Case Study 2

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

by Sarah Langhan

About the Case Study Series:
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.
Structure of the Presentation

- THE PRIMARY MORTGAGE MARKET – PORTFOLIO LENDING MODEL
- THE SECONDARY MORTGAGE MARKET – UNBUNDLING THE MORTGAGE VALUE CHAIN
- MORTGAGE LIQUIDITY FACILITY – BACKGROUND THEORY
- COUNTRY CASE STUDIES - MALAYSIA
- COUNTRY CASE STUDIES – EGYPT
- COUNTRY CASE STUDIES – TANZANIA
- COUNTRY CASE STUDIES – NIGERIA
- KEY ISSUES AND LESSONS LEARNED FOR FURTHER IMPLEMENTATIONS
- EXERCISE
The Portfolio Lending Model

- The traditional source of finance for housing in developed and developing markets is deposits in banks and savings institutions.

- In the traditional mortgage model, the traditional model of mortgage lending is the portfolio lending model.

- One institution performs the major functions of origination, servicing, funding and portfolio risk management.

- Therefore, the portfolio lender originates a mortgage to a homebuyer, services it and performs the pipeline risk management and portfolio management functions, including funding.

- Portfolio lenders are usually deposit taking institutions (commercial banks, savings banks, savings and loans, building societies), contract savings institutions or European-style mortgage banks.

- The portfolio lending model (depository system) is often referred to as a retail approach as institutions deal directly with the public in lending and borrowing funds.

- Although mortgage lending is becoming more attractive to portfolio lenders, such portfolio lenders in many low-income / developing countries are hesitant to enter the market at a significant level.

- 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 liens.
Unbundled Home Mortgage Delivery

- A major emerging characteristic of mortgage markets is functional separation (or unbundling)
- Functions of origination, servicing, risk management and funding are unbundled and provided by different specialised entities
- The institution that originates the loan may or may not be the one that services it
- 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 securities.

Source: Lea (2009)
Mortgage Liquidity Facility

Primary Function and Purpose of a MLF

- MLF is said to generally be more appropriate for emerging markets and can play a vital role in the establishment of a more developed secondary mortgage market, including securitisation.

- Acts as an intermediary between primary mortgage lenders (banks) 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 alone.

- MLFs can provide temporary liquidity support to lenders through collateralised short term operations such as repurchase agreements.

- 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.

Why Do We Need MLFS?

- 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 bases.

- In several developing countries, the instruments to raise funds directly from the capital markets are not available, or if they are, they might be too costly or complex given the stage of market development.
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 transactions costs and lower risk.
- However, in reality many of these market features and institutions only develop once mortgage lending is underway.
- MLFs fulfil 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 infrastructure.

- 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.

- 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.
Mortgage Liquidity Facility

Benefits of establishing a MLF where a developed secondary market is not in place

- Acts as an intermediate step on the path to a full secondary mortgage market
- The provision of secure long term funding at attractive rates
- The availability of fixed rates provides a degree of certainty
- Greater competition in the mortgage market
- Leverage of existing funding sources
- Standardisation in the market
- Provide long term investments to institutions with long term liabilities
- Tool for the delivery of policy objectives
How Does a MLF Work?

1. Borrowers cede their property as security for a long-term mortgage loan
2. When necessary, the bank sources funding from the MLF, using the mortgages as collateral
3. Either receives wholesale loan from the MLF (using mortgages as collateral) or "sells" the mortgage portfolio (default risk remains with the bank)

1. Bank provides loan from its balance sheet
2. When necessary, the bank sources funding from the MLF, using the mortgages as collateral
3. Either receives wholesale loan from the MLF (using mortgages as collateral) or "sells" the mortgage portfolio (default risk remains with the bank)

1. MLF then issues bonds These are not directly linked to the underlying mortgages. Unlike with securitisation the bonds can be issued at any time as there is no need for an existing portfolio of mortgages waiting to be funded
2. A key difference to securitisation is that the risk of default remains with the bank/lender
3. The bond would typically carry a small margin above government securities

1. Institutions with medium to long term liabilities buy the bonds issued by the MLF
2. The MLF may initially carry a guarantee (potentially government funded) in order to stimulate demand

Source: Adapted from Genesis Analytics (2009)
The Steps...........

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. What this means is that the originator is bound to replace any loans which go into default with performing credits.

- MLF’s 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) For the quality of underlying assets (typically mortgage rank, Loan-to-Value ratio, credit scores, residential purposes etc.)

- 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 an additional security.

- 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 advances.
The Steps........

Issuing Bonds

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

- This reflects the low risk nature of the MLF, which benefits from a number of safeguards to protect it against the main risks it faces. The two key risks for an MLF being a default by the refinancing institution and secondly a deterioration of the portfolio of loans it is holding as collateral against its loan to the primary mortgage lenders (PML).

- The safeguards take the form of over-collateralisation, 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 issuance.

- Unlike covered bonds or securitisation, the bonds issued by MLFs do not need a specific legal and tax framework such as exemptions to the general bankruptcy law for the former, or design of a true sale mechanism for the latter.

- 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 investors.

- MLFs also do not require credit enhancement structures which can be expensive, or the equally expensive transaction and deal structuring costs which are characteristic of securitisation.
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:

- A frequent approach is for the MLF to turnover 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 to either keep the mismatch at the originators’ level – this is the case of the French 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)*
Mortgage Liquidity Facility

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 that the bonds are issued at. 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%

Governance and Support

The ownership structure of MLFs is usually structured in one of two ways:

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

Cagamas Berhad

- A case study looking and the role of a MLF in housing finance would not be complete without an examination of the experience of Cagamas Berhad, Malaysia.

- 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 securities
  - 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 Cagamas.

- 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 market.
Current Business Models

Over a 25 year period, Cagamas has evolved through four distinct phases.

Today, Cagamas is a full-fledged mortgage corporation that encompasses a liquidity model, a securitisation model and a guarantee model to promote home ownership.
The Liquidity Model – Purchase with Recourse

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.

- When Cagamas started there were legal constraints in effecting a true transfer of property rights in Malaysia’s real estate laws. 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 loans.
- This approach was a feasible interim step towards the development of a secondary mortgage market for a number of reasons.

1. There was a distinct lack of statistics and a track record of loan performance to fulfil rating agency requirements in assessing the credit risks inherent in ‘pass through’ securitisation.
2. For primary lenders, which were commercial banks, finance companies and the Government Housing Loan Division, liquidity was an issue, not capital adequacy.
3. 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.
4. 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.
The Securitisation Model – Purchase without Recourse

- It took many years to create the enabling environment conducive to securitisation in Malaysia.
- Reforms started in 1998 and are still underway.

Underlying Requirements for Securitisation

- An adequate legal, tax, and accounting framework for securitisation and secured bond issuance
- The creation of bankruptcy remote-issuance vehicles - Special Purpose Vehicles SPVs
- Adequate disclosure of information on the collateral and the issuer is necessary to assess risk
- Facilities for lien registration
- Ability to enforce liens
- Ability to transfer (assign) security interest
- Protection of investors against bankruptcy of originator or servicer
Key Lessons from the Cagamas Experience

- 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 product.

- Looking at liquidity facilities as a stepping stone for securitisation is misleading.

- MLFs 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 may be 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.

- 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.
Country Case Studies - Africa

Three Countries Each with a Different Experience

- Egypt - The Egyptian Mortgage Refinancing Company (EMRC)
- Tanzania – The Tanzanian Mortgage Refinancing Company (TMRC)
- Nigeria - The Nigeria Mortgage Refinance Company Plc (NMRC)

Key Differences in the Macro-Economic Environment

<table>
<thead>
<tr>
<th>Country</th>
<th>Date</th>
<th>GDP growth</th>
<th>GDP per capita (current US$)</th>
<th>Inflation, consumer prices (annual %)</th>
<th>Lending interest rate (%)</th>
<th>Deposit interest rate (%)</th>
<th>Interest rate spread</th>
<th>Domestic credit provided by financial sector (% of GDP)</th>
<th>Domestic credit to private sector by banks (% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>2013</td>
<td>2.10%</td>
<td>$3,314</td>
<td>9.42%</td>
<td>12.29%</td>
<td>7.68%</td>
<td>4.60%</td>
<td>86.19%</td>
<td>27.80%</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td>2.20%</td>
<td>$3,436</td>
<td>10.14%</td>
<td>11.70%</td>
<td>6.91%</td>
<td>4.79%</td>
<td>92.82%</td>
<td>27.30%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>2013</td>
<td>7.30%</td>
<td>$927</td>
<td>7.90%</td>
<td>15.80%</td>
<td>9.80%</td>
<td>6.00%</td>
<td>18.20%</td>
<td>12.80%</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td>7%</td>
<td>$998</td>
<td>6.10%</td>
<td>16.20%</td>
<td>9.90%</td>
<td>6.30%</td>
<td>20.30%</td>
<td>13.80%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>2013</td>
<td>5.40%</td>
<td>$2,966</td>
<td>8.50%</td>
<td>16.70%</td>
<td>7.90%</td>
<td>8.80%</td>
<td>21.90%</td>
<td>12.60%</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td>6.30%</td>
<td>$3,186</td>
<td>8.10%</td>
<td>16.50%</td>
<td>9.30%</td>
<td>7.20%</td>
<td>21.60%</td>
<td>14.50%</td>
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<tr>
<td>Malaysia</td>
<td>2013</td>
<td>4.70%</td>
<td>$10,538</td>
<td>2.10%</td>
<td>4.60%</td>
<td>3%</td>
<td>1.60%</td>
<td>142.60%</td>
<td>123.90%</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td>6%</td>
<td>$10,830</td>
<td>3.10%</td>
<td>4.60%</td>
<td>3%</td>
<td>1.50%</td>
<td>145.30%</td>
<td>124.60%</td>
</tr>
</tbody>
</table>
# Country Case Studies - Africa

## Key Differences in the Level of Development of the Stock and Capital Markets

<table>
<thead>
<tr>
<th>Country</th>
<th>Stock Market</th>
<th>Listed companies</th>
<th>Liquidity</th>
<th>Market Cap.</th>
<th>Dominant sector</th>
<th>Daily trading volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>Egyptian Exchange</td>
<td>240: 216 on main market; 24 listed on Nilex</td>
<td>Liquid</td>
<td>US$73.7bn on main market; $158m on Nilex</td>
<td>Telecoms, construction, financials</td>
<td>137.3 million shares</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Dar es Salam Stock Exchange (DSE)</td>
<td>13 domestic plus seven cross-listed</td>
<td>Low</td>
<td>US$7.10bn (domestic)</td>
<td>Food and beverages, banks</td>
<td>785,048 shares</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Nigeria Stock Exchange (NSE)</td>
<td>199 (primary listings only)</td>
<td>Very liquid in African context</td>
<td>US$78.60bn (primary listings only)</td>
<td>Banks, food &amp; beverages, materials</td>
<td>324 million shares</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Capital Market</th>
<th>Development</th>
<th>Liquidity</th>
<th>Maturity range</th>
<th>Municipal bonds</th>
<th>Corporate bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>Yes</td>
<td>Developed</td>
<td>Liquid</td>
<td>91-day to 20-year</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Yes</td>
<td>Relatively underdeveloped</td>
<td>Limited</td>
<td>35 days – 15 years</td>
<td>None</td>
<td>Very limited issuance and liquidity</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Yes</td>
<td>Advanced in African context</td>
<td>Very liquid in African context</td>
<td>91-day to 20-year</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
In late 2004, the government of Egypt embarked on a macroeconomic and structural reform programme that improved the investment climate and supported economic growth.

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 WB 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 title

To address these constraints, the government started to work on developing the enabling environment for a modern residential mortgage market.

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 conditions.

The Egyptian Mortgage Refinancing Company (EMRC) was established in 2006 under the Egypt Mortgage Finance Project.
Country Case Studies - Egypt

Learning from the Egyptian Mortgage Refinancing Company

- EMRC was modelled 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 securities.

- 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 conducted.

- 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 respectively. This economic and social turmoil created extremely unfavourable market conditions for EMRC operations.
Country Case Studies - Egypt

Learning from the Egyptian Mortgage Refinancing Company

Outputs – Annual Targets and Results

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</tr>
</thead>
<tbody>
<tr>
<td>Volume of refinancing loans to PMLs (LE million)</td>
<td>N1</td>
<td>125</td>
<td>NIL</td>
<td>300</td>
<td>131</td>
<td>600</td>
<td>176</td>
<td>800</td>
<td>289</td>
<td>1200</td>
<td>450</td>
</tr>
<tr>
<td>EMRC launches bond operations (Y/N)</td>
<td>N1</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td></td>
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</table>

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.
BOND ISSUANCE

- 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 public.
- 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 effectively.
- Additional factors which were not adequately considered during the appraisal phase of the project were:
  - The lack of a buoyant and growing domestic institutional investor base;
  - An underdeveloped private bond market that would likely not be capable of supporting a cost-effective credit rating, bond underwriting, and servicing infrastructures;
  - Weaknesses in the macroeconomic framework;
  - A lack of clarity on whether a sufficiently homogenous pool of mortgages underwritten under sound origination standards was being generated.
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 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 finance 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 the 31st March 2010 and the project became effective on the 21st January 2011. 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. The project covers three components.

![Project Objective and Components Diagram](image)

Source: Mgaya (2015)
The Tanzanian Mortgage Refinance Company (TMRC)

- The primary element of the HFP is the provision of long term funds to the mortgage market through a Mortgage liquidity facility. The Tanzanian Mortgage Refinancing Company (TMRC) was set up for this purpose with a USD 30 million line of credit from the World Bank.

- The main blockage which the project seeks to addresses is, as described by the World Bank,

"The main blockage which the project is addressing is access to long term funds among lenders in Tanzania. This was always the main issue which the project aimed to tackle. Lenders in Tanzania tend to be very conservative and are unwilling to be exposed to a maturity mismatch by funding long term mortgage loans using short term deposits. The situation is more extreme than expected with lenders unwilling to fully commit to developing mortgage loan portfolios without receiving funding first to ensure they do not run into mismatch issues. Incidentally the new Basel III international framework on global regulatory standards for capital adequacy imposes much stricter norms on such maturity mismatches. Clearly Tanzania is some way off Basel III standards nevertheless, this project does provide an important tool towards better managing risks in the financial system and moving towards international best practice."
Stages of Development: Tanzanian Mortgage Refinance Company (TMRC)

Early years

- The credit provided supported the initial start-up phase of the TMRC’s operations as a second-tier, wholesale, market-based liquidity facility.

- Its initial focus / mandate was the refinancing longer-term residential mortgage loans originated by mortgage lenders.

- It was expected that TMRC, like the Egyptian Mortgage Refinancing Company would begin issuing bonds in the capital market to help fund its operations on a market sustainable basis.

- During the design phase of the project, there was 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. These were as follows:
  
  - 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.
  
  - The administration of direct lending to banks would prove to be complex and problematic, requiring in depth due diligence on each borrowing institution.
  
  - 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 facility.
Stages of Development: Tanzanian Mortgage Refinance Company (TMRC)

Restructuring

- The proposed restructuring of the HFP Financing Agreement and Project Agreement between the International Development Association (IDA) and the United Republic of Tanzania was first discussed during the implementation support mission that took place in January 2012.

- 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 primary mortgage lenders (PML). The need for this 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 refinancing purposes.

- The rationale for the restructuring of the agreements was founded upon a number of constraints on banks originating mortgages. These included:
  - lack of long term funding combined with a very conservative banking sector was preventing the mortgage market from getting off the ground;
  - banks were reluctant to take on maturity mismatches even for a short period 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] some maturity risk which they [were] reluctant to take.

- 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 months.
Measurable Impact Of TMRC To Date

During the next phase of the project, TMRC will continue to:

- Support the rapidly growing mortgage market;
- 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 repayment.
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/IFC.

- The principal objective of NHFP 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 three PDO level results indicators for the project are as follows:
  - 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 Housing Finance Development Project has four distinct components:

- **Component 1: Establishment of the Mortgage Refinance Company (US$250 million)**: The first component of the project is the 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 MRFC 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: Establishment of a Mortgage Guarantee Product targeted at lower income borrowers (US$25 million)**

- **Component 3: Housing Microfinance (HMF) (US$15 million)**

- **Component 4: Technical Assistance (TA) and capacity building (US$10 million)**
Nigeria – Constraints to the Development of Housing Finance

Mortgage market obstacles survey results (2012)

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

Access to long-term funds was banks major constraint to mortgage growth.

Other factors highlighted as constraints to the development of the housing finance market in Nigeria (2011)

- 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.
- Current market penetration is limited at all income levels.
- The absence of long-term finance has contributed to the lack of innovation in financial products to reach lower income segments.
- The high cost of doing business for financial institutions, which is reflected in the interest rates they charge, prevents access to low income markets.
- A sound legal framework for foreclosure is in place. However in practice, its implementation encourages informal practice.
- The housing sector suffers from high construction costs which limit the development of affordable housing.
STRUCTURE OF THE NIGERIA MORTGAGE REFINANCE COMPANY (NMRC)

- The Nigeria Mortgage Refinance Company Plc (NMRC) was incorporated on the 24th of June, 2013 and is a public limited liability company registered with the Securities & Exchange Commission (SEC) and regulated by the Central Bank of Nigeria (CBN).

- Is 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.

- NMRC currently has 20 member mortgage lending banks.

OBJECTIVES

The key business objectives of the NMRC include the following:

- To encourage financial institutions to increase their mortgage lending by providing them with long term funding;

- To increase the maturity structure of mortgage loans and assist to reduce mortgage lending rates;

- To 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;

- To 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 in the Nigerian environment and to lay the foundations for supporting other key sectors of the economy.
Learning from Other World Bank Funded MLF Projects and Changes to Project Design and Funding

- Substantial changes have been introduced to the structure of the Housing Finance Development Project in Nigeria, particularly the structure and operational plan of the NMRC by the World Bank.

- Changes have been informed by the experiences in both Egypt and Tanzania.

- World Bank recognises that the solutions in both Egypt and Tanzania had weaknesses that did not always tap the bond market.

- In order to reflect the lessons learned, the IDA loan to the NMRC will be disbursed in phases as subordinate debt financing.

- Importantly, the funds will not be on-lent, but invested in securities to cover the NMRCs operational costs and grow its capital base. In this regard, the World Bank state that, “this approach will ensure a strong capital base and will force NMRC to issue bonds from year 1.

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 instruments.

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 retailed by the PMLs.

NMRC will have full recourse if there is a failure of the security.
The role of the IDA line of credit will be twofold:

1. 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.
2. 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 operations.
Disbursement And Conditions

- 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.

- Subsequent disbursements will be based on meeting specified performance indicators under the implementation support plan of the Project Appraisal Document (PAD) and summarised as follows:
  - NMRC will be required to use the funds received to invest in government bonds and securities. It will also be required to meet a certain volume of transactions.
  - On submission of evidence that the funds have been duly invested and that NMR has met the relevant performance indicators required, NMRC will be entitled to receive the third tranche of US$70 million.
  - The fourth, fifth and sixth tranches of US$20 million each also will be paid when specific performance indicators have been met, as set out in the implementation plan. A disbursement condition will therefore apply to this component category.

Guarantee

- The Federal Government of Nigeria provides support to the NMRC through a guarantee of its bond issuance. The guarantee is both time limited and amount limited.

- 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 investment.
Achievements to Date

- Building an efficient secondary mortgage market by focusing on the primary mortgage market first
  - During 2014, the NMRC devoted a considerable amount of time to technical activities.
  - Focused in getting the fundamentals right.

<table>
<thead>
<tr>
<th>Standardisation</th>
<th>Legislative Reforms</th>
<th>Performance Data</th>
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<tbody>
<tr>
<td>NMRC’s Uniform Underwriting Standards for eligible mortgage loans have now been finalised.</td>
<td>The Model Mortgage and Foreclosure Law is in its final form for engagement with the Pilot States.</td>
<td>NMRC is initiating an IT Framework that will link NMRC’s system directly to the participating mortgage lending banks’ mortgage information system.</td>
</tr>
<tr>
<td>This process will effectively convert mortgage loans into commodities and lower the cost of due diligence.</td>
<td>Successful passage will fast track the process for creating legal mortgages, ensure timely resolution of disputes and create an efficient foreclosure process.</td>
<td>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.</td>
</tr>
<tr>
<td>It will enable investors, rating agencies and guarantors to quantify credit risk.</td>
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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 platform.

- 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 this.

- 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 investors.

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.
Key Issues and Lessons Learned for Future Implementations

- 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.
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.

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.
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?