title.

3.1.4 Primary mortgage market infrastructure

The successful development of a secondary mortgage market is highly dependent upon the readiness of the primary mortgage market. True and sustainable secondary market development cannot proceed until the primary market is able to produce a sufficient volume of high quality mortgages that meet the servicing and performance requirements of investors⁷⁹. Retail lending for housing finance is relatively new to banks in several African countries. An additional problem is created by the fact that several microfinance lenders see housing finance as consumption and not the purchase of a productive asset⁸⁰.

The government's role in developing primary and secondary mortgage markets is vital. It is trite that the development of a secondary mortgage market depends on a healthy and developed primary market. Although securitisation is a powerful tool for lenders it is not the only way to build the market, nor is it the only bond-market instrument available to mortgage lenders. As this case study will show, simpler, low-risk and transparent bond products may be more attractive for domestic investors in developing economies. Commenting on the role of government in developing an effective housing finance system, Chiquier and Lea state that the primary role of government should be “the development of mortgage markets through the creation of the lending infrastructure and elimination of barriers to lending. Historical experience suggests that the development of mortgage lending follows a sequence starting with financial liberalisation and sector development, followed by the expansion of the primary market and then the creation of mortgage capital markets (secondary market). The state can accelerate this development by improving the liquidity of mortgage assets and reducing the costs of credit-risk underwriting for investors⁸¹.”

⁷⁶ International Monetary Fund 2011 *Housing Finance and Financial Stability – Back to Basics?* 123-124.

⁷⁷ Interview with Dr. Friedemann Roy (07/08/2015).

⁷⁸ EFinA 2010 *Overview of the Housing Finance Sector in Nigeria* 8.

⁷⁹ Lea M 2000 *The Role of the Primary Mortgage Market in the Development of a Successful Secondary Market* 1.

⁸⁰ Interview with Dr. Friedemann Roy (07/08/2015).

⁸¹ Chiquier and Lea “Introduction” xlv.

3.1.4.1 Title and collateral registration system

The lack of an effective title registration system is a major barrier to the development of housing markets. It is also a barrier to lending, as borrowers that cannot establish clear title to their property cannot pledge it as collateral for a loan⁸². The importance of an effective system for registering property rights cannot be underestimated. The issues associated with inadequate or inefficient title registration systems are numerous and include different systems for property rights; different registration systems; complex technological, administrative, budgetary, and human resources issues; rapid expansion of illegal construction and informal settlements⁸³. It is very important to stress the fact that the lack of an efficient and reliable title registration system has emerged as one of the primary barriers to greater mortgage lending activity.

What does it take to complete a property transfer in each of the four countries included in this case study? According to data collected by Doing Business, registering property in Malaysia requires only 8.0 procedures, takes 13.5 days and costs 3.3% of the property value. Globally, Malaysia stands at 75 in the ranking of 189 economies on the ease of registering property. Malaysia has taken a number of steps to make registering a property easier. The reforms noted by Doing Business DB2011 – DB2015 include the introduction of online stamping, reducing the time and cost to transfer property and substantially reducing the number of days it takes to register property transfers. If one compares this to the situation in Nigeria for example, where registering property a property requires 13 procedures, takes 69.6 days and costs 18.6% of the property value, it is clear why the mortgage market survey of financial institutions implemented by the Central Bank of Nigeria (CBN) in 2012 confirmed anecdotal reports that after access to long-term funds, difficulties with property registration was the second major constraint to mortgage growth in the country. As shown in Table 4 below, it also takes many days to register a property in Egypt (63 days) and Tanzania (67 days)⁸⁴. Long delays in the registration process increases the risk of both primary and secondary market transactions.

Table 4: Ease of Registering Property

Indicator	Egypt	Tanzania	Nigeria	Malaysia
Doing Business 2015 Rank ⁸⁵	112	131	170	18
Registering Property DB 2015 Rank	84	123	185	75
Registering Property DB 2014 Rank	84	117	185	74
Change in Rank	No change	-6	No change	-1
Procedures (number)	8	8	13	8
Time (days)	63	67	77	13.5
Cost (percentage of property value)	0.7	4.4	20.6	3.3

Source: Doing Business (2015)

3.1.4.2 Characteristics of the mortgage instrument – standardisation

Standard documentation must be available for all loans. Typical documentation includes the mortgage note (document describing the mortgage obligation) and deed (document conveying ownership to the lender as security for the repayment of the mortgage). The security required for the loan varies from country to country. It can be in the form of a deed of trust, mortgage or deed to secure debt. In several developing countries, mortgage documentation is not standardised, however, most bank loan applications contains similar information including demographic information on the borrower(s), employment history and an accounting of net worth. In recognition of the importance of standardised documentation, several Housing Finance Development Programmes which include the establishment of a MLF now include the standardisation of mortgage loan documents, including underwriting standards as a key component.

3.1.4.3 Underwriting standards

Investors in the secondary mortgage market must have confidence that lenders are properly judging risk and using a consistent set of criteria in evaluating loans⁸⁶. Underwriting standards are necessary to lower the cost of due diligence and allow investors, rating agencies and guarantors to quantify credit risk.

3.1.4.4 The importance of a credit bureau

In order to adequately price a loan, a lender must have information on the creditworthiness of the prospective borrower. This information enables a determination of the probability of default. Public credit registries or private credit bureaus are a good source

⁸² *ibid.*, 7.178.

⁸³ Chiquier L, Hassler O and Bulter S "Enforcement of Mortgage Rights" in: Chiquier L and Lea M (eds) *Housing Finance Policy in Emerging Markets* (2009) 89.

⁸⁴ In an interview with Mr. Oscar Mgaya (TMRC CEO) on the 07/08/2015, Mr. Mgaya confirmed that the World Bank is currently funding a project to automate the Real Estate Ministry system.

⁸⁵ Out of 189 economies.

⁸⁶ *ibid.*, 7.7.

of this information as they produce standardised and, in most cases, accurate credit histories. Worldwide, credit information bureaus, which collect, maintain, and distribute data on borrower credit activities, are a crucial mainstay of underwriting for both consumer and small business loans. Credit bureaus provide vital insight into both a borrower's ability to pay (as evidenced by their past and current indebtedness) and willingness to pay (as evidenced by their debt repayment history). In addition, credit bureaus may be able to shed light on the source of down payment. Without the ability to determine whether the down payment has come not from own savings, but is rather a loan from another bank, lenders are at much greater risk than would otherwise be the case⁸⁸. Developing a full-service credit bureau is a long-term process in emerging markets. There are numerous barriers, including the structure of the banking system itself. Where there are a few dominant players, they often resist sharing information.

As indicated in Table 5 below, Malaysia, a country with a well-developed primary and secondary mortgage market has public credit bureau coverage of 78% and public registry coverage of 56.2%. Whilst Nigeria has made a number of reforms which have made getting credit easier, including the improvement of its credit information system through a central bank guideline defining the licensing, operational and regulatory requirements for a privately owned credit bureau (DB2010) and improving the access to credit information by distributing credit information from retail companies (DB2013), private credit bureau coverage remains low at 5.8% and public credit registry coverage even lower at 0.1%. Despite Tanzania's very low private credit bureau coverage (0.6%) and no public registry coverage, Tanzania has made getting credit easier by improving its credit information system through new regulations that provide for the licensing of credit reference bureaus and outline the functions of the credit reference bank (DB2014). DB2015 also records that Tanzania has improved access to credit information by creating credit bureaus.

Table 5: Coverage of Private Credit Bureaus and Public Credit Registries in Tanzania, Nigeria and Malaysia

Coverage	Tanzania		Nigeria		Malaysia	
	Private credit bureau	Public credit registry	Private credit bureau	Public credit registry	Private credit bureau	Public credit registry
Number of individuals	149,042	0	4,747,797	-	15,000,000	10,609,998
Number of firms	1,752	0	621,895	-	1,000,000	844,323
Total	150,794	0	5,369,692	73,189	16,000,000	11,454,321
Percentage of adult population	0.6%	0%	5.8%	0.1%	78.6%	56.2%

Source: Doing Business (2015)

3.1.4.5 Enforcement of mortgage rights

A variety of legal (including regulatory and contractual) measures can incentivise lending and homeownership. Each may have a specific impact as it addresses different players, products or stages involved in mortgage finance:

- The ranking of mortgage lenders impacts the availability and pricing of credit (with first-ranking liens offering stronger incentives).
- Legislation may provide for the exemption from "claw-back provisions" allowing the reversal of transactions undertaken within a specific period before the borrower's insolvency. Laws may also provide that the proceeds from the sale of the mortgaged property are to go to the lender, outside of the ordinary bankruptcy proceedings (without the need for asserting the lenders' claim in such proceedings).
- Laws may exempt mortgage lenders from going to court to enforce their claims.
- Prudential requirements may facilitate access to finance for certain categories of borrowers where additional guarantees are provided, or set advantageous risk weightings on banks' capital ratios for owner-occupied mortgage loans.
- Government housing finance agencies may be established to develop the domestic housing finance market⁸⁹.

⁸⁷ *ibid.*, 7.86.

⁸⁸ *ibid.*, 7.86.

⁸⁹ Add reference.

3.2 Learning from the Egyptian mortgage refinancing company

In late 2004, the government of Egypt embarked on a macroeconomic and structural reform programme that improved the investment climate and supported economic growth. The real GDP growth rate increased from 6.8% (2006) to 7.2% (2008). During this positive period the World Bank funded Egypt Mortgage Finance Project (EMFP) was approved and became effective on 8 May, 2007. The estimated project cost was US\$ 37.1 million and the actual cost was US\$ 39.1 million. This difference arose due to the fluctuations in the Egyptian pound – the currency in which the loan was denominated. The project was closed as scheduled on 31 July, 2011.

Although the banks had plenty of liquidity in 2006, they were reluctant to extend mortgage loans for two primary reasons: (i) the maturity mismatch between their short term deposits and long term mortgage loans; and (ii) the lack of registered titles - in part due to the costly and time consuming process to obtain good title⁹⁰.

In order to address these constraints, the government started to work on developing the enabling environment for a modern residential mortgage market⁹¹. The enabling environment included the laws, policies, institutions and systems necessary to facilitate the emergence of an efficient, low risk residential mortgage finance system in which mortgage lenders would be able compete on a market basis to make housing finance available on economically attractive terms and conditions⁹².

To ensure liquidity in the housing mortgage industry, the Egyptian Mortgage Refinancing Company (EMRC) was established in 2006 under the Egypt Mortgage Finance Project. The EMRC did not provide any refinancing to PMLs during 2007. In 2008, it began to refinance loan portfolios for banks and mortgage finance companies at below-market interest rates. This reduced liquidity risk and increased mortgage loan origination by PMLs. However, although the EMRC provided refinancing each year from 2008 to 2011, when the World Bank project closed in 2011, EMRC's outstanding refinanced loans were less than half of the target originally envisaged (see Table 6 below)⁹³.

EMRC was modeled after secondary mortgage financial institutions like Fannie Mae, and Cagamas Berhad. It was designed to purchase loans from mortgage lenders and to ultimately issue Mortgage-Backed Securities (MBSs) in the capital market through an efficient panel of primary dealers and underwriters, which would diversify lending risks and motivate capital market investors to purchase such securities⁹⁴. The project set two yardsticks to measure its success: 1) the growth of the longer term mortgages; and 2) the issuance of bonds on market terms by the MLF to fund these mortgages. It was envisaged that EMRC would start to sell bonds by the second year of its operations so as to mobilise funds for its operations. However, no bond operations were launched during the life of the project, nor were they initiated as of the spring of 2015 when the review of the project was ultimately conducted⁹⁵. During the second year of the project (2008), the global financial crisis unfolded and Egypt was also hit by the Arab Spring which ultimately led to the downfall of two governments in 2011 and 2013 respectively⁹⁶. This economic and social turmoil created extremely unfavorable market conditions for EMRC operations⁹⁷.

In addition, even if these adverse developments had not taken place, "it is not clear that the conditions to support EMRC's bond issuance were in place. No meaningful institutional investor base capable of absorbing EMRC's bond issuance was in place nor was it clear that banks would have been in a position to carry these instruments. While banks had ample liquidity, much of it was allocated to T-Bills (they held 95% of outstanding stock), their funding was short-term and carrying longer-dated securities would have increased maturity mismatch risk. Moreover, the public sector had substantial and rising roll-over requirements (around 20 percent of GDP in YR3/YR4 of the project) and would have been competing with EMRC in issue placements⁹⁸."

⁹⁰ The World Bank 2012 *Implementation Completion and Results Report (IBRD-73960) on a Loan in the Amount of 214.2 Million Egyptian Pounds (US\$37.1 Million Equivalent) to the Arab Republic of Egypt for a Mortgage Finance Project 5*.

⁹¹ *ibid.*, 7.5.

⁹² *ibid.*, 7.5.

⁹³ See Independent Evaluation Group 2015 *Project Performance Assessment Report Arab Republic of Egypt Mortgage Finance Project (IBRD – 73960)* 13 where it is stated further that, "as of year-end 2013, two years after the project closed (a lapse of time that "accommodates" the initial project delays), this output remained 50% below the target value for the fifth year of EMRC operations."

⁹⁴ Policygnosis International 2011 *A Feasibility Study on the Establishment of a Secondary Mortgage Institution in Nigeria 20*.

⁹⁵ Independent Evaluation Group 2015 *Project Performance Assessment Report Arab Republic of Egypt Mortgage Finance Project (IBRD – 73960)* 13.

⁹⁶ *ibid.*, 7.13.

⁹⁷ Economic recovery in Egypt remains particularly fragile due to 1) high inflation - 10.14% in 2014; 2) a budget balance still projected to show a deficit of 11% of GDP in FY 2015/2015; 3) the country's high outstanding debt to GDP ratio, up to 97% in June 2014; and 5) a rising unemployment rate. Economic recovery will be dependent upon continued reform efforts. With inflation in Egypt in double digits and the country's population growing at 1.6% per year, many Egyptians are unlikely to see real increases in their standard of living.

⁹⁸ Independent Evaluation Group 2015 *Project Performance Assessment Report Arab Republic of Egypt Mortgage Finance Project (IBRD – 73960)* 13 – 14.

Table 6: Outputs: Annual Targets and Results

Output indicators	Baseline 2006	YR1 2007		YR2 2008		YR3 2009		YR4 2010		YR5 2011	
		Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual
Volume of refinancing loans to PMLs (LE million)	N1	125	NIL	300	131	600	176	800	289	1200	450
EMRC launches bond operations (Y/N)	N1	N	N	Y	N	Y	N	Y	N	Y	N

Source: Project Appraisal Document and EMRC

During the life cycle of the World Bank project, less than half of one output (yardstick 1) and none of the other output (yardstick 2) were delivered. However, significant growth did occur in the primary mortgage market, both in terms of the number of lenders and the volume of housing finance which expanded at high rates. Among the positive outcomes observed were:

- Policy and regulatory reforms including mortgage laws, building code and streamlining property registration;
- Capacity building in public agencies, including the central bank, the housing sector and social welfare, which set the stage for future housing and financial programs;
- A large increase in the outstanding stock of mortgage loans – from LE 300 million in 2006 to LE 4,706 in 2011;
- A significant extension of the term-to-maturity of mortgage loans – from an average of 7 years in 2006 to 16 years in 2011;
- An expansion in the number of mortgage finance companies – from 2 in 2006 to 12 in 2011;
- More competitive mortgage markets with both banks and mortgage finance lenders participating in the market.

The Independent Evaluation Group are however of the opinion that although it is true that the mortgage markets expanded since the project was implemented and the tenor (term-to-maturity) became longer, the actual contribution of the project to this outcome is questionable⁹⁹. The rationale for this reasoning is that most of the growth in mortgage lending took place before the project began its disbursement (towards the end of 2008)¹⁰⁰. Additionally, even today, the size of the mortgage market remains small (at less than one half of 1% of GDP. Available evidence also seems to suggest that the EMRC lagged behind the markets, instead of leading them, in extending the tenor of mortgages¹⁰¹.

On its second goal, (2) the issuance of bonds, the EMRC was less successful – no bonds were issued into the market. At the time of appraisal of the project, the bond market was very underdeveloped. Only the government and a few large companies such as Telecom Egypt and Orascom had issued medium-term bonds (of 5 – 10 years) to the public¹⁰². As of April, 2014, the corporate bond market was less than 1% of GDP – a small fraction of treasury securities which amounted to 49% of GDP. The panic caused by the global financial crisis and the Arab Spring depressed trading further and drained liquidity from the markets¹⁰³. The Independent Evaluation Group state in their 2015 report that despite clear objectives and a reasonable results framework, the World Bank project design suffered from a serious flaw, namely, it did not ascertain that adequate conditions were in place, or would be put into place to enable the MLF to work effectively¹⁰⁴. Additional factors which were not adequately considered during the appraisal phase of the project were¹⁰⁵:

- (i) The lack of a buoyant and growing domestic institutional investor base;
- (ii) An underdeveloped private bond market that would likely not be capable of supporting a cost-effective credit rating, bond underwriting, and servicing infrastructures;
- (iii) Weaknesses in the macroeconomic framework;
- (iv) A lack of clarity on whether a sufficiently homogenous pool of mortgages underwritten under sound origination standards was being generated.

Whilst the relevance of the project's objective was rated as substantial, the overall outcome was rated moderately unsatisfactory. The Independent Evaluation Group state that, "the project failed to achieve its objectives. So far, the MLF (which was incorporated as the Egyptian Mortgage Refinancing Company or EMRC) has not started performing its most important role. [...] The EMRC has not served as a centralised issuer of corporate bonds to mobilise long-term funding from domestic capital markets. The EMRC has so far operated on the basis of the funds provided by this project (and stakeholders' subscriptions), which were intended only to be used as bridge finance to get it started¹⁰⁶."

⁹⁹ *ibid.*, 7.ix.

¹⁰⁰ *ibid.*, 7.ix.

¹⁰¹ *ibid.*, 7.ix.

¹⁰² *ibid.*, 7.5.

¹⁰³ *ibid.*, 7.5.

¹⁰⁴ *ibid.*, 7.9.

¹⁰⁵ *ibid.*, 7.8 – 9.

¹⁰⁶ ix. The findings of the evaluation were based on a review of the project appraisal document (PAD), implementation and results report (ICR), IEG review of the ICR and other documents from the World Bank's operations portal. In addition, IEG carried out a mission to Egypt in March 2015 to conduct a number of interviews.

It seems a little unfair that the overall outcome of the project was rated as moderately unsatisfactory by the Independent Evaluation Group purely on the basis that the EMRC had not issued any bonds by the close of the World Bank project on the 31st July, 2011 but it must be remembered that this was one of only two yardsticks set by the Bank to measure its success. The heavy emphasis on the issuance of bonds as the ultimate indicator of the success or failure of the MLF was lightened by the World Bank in the subsequent projects funded in Tanzania and Nigeria. It must be emphasised that the Egyptian project contributed to:

- 1) Helping participating mortgage lenders to mitigate important lending risks associated with housing loans;
- 2) Facilitating an increase in the flow of private sector funding to the housing finance sector; and
- 3) Improving the affordability of housing finance through a lengthening of the term to maturity of mortgage loans.

More specifically, “the term finance provided by EMRC to PMLs helped them to reduce the liquidity risk incurred in their provision of long term loans for housing (i.e., the risk that the money will be needed before it is available); which allowed them to increase housing finance. The PMLs were able to utilise EMRC financing to improve the efficiency of their portfolio and risk management activities, which helped to lower financial spreads in the market to the benefit of home-buyers. EMRC financing also helped to facilitate increased competition in the mortgage market by creating a funding source for non-depository lenders, promoting the development of safe and sound mortgage credit standards¹⁰⁷.”

On the 30th June 2013, EMRC signed a new Master Refinance agreement with Banque Misr for LE20 million. This is the first to be signed with Banque Misr, being one of the four entities that were assigned to handle the financing of the National Housing Programme (NHP) that supports low income citizens¹⁰⁸. The EMRC continues to operate despite no longer receiving World Bank funding. In July 2015, Amlak Finance & Real Estate Investment Company signed a refinance contract with EMRC worth EGP50 million (US\$6.3 million)¹⁰⁹.

¹⁰⁷ See World Bank 2012 Implementation Completion Report (ICR) Review - Eg-Mortgage Finance. Online. Available at: <http://lnweb90.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/8525682E00686037852579960073FDDA?opendocument>

¹⁰⁸ Independent Evaluation Group 2015 Project Performance Assessment Report Arab Republic of Egypt Mortgage Finance Project (IBRD – 73960) 67 – 68.

¹⁰⁹ See <http://timberexec.co.uk/amlak-egyptian-mortgage-refinance-sign-usd6m-deal/?lang=sq>

Key learnings from Egypt – the basic checklist

Many countries have shown interest in following Egypt's example and adopting the MLF funding model. But, as the Independent Evaluation Group urges, this model is not always viable or appropriate. Box 3 below sets out several lessons learnt from the Egyptian experience and a basic check list of circumstances that should be considered before embarking upon a MLF project.

Box 3: Lessons learnt and a basic check list

Lessons learnt

Lesson 1: Housing finance is not an island. The Egypt Mortgage Finance Project is a stark reminder that housing finance is embedded in the broader financial markets, economy and political situation of a country. The social upheavals in Egypt since the global financial crisis battered the financial system. With rising inflation and falling investor confidence, financial depth (M2/GDP ratio) fell sharply, as did capital market activities. As a result of this, housing finance which was poised in 2005 for a major spurt in growth and innovations was put on hold.

Lesson 2: Legal and institutional framework: Housing finance is also an integral part of the overall housing markets. The project revealed that deepening financial markets for loans and increasing institutional investment opportunities, depends not only on creating frameworks for new financing mechanisms, but also on conditions in the underlying market for primary lending and general economic activity. The satisfactory outcome of housing finance initiatives, such as responsiveness, wider access and improved affordability are dependent upon many elements of housing market policies other than finance. These include: property rights, registration records, provision of infrastructure, the availability and ownership of land, regulations of land use and the building industry, rent control and housing subsidies.

Lesson 3: Start with basic financial products and narrow mandates: In emerging mortgage finance systems, second-tier financial institutions should start with basic financial products and narrow mandates in order for them to better manage and control risks in relatively new and untested product markets.

Lesson 4: Housing finance is not the exclusive domain of formal financial institutions. In designing a MLF project, it is important to have an understanding of the various formal and informal market players that affect and would be affected by the intervention. In Egypt, formal financial institutions account for only a small share of the market. Self-finance together with informal lenders extending personal loans to home buyers play a large role in the Egyptian market. Importantly, builders and developers offer extended payment plans which include installment plans of between 5 and 10 years. Builders and developers in Egypt provide more housing loans to homebuyers than banks and mortgage finance companies combined and account for more than two thirds of the market.

Checklist for reviewing the viability and appropriateness of a MLF

- **Readiness of bond markets.** If functioning bond markets are not in place, the MLF would not be able to perform its most critical role of being the central issuer of bonds.
- **Local inflation.** Even if the bond markets are functional, high and persistent inflation may render the MLF impotent. In Egypt's case, the EMRC has not been able to raise funds at competitive rates. Banks can mobilise deposits at much lower rates, albeit also for shorter terms.
- **The presence of non-bank mortgage finance companies.** Without access to cheap sources of funds in the form of bank deposits, non-bank financial firms are more likely to draw on the services of the MLF.
- **Size of the mortgage market.** To compete with banks, the MLF needs a large scale of operations and frequent visits to the bond markets to reduce the cost of operations. If the size of the mortgage markets is too small, as is the case in Egypt, the MLF will not be competitive.
- **The viability of adjustable rate mortgage.** If mortgages are predominantly of fixed rates, the case for adopting a MLF is stronger. Lending large sums on extended terms is not suitable for short-term funding like bank deposits. However, where adjustable rate mortgages are viable, supported by laws and consumer acceptance, the case for a MLF is weaker. Banks can rely on short-term deposits to fund ARM without incurring undue interest rate risk albeit maturity risks require continued management.




Source: Independent Evaluation Group (2015)

3.3 The Tanzanian Mortgage Refinancing Company

3.3.1 The broader context – the Tanzanian Housing Finance Project

Learning from the Egyptian experience, the government of Tanzania recognised that the anticipated acceleration of Tanzania's mortgage finance market would, for the most part, be dependent on the strength of the overall economy; the efficacy of the legal system to support registration of properties and enforcement of rights; and the willingness and capacity of mortgage lenders to accept risks and offer mortgage loans. Cognisant of this, the government, through the Ministry of Lands, Housing and Human Settlements, initiated the Housing Finance Project (HFP) to support an active mortgage market. The HFP is aligned with the Tanzania Development Vision 2025, which highlights the importance of access to finance, affordable housing and capital market development. The HFP Financing Agreement and Project Agreement between the International Development Association (IDA) and the United Republic of Tanzania were signed on 31 March, 2010 and the project became effective on 21 January, 2011¹¹⁰. The Project Development Objective (PDO) of the HFP is to develop the housing mortgage finance market through the provision of medium and long-term mortgage lenders. It has three components. The primary element of the HFP is the provision of long term funds to the mortgage market through a MLF. The Tanzanian Mortgage Refinancing Company (TMRC) was set up for this purpose with a USD 30 million line of credit from the World Bank¹¹¹.

Table 7: A Broader Initiative

PROJECT OBJECTIVE		PROJECT COMPONENTS
To improve access to long-term housing mortgage finance, progressively mobilised through the domestic capital market		1) Develop the Mortgage Market
To develop access to medium term housing microfinance		2) Development of Housing Microfinance
To expand the supply of affordable housing by private developers		3) Expansion of affordable housing supply

Source: Mgaya (2015)

Additional funding of US\$ 60 million for the HFP was approved by the World Bank Board on 24 February, 2015 and signed in March 2015¹¹².

3.3.2 Structure and shareholding of the Tanzanian Mortgage Refinancing Company (TMRC)

TMRC is a financial institution owned by banks and non-bank institutions with the sole purpose of supporting banks to do mortgage lending by pre-financing and refinancing banks' mortgage portfolios. Currently, TMRC has fourteen shareholders¹¹³. On 22 May 2015, Shelter Afrique, a pan-African finance institution exclusively supporting the development of affordable housing and the real estate sector in Africa, finalised a US\$1 million equity investment in TMRC giving it an 11% stake in TMRC. Each of the 14 shareholders has subscribed to the issued share capital of TMRC with the minimum of TZS 500 million.

3.3.3 Goals and expectations of the TMRC

The primary goal of the TMRC is the provision of secure long term funding at attractive rates to member banks to continue lending to their clients¹¹⁴. Secondly, TMRC aims to lower the cost of funds, leading to a lowering of mortgage rates, thereby improving affordability and extending the range of potential borrowers. Thirdly, TMRC aims to facilitate member banks to extend mortgage maturity to be in line with normal mortgage products. Important expectations include the contribution to the growth of Tanzanian capital markets through the issuance of TMRC bonds to source funds for long term lending to member banks and the standardisation of mortgage practices through specialised training to member banks and to continue to facilitate the entry of new mortgage lenders into the market.

¹¹⁰ World Bank 2013 *Restructuring Paper on a Proposed Project Restructuring of Tanzania – Housing Finance Project* Project Loan March 9, 2010 to the United Republic of Tanzania 4.

¹¹¹ *ibid.*, 7.5.

¹¹² The World Bank 2015 *Tanzania Housing Finance Project Implementation Status and Results Report 2*.

¹¹³ The shareholding is as follows: CRDB (14%); Azania Bank (12%); NMB (11%); Shelter Afrique (11%); TIB Development Bank (9%); DCB Commercial Bank (7%); EXIM Bank (7%); BancABC (6%); BOA (6%); NBC (6%); I&M Bank (3%); PBZ (3%); NIC Bank (3%); NHC (3%).

¹¹⁴ Interview with Mr. Oscar Mgaya (TMRC CEO) on the 07/08/2015. Mr. Mgaya confirmed that TMRC sign a debenture with the banks. If a bank defaults, TMRC take the portfolio

3.3.4 The early years – establishment of the TMRC

The development of the mortgage market was, and continues to be, the main component of the HFP project. Initially, the focus of this component centered on the creation and development of the TMRC to provide medium and long-term liquidity to mortgage lenders. The credit provided through the HFP supported the initial start-up phase of the TMRC's operations as a second-tier, wholesale, market-based MLF focused on refinancing longer-term residential mortgage loans originated by mortgage lenders. It was expected that TMRC, like EMRC would begin issuing bonds in the capital market to help fund its operations on a sustainable basis.

The timing of the project was supported by significant improvements at the time in the lending environment. Specifically, the passing of the Mortgage Finance (Special Provisions) Act, 2008¹¹⁵ created strong momentum for the development of housing finance. Other legal changes such as the passing of the Unit Titles Act, 2008¹¹⁶ together with reforms to the titling process significantly improved the prospects for mortgages.

The original World Bank Project Appraisal Document on a Proposed Credit in the Amount of SDR 25.6 Million (USD 40 Million Equivalent) to the United Republic of Tanzania for a Housing Finance Project listed nine critical technical design risks and risk mitigation strategies. For the purposes of this case study, it is important to note that the third risk identified was that “banks would not use the liquidity facility”. During the early years of the project, this was indeed what happened.

Table 8: Critical Technical Design Risks and Possible Controversial Aspects (2010)

Risk	Risk	Risk Mitigation Measure
Risk Mitigation Measure		
1. High risk premium for capital market funding – Pension funds demand a minimum of 3 percent over T-Bills for even highly rated corporate bonds. This would make funding for mortgages too expensive.	M	Pension reform – The Government, BOT and the World Bank are undertaking a comprehensive Pension and Health Finance Reform Program that would establish a framework where pension funds' investments are based on adequate long-term risk-return criteria rather than on short-term speculative transactions.
2. Creating a credit risk 'sub-prime' problem – Mortgages are relatively unknown in Tanzania both to financial institutions and to consumers. There is a risk that without adequate regulation, inappropriate products and lending may take place.	N	Strengthen regulation – The project envisages the development of regulatory frameworks for mortgages to manage and monitor risks arising from these new lending activities. Mortgage literacy programme will be carried out.
3. Banks will not use the facility for refinancing – The mortgage liquidity facility will operate on a market basis and will face risk that it is not able to offer pricing which is attractive enough for banks to participate.	N	Ensure lender ownership of the facility – By ensuring ownership of the facility by banks, this will create an incentive for banks to use the facility and to make it work. The cooperative nature of the facility means that the more it is used, the stronger it becomes and the cheaper it can raise funding.
4. Insufficient stock of 'mortgage-able' housing – The supply of housing is limited and virtually non-existent in the 'affordable' range. Most housing is self-built on an incremental basis.	N	Supply side component – There is a large stock of partly finished housing which offers great potential for initial growth of the mortgage market. The project also seeks to remove some of the supply barriers making housing development uneconomical at present.
5. Inadequacy in land titling and registration may hinder 'effective demand' for mortgage loans.	N	On-going efforts to improve titling/registration – The Land Reform Project and the Private Sector Competitiveness Project by the World Bank and land regularisation efforts by the GOT will improve delivery of titled property which can be used as collateral for mortgages.
6. Land development continues to be expensive – High cost of servicing land and the inability of developers to access large parcels of land for housing development continues to drive up the price of housing.	M	Create a one-stop-shop for land servicing and development – The restructuring of NHC aims to expand the agency's role as a master-developer, responsible for delivery of larger parcels of serviced land. This will help make housing more affordable through economies of scale associated with larger projects, as well as circumvent the otherwise prohibitive cost of trunk infrastructure.

Risk Rating – H (High Risk), S (Substantial Risk), M (Modest Risk), N (Negligible or Low Risk)

¹¹⁵ Act 17 of 2008.

¹¹⁶ Act 16 of 2008.

Table 8: Critical Technical Design Risks and Possible Controversial Aspects (2010) continued

Risk	Risk	Risk Mitigation Measure
Risk Mitigation Measure		
7. Underdeveloped land and property market	N	Establish a Business Plan for NHC with a transparent framework for procurement, development and sale of land – The new Business Plan for NHC will be formally adopted by MLHSD as a condition of disbursement of their activity under Component 3. Also NHC's expanded role does not preclude other players from entering the land development sector; NHC will essentially act as a 'facilitator' of housing by filling a gap (non-availability of serviced land) that currently exists in the supply chain. This is expected to stimulate activity in the housing market, not stifle it.
8. High cost of construction – Conventional construction technology and materials are very expensive, which escalate the unit cost of built up space, adversely affecting affordability.	N	Promote low-cost technologies and design – The HFP will provide support in the production and promotion of low-cost building materials, technologies and house design in the mainstream developer industry, to reduce costs and make housing more affordable. To this effect, the new Unit Titles Act No. 16 of 2008 also supports the development of storied housing and higher density and more cost-effective building/space configurations.
9. Developers' lack of access to construction finance – Banks do not give construction loans, which hamper the ability of developers to raise capital and undertake sizeable housing projects.	N	TA on construction finance – The HFP will help build the capacity of banks on construction finance to equip them to better handle the risk underlying construction loans.

Risk Rating – H (High Risk), S (Substantial Risk), M (Modest Risk), N (Negligible or Low Risk)

As the project progressed it was found that the initiative was unable to address a number of constraints faced by banks in originating mortgages, and this limited participation. The lack of long term funding, combined with a very conservative banking sector was preventing the mortgage market from getting off the ground¹¹⁷. Banks were reluctant to take on maturity mismatches even for short periods of time. It had originally been anticipated that the creation of the TMRC would alleviate this problem and encourage banks to start originating loans. However, in reality, because banks had to hold the loan on their books for a minimum of six months and they also needed to build up a portfolio large enough to refinance through a single transaction, the banks still faced maturity risk which they were reluctant to take.

The combination of these factors meant that despite there being demand for mortgage finance in the market, the mortgage market had not started up as had been expected and banks were unwilling or unable to take the maturity mismatch between origination and refinancing¹¹⁸. It was realised in 2012 that if the TMRC waited for the creation of mortgage portfolios, this would significantly delay the development of the mortgage market in Tanzania. The delay was threatening the sustainability of TMRC as the volumes needed to generate revenue sufficient to cover the operating costs would take time to be achieved¹²⁰.

It is interesting to note that during the design phase of the project, there had in fact been a discussion about the need to have a 'kick-start' phase to build up a mortgage portfolio among lenders prior to the establishment of the MLF. This was however rejected at this stage for several reasons.

- 1) It was felt that the creation of the facility itself would provide sufficient confidence in the availability of long-term funds to allow lenders to develop their mortgage portfolios.
- 2) The administration of direct lending to banks would prove to be complex and problematic, requiring in depth due diligence on each borrowing institution.
- 3) The experience gained in the project in Egypt seemed to suggest that even new lenders were able to enter the market on the basis of the existence of the mortgage liquidity facility¹²¹.

A number of years later, it was found that the decision not to include a "kick-start" phase in the project design had in fact been a mistake and as such, the project was restructured in 2012 to allow TMRC to pre-finance as well as refinance mortgage portfolios from primary mortgage lenders (PML) and an amendment to the Financing Agreement was signed on the 8th March 2013¹²².

¹¹⁷ World Bank 2013 *Restructuring Paper on a Proposed Project Restructuring of Anzania – Housing Finance Project* Project Loan March 9, 2010 to the United Republic of Tanzania 7.

¹¹⁸ *ibid.*, 7.8.

¹¹⁹ *ibid.*, 7.8.

¹²⁰ *ibid.*, 7.8. The World Bank also states that, the market issue had become a bottleneck in achieving the projects objectives within the timeframe.

¹²¹ See World Bank 2010 *Project Appraisal Document on a Proposed Credit in the Amount of SDR 25.6 Million (USD40 Million Equivalent) to the United Republic of Tanzania for a Housing Finance Project* 10.

¹²² See Tanzania: Housing Finance Project (Credit No. 4712-TA) Amendment to the Financing Agreement, 8 March 2013.

3.3.5 Restructuring – the need for pre-financing and refinancing to “kick start” the market

In January 2012, the Implementation Support Mission of the World Bank discussed the possibility of restructuring the HFP Financing Agreement and Project Agreement between the IDA and Tanzania¹²³. Subsequently, the World Bank received a restructuring request letter from the Government in September 2012. The government requested an amendment to the agreements of the project to allow TMRC to pre-finance as well as refinance mortgage portfolios from PMLs. Pre-financing was to allow for an initial “kick start” period to generate mortgage assets onto the balance sheets of the banks which could then be used as eligible assets for refinancing¹²⁴.

The Level II restructuring was approved on 12 February, 2013 and additional changes were introduced through the revision of the Operations Manual¹²⁵. A 5% concessionary discount was introduced on the financing of TMRC to be passed onto lenders. This was capped at 10% and provided an incentive for lenders to enter the market and help support the initial investment outlay by starting up the mortgage product line. The restructuring and subsequent changes to the discount offered by TMRC to lenders paved the way for accelerated implementation, as more banks entered the market and tapped the pre-financing facility and converted the funding into mortgage lending, leading to a rapid growth in the mortgage industry in subsequent months¹²⁶.

The total number of mortgage loans grew rapidly from 2,784 at the beginning of 2014 to 3,598 by the end of December 2014. This represents an increase of 29% in only 12 months. The Bank of Tanzania attributes this increase to a number of factors and stated in December 2014 that, factors attributed to this increase include an increased awareness on mortgage loans among borrowers, public awareness campaigns by banks offering mortgage loan products, favourable interest rate environment during the year – with Bank of Africa’s interest rate reduction campaign which ran for six months in 2014, interest rates on mortgage lending went as low as 16% (for Bank of Africa) from the common 18% to 21% range offered by most lenders¹²⁷.

Additionally, a key contributing factor to the growth of the mortgage market has been the provision of long term funding both in the form of re-financing and pre-financing by the Tanzania Mortgage Refinance Company (TMRC)¹²⁸.

In the third quarter of 2014, Tanzania Investment Bank (TIB) entered the mortgage lending market and there are currently prospects for the entry of other large banking institutions such as NBC and NMB¹²⁹.

3.3.6 The Measurable Impact of Setting up the TMRC

Although the TMRC has yet to serve as a centralised issuer of corporate bonds to mobilise long-term funding from domestic capital markets, its role in boosting the Tanzanian mortgage market cannot be underestimated. The primary achievements of the TMRC have been to facilitate:

- An increase in the number of banks engaged in mortgage lending. Prior to the establishment of TMRC only three banks namely, Azabia Bank Limited, Commercial Bank of Africa (CBA) and Stanbic Bank engaged in mortgage lending. As of July 2015, there are nineteen banks and financial institutions engaging in mortgage lending in Tanzania.
- An increase in mortgage loan tenors: when TMRC was established, tenors ranged from 5 – 10 years; they now range from 15 – 20 years.
- A reduction in mortgage loan interest rates which have reduced from 20% - 25% to between 10% - 16%¹³⁰.
- An increase in the total number of mortgage loans from 2,784 at the beginning of 2014 to 3,598 by the end of December 2014.
- An increase in the outstanding volume of eligible housing loans financed by TMRC from the baseline of 0.00 (31 March 2010) to TZS 16.30 billion (31 March 2015).
- Two financial institutions refinanced by TMRC.
- An increase in the outstanding volume of loans refinanced by the TMRC from the baseline of 0.00 (31 March 2010) to TZS 9.30 billion (31 March 2015).
- An increase in the volume of eligible housing loans pre-financed by TMRC from the baseline of 0.00 (31 March 2010) to TZS 7 billion (31 March 2015).
- An increase in the outstanding volume of loans pre-financed by the TMRC from the baseline of 0.00 (31 March 2010) to TZS 9.3 billion (31 March 2015).

¹²³ World Bank 2013 *Restructuring Paper on a Proposed Project Restructuring of Anzania – Housing Finance Project* Project Loan March 9, 2010 to the United Republic of Tanzania 5.

¹²⁴ *ibid.*, 7.4.

¹²⁵ World Bank 2010 *Project Appraisal Document on a Proposed Credit in the Amount of SDR 25.6 Million (USD 40 Million Equivalent) to the United Republic of Tanzania for a Housing Finance Project* 2.

¹²⁶ *ibid.*, 7.2.

¹²⁷ Bank of Tanzania 2014 *Tanzania Mortgage Market Update – 31 December 2014* 1.

¹²⁸ Centre for Affordable Housing Finance in Africa 2014 *Housing Finance in Africa: A Review of Some of Africa's Housing Finance Markets – 2014 Yearbook* 172.

¹²⁹ Bank of Tanzania *Tanzania Mortgage Market Update – 31 December 2014* 2.

¹³⁰ Mgaya O 2015 *Improving Access to Housing Finance through Mortgage Liquidity Facilities*.

3.3.7 Bond issuance, post 2015

During the next phase of the project, TMRC will continue to support the rapidly growing mortgage market, while also moving towards financial sustainability by raising its own funding through other means, such as local bond issuance. It is envisaged that after exhausting the World Bank loans, TMRC will fund its operations from a combination of both the remaining shareholders' equity and by issuing corporate bonds in the capital market. The bonds issued by TMRC will be plain vanilla bonds with semi-annual interest payments and bullet repayment¹³¹. As the balance sheet of TMRC grows, shareholders will be expected to raise their capital. There should be no restrictions on other banks or other eligible institutions participating in the equity of TMRC. The company is an 'open club' with no restrictions on entry for eligible investors¹³².

3.4 The Nigeria Mortgage Refinance Company PLC (NMRC)

3.4.1 The broader context – the Housing Finance Development Programme

The Nigeria Housing Finance Programme (NHFP) was initiated by the Federal Ministry of Finance (FMOF), the Central Bank of Nigeria (CBN), the Federal Ministry of Lands & Urban Development & Housing and the World Bank/ International Finance Corporation (IFC). Its principal objective is to address the long-term funding constraints hindering the growth of the primary mortgage market and to reduce the costs of residential mortgages and available housing to working Nigerians. The NHFP will be implemented with parallel funded projects in land registration and the construction sectors by DFID and GLZ.

When the World Bank published the International Development Association Project Appraisal Document for a Housing Finance Project in Nigeria, nine factors were highlighted in the document as constraints to the development of the housing finance market in Nigeria (2011 data)¹³³. These are summarised below¹³⁴.

Factor 1: The Nigerian mortgage market remains under-developed despite strong growth over the last six years (2006 – 2011): From 2006 – 2009, the market grew from NGN54 billion (US\$342 million) to NGN226 billion (US\$1.43 billion) at an average rate of 61%. In 2010, due to the banking crisis, outstanding mortgage loans experiences a decline of 7%, before starting to grow again. In 2011, the market stood at NGN224 billion (US\$1.42 billion). Despite this rapid increase, the ratio of mortgage loans to GDP stood at 0.6% as at end 2011¹³⁵.

Factor 2: Unlocking the potential in the housing market requires multiple and interrelated market functions to work effectively: These market functions are: (a) conducive macro policies that provide stable and low inflation, (b) access to long-term finance, (c) reduced cost to business transactions and land registration and foreclosure, and (d) good quality and efficient building and construction.

Factor 3: Current market penetration is limited at all income levels: The average loan size in Nigeria is approximately NGN5 million (US\$32, 00), although this does not reflect the high variance between high income luxury properties and those at the bottom of the market. Based on an average loan size of NGN5 million there were 44,000 individual mortgage loans outstanding in 2011.

Factor 4: Access to long-term funding is reported as a key constraint to accessing housing finance: A mortgage market survey of financial institutions implemented by the Central Bank of Nigeria (CBN) in 2012 confirmed anecdotal reports that access to long-term funds was their major constraint to mortgage growth. Other obstacles highlighted included difficulties with property registration. Titling and the cost and time of foreclosure were ranked as the second and third obstacles, respectively. Survey participants were asked to rank their top 5 obstacles to market development. The results of the survey are set out in Table 8 below.

Table 9: Mortgage Market Obstacles Survey Results (2012)

Mortgage market obstacles	Frequency of response
Access to long-term funds	55
Difficulties with property registration/titling	21
Cost and time of foreclosure	18
High interest rate	14
Lack of housing supply – new construction	11
Burden of regulation (provisioning, capital requirements, liquidity rules)	9
Credit risk (lack of credit histories, documented income)	7
Low level of incomes/informality	5
Lack of understanding of mortgage product/financial literacy by consumer	3

¹³¹ See TMRF website: <http://www.tmrc.co.tz/about>

¹³² <http://www.tmrc.co.tz/about>

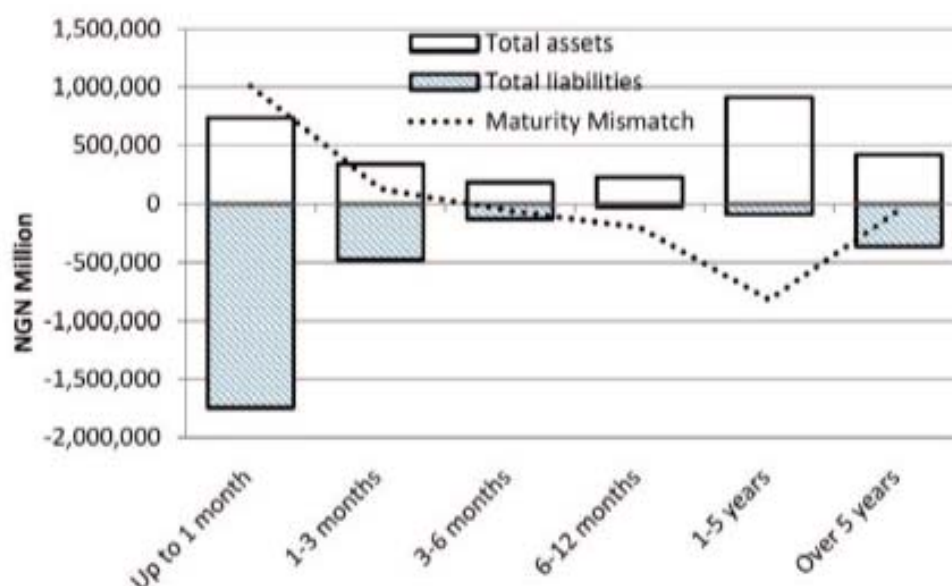
¹³³ See World Bank 2013 International Development Association Project Appraisal Document on a Proposed Credit in the Amount of SDR 199.5 Million (USD 300 Million Equivalent) to the Federal Republic of Nigeria for a Housing Finance Project.

¹³⁴ *ibid.*, 7.3 – 5.

¹³⁵ *ibid.*, 7.3 – 5.

Factor 5: A full maturity breakdown for a large Nigerian Deposit Money Bank which is representative of the sector as a whole confirms the maturity mismatch: This situation would be further accentuated for other financial institutions, especially the Primary Mortgage Banks which have access to very limited sources of funding including deposits.

Figure 10: Maturity Analysis Of Bank X Using Contractual Deposit Maturity



Factor 6: The absence of long-term finance has contributed to the lack of innovation in financial products to reach lower income segments: A financing mismatch is financial institutions; particularly Microfinance Banks (MFBs) have limited their ability to respond to market demand. Anecdotal evidence from microfinance banks suggested that home improvement loans were often disguised as productive loans because the latter are more easily available.

Factor 7: The high cost of doing business for financial institutions, which is reflected in the interest rates they charge, prevents access to low income markets: Credit risk is calculated using the Probability of Default (PD) and the Loss Given Default (LGD). The PD in Nigeria is high due to the difficulties in underwriting a loan without reliable credit scoring information to assess borrowers and to know with certainty whether the borrower already has additional loans. The LGD will be high, due to difficulties in foreclosing on properties, lack of reliable property valuations and lack of a liquid property market on which to resell foreclosed properties.

Factor 8: A sound legal framework for foreclosure is in place. However in practice, its implementation encourages informal practice. Power of sale (non-judicial foreclosure and sale of property used as mortgage collateral) is available under the laws of Nigeria. However, in practice, lenders regularly forego their right to “perfect” mortgages by registration in the property records due to the lengthy process, making it difficult to foreclose in the case of default. The State of Lagos has however adopted fast track court procedures for mortgage cases under a specialised commercial division of the High Court. These fast track procedures have reduced the time to resolve a mortgage enforcement case to approximately eight months, down from several years.

Factor 9: The housing sector suffers from high construction costs which limit the development of affordable housing: It is estimated that the construction of a 3-bedroom house in Nigeria costs US\$50, 000, compared to US\$36, 000 in South Africa and US\$26,000 in India. Limited, often absent, public infrastructure is frequently priced into residential housing. Skilled labour is in short supply and larger construction companies often resort to training their own staff. These costs make housing construction expensive and limit affordability.

3.4.2 Project Development Objective and project components

In order to address the constraints listed above the Housing Finance Development Project (HFDP) was launched in Nigeria. The Project Development Objective of the HFDP is to, “increase access to housing finance by deepening the primary and secondary mortgage markets in the Federal Republic of Nigeria¹³⁶.”

The first tier of beneficiaries that the project aims to benefit are new mortgagors in existing market segments in the first 2 years and in lower income market segments, including the self-employed in the microfinance market segment in the next 2 years. The second tier of beneficiaries of the project will be those employed directly or indirectly in the housing sector. These beneficiaries will benefit through increased activity as housing production is scaled up. The third tier beneficiaries are institutions in the financial sector that will benefit from the growth of mortgage assets. These beneficiaries include: commercial banks, MFBs and institutional investors such as Pension Fund Administrators (PFAs). Importantly, the project aims to provide a new investment outlet for PFAs in the form of Nigeria Mortgage Refinance Company (NMRC) bonds which will match their needs for long-term investments¹³⁷.

The three results indicators for the project are as follows¹³⁸:

- **Indicator 1:** Number of new mortgage loans provided;
- **Indicator 2:** Number of new mortgages below NGN5 million;
- **Indicator 3:** Proportion of mortgage debt outstanding refinanced by NMRC.

The HFDP has four distinct components. The first component of the project is support for the establishment and operation of the NMRC, created in partnership between private financial institutions, development finance institutions and the Ministry of Finance. The NMRC has been designed to bridge the gap between mortgage lenders and the capital markets. It will issue standard corporate bonds into the capital market and subsequently issue loans (refinance and pre-finance) to mortgage lending institutions. Component 2 is the establishment of a Mortgage Guarantee Product targeted at lower income borrowers, Component 3 is a housing microfinance component and Component 4 consists of technical assistance and capacity building.

3.4.3 The structure and objectives of the NMRC

NMRC was incorporated on 24 June, 2013 as a public limited liability company registered with the Securities & Exchange Commission (SEC). It is regulated by the Central Bank of Nigeria (CBN) as a non-deposit taking financial institution with the core activity of refinancing mortgages. NMRC is a Public Private Partnership (PPP) arrangement between the Federal Government of Nigeria and the private sector. Its purpose is to bridge the funding cost of residential mortgages and promote the availability and affordability of good housing to working Nigerians, by providing mortgage lending banks with increased access to liquidity and longer term funds in the mortgage market. NMRC currently has 20 member mortgage lending banks¹³⁹.

The key business objectives of the NMRC are to:

- Encourage financial institutions to increase their mortgage lending by providing them with long term funding;
- Increase the maturity structure of mortgage loans and assist to reduce mortgage lending rates;
- Increase the efficiency of mortgage lending by taking a lead role in proposing changes to the enabling environment for mortgage lending as well as standardising mortgage lending practices of financial institutions;
- Introduce a new class of high quality long-term assets to the pension funds and other institutional investors.

It is intended that these objectives will be executed in phases so as to enable the NMRC to operate as efficiently as possible and to lay the foundations for supporting other key sectors.

3.4.4 Learnings from other World Bank funded MLF projects and changes to the project design

Substantial changes have been introduced by the World Bank to the structure of the HFDP, particularly the structure and operational plan of the NMRC. These changes have been informed by the experiences in Egypt and Tanzania as the solutions in both countries had weaknesses that did not tap the bond market¹⁴⁰. In order to reflect the lessons learned, the IDA loan to the NMRC will be disbursed in phases as subordinate debt financing. The funds will not be on-lent, but invested in securities to cover the NMRC's operational costs and grow its capital base. This approach will ensure a strong capital base and will force NMRC to issue bonds from year 1¹⁴¹.

¹³⁶ World Bank 2013 *Project Appraisal Document on a Proposed Credit in the Amount of SDR 199.5 Million (USD300 Million Equivalent) to the Federal Republic of Nigeria for a Housing Finance Project 7*.

¹³⁷ *ibid.*, 7.7.

¹³⁸ *ibid.*, 7.

¹³⁹ The 20 member mortgage lending banks are: Sterling Bank Plc; Access Bank Plc; Heritage Bank Plc; Stanbic IBTC Bank Plc; Infinity Trust Mortgage Bank Plc; Homebase Mortgage Limited; FHA Homes Savings & Loans Limited; Aso Savings & Loans Plc; Trust Bond Mortgage Bank; Imperial Homes Mortgage Bank Plc; Abbey Mortgage Bank Plc; Resort Savings & Loans Limited; Platinum Mortgage Bank Limited; Jubilee Life Savings & Loans Limited; Haggai Savings & Loans Limited; Refuge Home Savings & Loans Limited; New Prudential Building Society; Sun Trust Savings & Loans Limited; Nigeria Police Mortgage Bank Limited; Mayfresh Savings & Loans Limited.

¹⁴⁰ World Bank 2013 *Project Appraisal Document on a Proposed Credit in the Amount of SDR 199.5 Million (USD300 Million Equivalent) to the Federal Republic of Nigeria for a Housing Finance Project 12*.

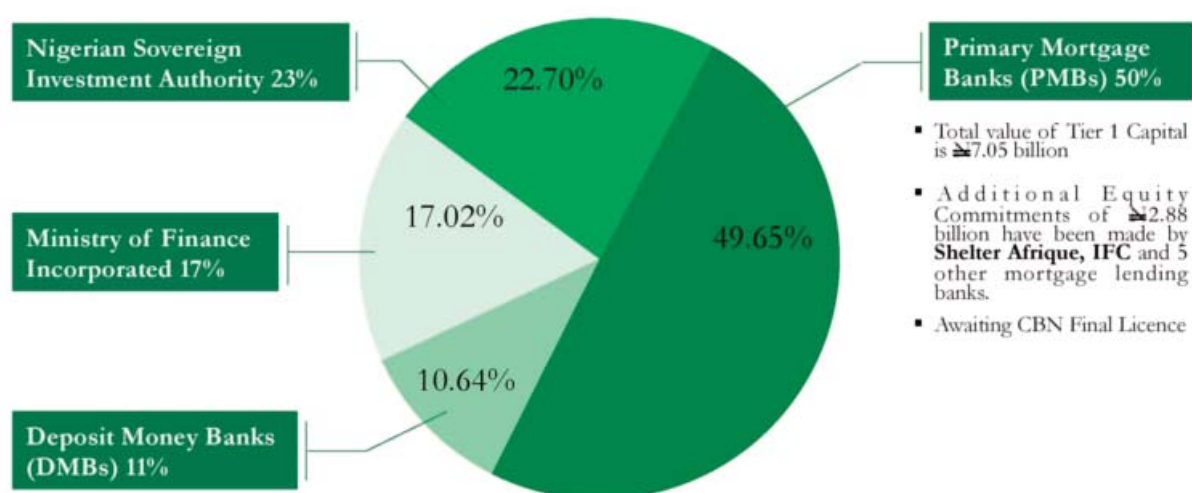
¹⁴¹ *ibid.*, 12.

The NMRC will therefore serve as a financial intermediation vehicle. With the strength of its capital base and credit support from the Federal Government, NMRC will be able to access a steady flow of long term funds from the capital market through the issuance of bonds or other forms of debt instruments¹⁴². During the ordinary course of its business, the NMRC will lend these funds to participating PMLs in the form of loans backed by an assignment of security interest in a pool of mortgages which have been prequalified for refinancing. NMRC will be assigned a security interest over the receivables and as such, will only hold a beneficial interest over the receivables while the credit risk will be retained by the PMLs. NMRC will have full recourse if there is a failure of the security¹⁴³.

3.4.4.1 Tier 1 and Tier 2 capital

The NMRC is majority owned by private sector institutions and is registered as a publically listed company owned by Deposit Money Banks, Primary Mortgage Banks, International Financial Institutions and a 17.02% share owned by the Ministry of Finance. NMRC enjoys a strong shareholder base, presently made up of two public sector-related entities (jointly accounting for 39.7% of the fully paid up capital) and 20 local financial institutions. NMRC is well capitalised with total Tier I capital of ₦7.05bn as at 31 March 2015. In addition, the company has secured the commitment of the World Bank – IDA to inject Tier II capital of USD250m into the company.

Figure 11: Tier I Capital – Tranche 1 Equity Capital



Source: Ayere (2014)

A line of credit of US\$250 million equivalent will be disbursed in six tranches to the NMRC as Tier 2 capital. The role of the IDA line of credit will be twofold:

- To strengthen the balance sheet. This confidence is critical in ensuring its ability to raise bond financing at just above sovereign debt levels. In addition, the initial bond issuance will benefit from a sovereign guarantee; this is for the initial issues only, with an amount capped at NGN50 billion and will gradually be phased out during the course of the project;
- To ensure sustainability of the model. The IDA funds will be invested in Government securities to generate sufficient return to cover administrative expenses and generate sufficient income to grow the capital base in line with the growth of the balance sheet.

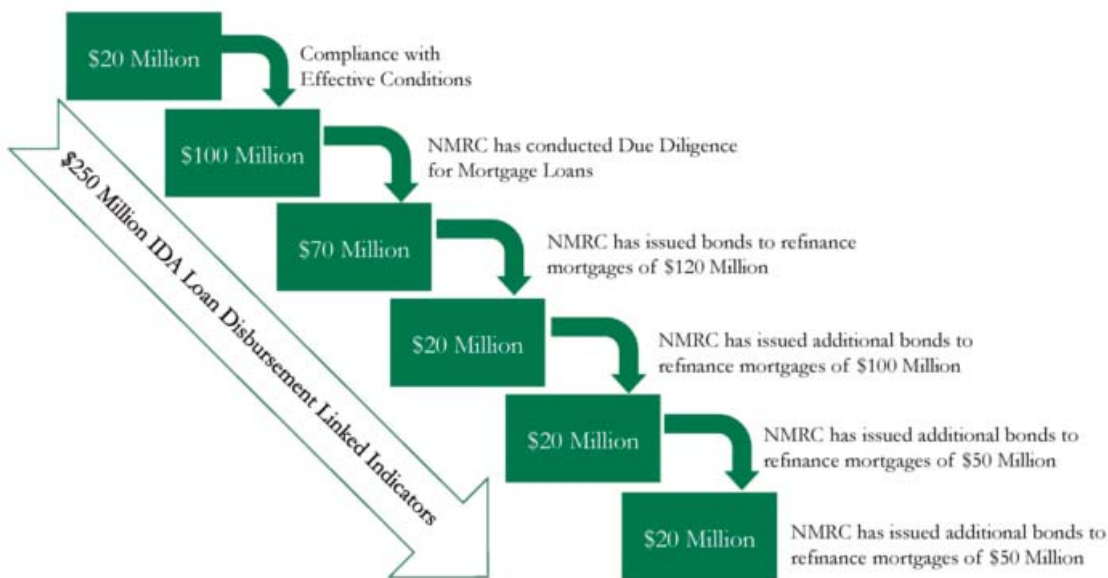
Investing the IDA funds is a departure from previous models in which the World Bank loans were used to provide funding directly for on-lending. One of the consequences is that NMRC will have to issue bonds soon after creation, and before it can begin refinancing or pre-financing operations¹⁴⁴.

¹⁴² Nigeria Real Estate Guide Volume 1 2015 Edition 16.

¹⁴³ *ibid.*, 16.

¹⁴⁴ World Bank 2013 *Project Appraisal Document on a Proposed Credit in the Amount of SDR 199.5 Million (USD300 Million Equivalent) to the Federal Republic of Nigeria for a Housing Finance Project* 8.

Figure 12: Tier II Capital – Performance Linked Disbursement Milestones



Source: Ayere (2014)

The first US\$20 million was disbursed by the IDA once the NMRC was fully operational in line with various technical requirements including fulfilment of its licensing and other obligations to operate. An additional US\$100 million was approved for payment to NMRC once the World Bank's mission was able to confirm that performance indicators specified under the first supervision mission have been met. The indicators included (1) that NMRC has set up adequate systems and controls; (2) has set up a credit policy, asset and liability management policies and financial management and operations policies. In respect of payments to the NMRC, the foreign currency payments will be made directly to the CBN, which will pay NMRC the Naira equivalent. Subsequent disbursements will depend on the achievement of specified performance indicators under the implementation support plan of the Project Appraisal Document. The disbursement linked indicators are set out in Table 9 below.

Table 10: Disbursement Linked Indicators

Tranche	Maximum Amount Allocated	Disbursement linked indicators
I	US\$20,000,000	Compliance with Conditions of Effectiveness under Section 5.01 of the Financing Agreement.
II	US\$100,000,000	Evidence that NMRC has carried out the due diligence for refinance or pre-financing transactions of mortgage loans of Participating Mortgage Lenders ¹⁴⁵ .
III	US\$70,000,000	Evidence that since Tranche II disbursement, NMRC has (a) issued new bonds to fund the refinance or pre-financing of eligible mortgages with a minimum volume of bonds outstanding equivalent to US\$120 million and (b) new refinancing or pre-financing of eligible mortgage loans at a minimum volume of US\$120 million equivalent.
IV	US\$20,000,000	Evidence that since Tranche III disbursement, NMRC has (a) issued new bonds to fund the refinance or pre-financing of eligible mortgages with a minimum volume of bonds outstanding equivalent to US\$100 million and (b) new refinancing or pre-financing of eligible mortgage loans at a minimum volume of US\$100 million equivalent.
V	US\$20,000,000	Evidence that since Tranche IV disbursement, NMRC has (a) issued new bonds to fund the refinance or pre-financing of eligible mortgages with a minimum volume of bonds outstanding equivalent to US\$50 million and (b) new refinancing or pre-financing of eligible mortgage loans at a minimum volume of US\$50 million equivalent.
VI	US\$20,000,000	Evidence that since Tranche V disbursement, NMRC has (a) issued new bonds to fund the refinance or pre-financing of eligible mortgages with a minimum volume of bonds outstanding equivalent to US\$50 million and (b) new refinancing or pre-financing of eligible mortgage loans at a minimum volume of US\$50 million equivalent.

¹⁴⁵ Due diligence means a pre-selection of an eligible pool of mortgages from PMLs so to be pre-financed or refinanced by the NMRC in accordance with the criteria set out in the *Regulatory and Supervisory Framework for the Operations of a Mortgage Refinance Company* and the provisions of a master refinance and servicing agreement or such other applicable agreement satisfactory to the Association) to be entered into between PMLs and the NMRC.

3.4.4.2 The guarantee

The Federal Government of Nigeria (FGN) provides support to the NMRC through a guarantee of its bond issuance¹⁴⁶. The guarantee is both time limited and amount limited. However, within the context of the Nigerian market, the guarantee is seen as a necessary credit enhancement. The rationale for this is that institutional investors are not yet familiar with NMRC and require some initial reassurance to support their investment¹⁴⁷. “A new company with no track record and an unproven business model cannot just issue a bond and expect to have it priced at close to T-bills. The guarantee is limited in amount to N440 billion (around \$2.2 billion) – with the guarantee being subject to review and extended in tranches. There is a cost attached to it which is 10% of NMRC before tax profits which go into a trust towards affordable housing. It is likely that this will be used to fund a credit guarantee program for affordable housing¹⁴⁸.”

It is expected that in the first five years of operation, all bonds issued by NMRC will be backed by the full faith and credit of the FGN. This will “de-risk” the bonds and qualify the issue for an “AAA” credit rating typically assigned to FGN guaranteed instruments¹⁴⁹. After five years, “it is expected that the mortgage asset class would have seasoned (the market would have enough information with which to independently assess its performance), investors would have a better understanding of the mortgage market and NMRC would be able to access the capital market on the strength of its balance sheet without the support from the FGN¹⁵⁰.”

3.4.5 Activities and progress to date

3.4.5.1 Focus on the enabling environment

During 2014, NMRC devoted a considerable amount of time on three technical areas: standardisation, legislative reform and performance data. These activities are considered to be critical to the management of risks inherent in the primary mortgage market for the long-term benefit of market development and the sustainability of the secondary mortgage market.

Table 11: NMRC's focus on Getting the Fundamentals Right

Tranche	Maximum Amount Allocated	Disbursement linked indicators
<ul style="list-style-type: none"> NMRC's Uniform Underwriting Standards for eligible mortgage loans have now been finalised. This process will effectively convert mortgage loans into commodities and lower the cost of due diligence. It will enable investors, rating agencies and guarantors to quantify credit risk. 	<ul style="list-style-type: none"> NMRC's Uniform Underwriting Standards for eligible mortgage loans have now been finalised. This process will effectively convert mortgage loans into commodities and lower the cost of due diligence. It will enable investors, rating agencies and guarantors to quantify credit risk. 	<ul style="list-style-type: none"> NMRC is initiating an IT Framework that will link NMRC's system directly to the participating mortgage lending banks' mortgage information system. Availability of credible historical performance data on mortgage loans (e.g., default and prepayment) will enhance risk assessment and pricing of NMRC's credit risk.

3.4.5.2 Bond Issuance

The NMRC has achieved what the EMRC and the TMRC have yet to achieve. On the 30 September 2015 FMDQ OTC listed the NMRC N8 billion Series 1, 15-Year 14.9% Fixed Rate Bond under a N140 billion Medium-Term Note Programme (the NMRC Bond) on its platform¹⁵¹. The 15-year bonds will be used to refinance existing mortgages that meet specified underwriting requirements and will be listed on the Financial Market Dealers Association trading platform. The bond issued in Nigeria has a ‘pass through’ element. The intention is to raise fixed rate funding and do fixed rate mortgages. The risk of early repayment would be passed on to bond holders who apparently have an appetite for this¹⁵². Speaking at the bond listing ceremony, the Managing Director of Dunnloren Merrifield Advisory Partners Limited, Chinua Azubuike noted that the successful debut of the bond issue has engendered market confidence in the credit standing of NMRC as a bond issuing entity, allowing NMRC to connect the Nigerian mortgage market to the capital markets, particularly the pension fund investors which account for 78 per cent of the bond investors¹⁵³.

¹⁴⁶ Email correspondence with Dr. Hoek-Smit (06/08/2015). “NMRC require a government guarantee to float bonds at reasonable rates. The guarantee gives it a semi-government status and funds are effectively subsidised. While helpful to drive more money to the housing sector, it remains to be seen whether lenders will expand mortgage lending beyond the funds available from the LF and how permanent the guarantee.”

¹⁴⁷ Interview with Mr. Simon Walley (World Bank) on the 07/08/2015.

¹⁴⁸ Interview with Mr. Simon Walley (World Bank) on the 07/08/2015.

¹⁴⁹ *Nigeria Real Estate Guide* Volume 1 2015 Edition 16.

¹⁵⁰ *ibid.*, 16.

¹⁵¹ Crowley K *Nigeria's Mortgage Company Plans \$2.2 Billion Bonds in 5 years, but High Construction Costs Spoil the Party* Mail & Guardian Africa 25/06/2015.

¹⁵² Commenting on this, Mr. Simon Walley noted his concerns in that “the risk cannot easily be priced as there is no early repayment data. Of course during the government guarantee period this does not show up, but looking beyond that I am not sure it will be viable economically.”

¹⁵³ See <http://www.ngrguardiannews.com/2015/10/fmdq-lists-n8-billion-nmrc-bond-on-platform/>

3.4.5.3 Refinancing

On Monday 7 September 2015, NMRC refinanced approximately N1 billion of existing mortgages of Imperial Homes and, according to the authorities of the bank, the refinancing was in pursuit of NMRC's aim of facilitating the provision of affordable homes to Nigerians at good mortgage rates. Imperial Homes is one of the few primary mortgage banks (PMBs) in Nigeria that scaled the Central Bank of Nigeria (CBN) recapitalisation huddle to operate nationally. The bank's long-term view is to achieve low interest rate on mortgage loans to drive affordable housing delivery. The bank was formerly a subsidiary of GTBank PLC. It attained and was granted a national mortgage banking license by the CBN in June 2014. In a statement made available to BusinessDay in Lagos, Ben Akaneme, the bank's managing director, described this refinancing as a milestone, adding that it was an outstanding achievement in the march towards the realisation of affordable and single-digit interest rates for mortgages in Nigeria.

4. Conclusion

The central question that has been examined in this case study is what is the role of a MLF in housing finance in Africa? Clearly MLFs have a vital role to play, not only in serving as a centralised issuer of corporate bonds to mobilise long-term funding from domestic capital markets, but also serving as a catalyst for the development of the primary mortgage market. Through the World Bank's long journey supporting and financing MLFs in Egypt, Tanzania and Nigeria, vital lessons have been learned. Key amongst these are:

- Without a stable macroeconomic framework and deep liquid bond markets supported by active institutional investors, the MLF could not, and should not, be expected to issue bonds at competitive prices (or equivalently at low interest rates). When designing a project that includes the establishment of a MLF, sufficient consideration should be given to whether there is a buoyant and growing domestic institutional investor base; whether the private bond market is sufficiently developed and capable of supporting cost-effective credit rating, bond underwriting, and servicing infrastructures; and confirmation that a sufficiently homogenous pool of mortgages underwritten under sound origination standards is being generated.
- MLFs are easier to establish than securitisation. When establishing a MLF, there is no need for (1) the ability to create bankruptcy-remote structures such as special purpose vehicles (SPVs); (2) a specialised legal framework and willingness of authorities to grant exemptions; (3) a tax framework capable of treating securitisation in a tax-neutral manner; (4) a specific accounting framework; and (5) the ability to transfer/assign security interest at a low cost, all of which are required for securitisation.
- Any country considering the introduction of ABS or MBS should carefully consider the impediments to securitisation transactions that may exist. There is certainly a lot to be learnt from the findings and recommendations of the Malaysian consultative committee. Vitally, it is important to emphasise that securitisation is far more complex than the provision of liquidity through a MLF. Key amongst the requirements for securitisation is an adequate legal, tax, and accounting framework. In Malaysia, the consultative committee found that the impediments faced in securitisation could be categorised based on the three key stages of a securitisation transaction, namely: Stage 1: Prior to the transfer of assets by originator to SPV; Stage 2: During the process of asset transfer from the originator to SPV; and Stage 3: When issuing asset-backed securities.
- Looking at liquidity facilities as a stepping stone for securitisation is misleading. They may help in standardising underwriting/origination standards and therefore make the industry riper for possible securitisation. But this has not happened in Egypt for example. Cagamas went from refinancing with recourse to non-recourse refinancing of loans, making the market ready for securitisation. Looking at MLFs as future securitisation conduits is dangerous. Liquidity facilities address different types of risks and have different requirements from securitisation platforms or conduits. They should make sense in their own right. Lessons from government sponsored securitisation conduits such as Fannie Mae are not encouraging. Indeed, most countries do not need a government sponsored conduit to initiate securitisation. Market entities can do this very efficiently once the demand is there and the tax and regulatory environment allow for it.
- Despite several MLFs not having issued any bonds, their impact in developing the primary mortgage market should not be discounted or underestimated. In particular, the MLFs in Egypt and Tanzania have helped participating mortgage lenders to mitigate important lending risks associated with housing loans; 2) facilitated an increase in the flow of private sector funding to the housing finance sector; 3) improved the affordability of housing finance through a lengthening of the term to maturity of mortgage loans; and 4) been the drivers of regulatory change and standardisation in the primary mortgage market.
- Under certain circumstances, the need for pre-financing may be required in order to allow for an initial "kick start" period to generate mortgage assets onto the balance sheets of banks which can then be used as eligible assets for refinancing purposes.

¹⁵⁴ See <http://www.nmrc.com.ng/news-posts/nmrc-disburses-n1bn-to-imperial-homes/>

- Finally, the manner in which the projects are structured, particularly their funding criteria/conditionality has a direct bearing on if and when bonds are issued. Appropriate incentives need to be in place. In the Nigerian case, the required investment of the IDA funds is a departure from previous models in which the World Bank loans were used to provide funding directly for on-lending. The direct consequence of the new model applied in Nigeria was that the NMRC was required to issue bonds soon after its creation, and before it could begin refinancing or pre-financing operations. This was not the case in Egypt or Tanzania where the World Bank funding was used directly for on-lending.

5. Practical Exercise

The World Bank's 2015 evaluation of the EMRC states that whilst the relevance of the project's objective is rated as substantial, the overall outcome is rated moderately unsatisfactory. "The project failed to achieve its objectives. So far, the MLF has not started performing its most important role. [...] The EMRC has not served as a centralised issuer of corporate bonds to mobilise long-term funding from domestic capital markets. The EMRC has so far operated on the basis of the funds provided by this project (and stakeholders' subscriptions), which were intended only to be used as bridge finance to get it started."

Based upon the experiences in Egypt, Tanzania and Nigeria please consider:

- 1) Whether you agree with this evaluation?
- 2) Whether MLFs have a broader role to play?
- 3) What factors need to be considered before embarking on a MLF project?
- 4) How the project structure of the Nigerian HFDP, particularly the requirement that the IDA funds are invested rather than directly on-lent is likely to lead to the achievement of the three indicators set for the project?

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7. Acronyms

ABS	Asset Backed Securities	NUCA	New Urban Communities Authority
BNM	Bank Negara Malaysia	PDO	Project Development Objective
CAHF	Centre for Affordable Housing Finance in Africa	PDS	Private Debt Securities
CBN	Central Bank of Nigeria	PML	Primary Mortgage Lenders
CRH	Caisse de Refinancement de l'Habitat	PPP	Public-private partnership
DB	Doing Business	PWR	Purchase with Recourse
EFSA	Egyptian Financial Supervisory Authority	PWOR	Purchase without Recourse
EMRC	Egyptian Mortgage Refinancing Company	RM	Malaysian Ringgit
GDP	Gross domestic product	SEC	Securities & Exchange Commission
GSHL	Government Staff Housing Loans	SMF	Secondary Mortgage Facilities
HFP	Housing Finance Project	SMM	Secondary Mortgage Market
IDA	International Development Association	SPV	Special purpose vehicle
IEG	Independent Evaluation Group	TMRC	Tanzania Mortgage Refinance Company
IFC	International Finance Corporation	TZS	Tanzanian Shilling
ILO	International Labour Organisation	UCT	University of Cape Town
NHFP	Nigeria Housing Finance Programme	US\$	United States Dollar
MLF	Mortgage Liquidity Facility	VRM	Variable-Rate Mortgage
NGO	Non-governmental organisation	VTN	Variable Rate Note
N	Nigerian Naira	Yrs	Years
NMRC	Nigeria Mortgage Refinance Company		