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The Role of Secondary Mortgage Facility in expanding the availability of funds for Mortgage Finance in Nigeria

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Master of Science thesis

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Abstract

Housing since Nigeria's independence has been highlighted as major priority. Unfortunately, for over 48 years her independence, a vibrant mortgage market is yet to be developed. Individual houses continue to be provided through problematic traditional method of buying land and building over some years, which could be an entire life time. In many cases such buildings are left uncompleted or individuals have to exhaust their entire life savings in order to build a home. As Nigerians are desirous of owning their own homes, the Government in its operation is aware of this fact and has always formulate policies and create bureau positioned at increasing the housing stock. The home ownership desire of Nigerians adds tremendous financial, economic and psychological values to those who are able to achieve this goal.

Apart from rising market values, houses also serve as valuable collaterals for loans. However, building and owning a home in Nigeria has become increasingly difficult over the years as a result of prohibitive terms of credit facilities offered by banks and the limitation on loan-able funds available from the apex mortgage banking institution, the Federal Mortgage Bank of Nigeria (FMBN) through the Primary Mortgage Institutions (PMIs) to borrowers. It has also been revealed that one of the major challenges facing housing financing system in Nigeria is the mismatch which currently exists between sources and application of fund in the sector.

This thesis tries to review the role secondary markets can play in expanding the availability of funds for housing in Nigeria. The strategies to be adopted by the Primary Mortgage Markets (PMIs) with respect to the standardization of loan applications; credit policy; property appraisal and loan underwriting are examined as these requirements are particularly important to lower transaction and processing costs. Government can be influential in the development of a secondary market while its major role should be to develop an appropriate legal and regulatory environment.

Several different secondary market models are examined and their experience in developed and developing countries reviewed. The benefits of secondary markets for Nigeria and the obstacles that exist to their creation are also explored. The experience of Cagamas, the National Mortgage Corporation of Malaysia, Nordea Hypotek and Swedbank Mortgage Covered Bond are also discussed. Benefits from these funding mechanisms are explored in order to propose future finance options and possibilities of mortgage market in Nigeria.

The study concluded that in spite of this global trend, both FMBN and mortgage banks in Nigeria have not fully engaged in modern mortgage financing options discussed hence the need to adopt farreaching approach for the benefit of all participants within mortgage industry as proposed in this thesis.

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Table of Contents

1. Introduction And Background	8
1.1 Purpose and Objective	8
1.2 Methodology	9
1.3 Justification	9
1.4 Scope of Study	1(
2. Mortgages And Mortgage Lending Markets:	
Conceptual Framework	11
2.1 Evolution of Mortgage	11
2.2 Concept of Primary Mortgage Market	11
2.2.1 Traditional Mortgage Lending Model	12
2.2.2 The Role of Primary Mortgage Market	13
2.2.3 Market Structure	13
2.2.4 Characteristic of the Instrument	14
2.2.5 Mortgage Origination	15
2.3 Secondary Mortgage Market (SMM)	17
2.3.1 Modern Mortgage Lending Model	18
2.3.2 Secondary Marketing	18
2.3.3 Servicing	19
2.4 The Secondary Mortgage Market Characteristics	20
2.4.1 Whole Loans	20
2.4.2 Mortgage –Backed Securities	21
2.5 Major Prerequisites for Secondary Mortgage	
Market Development	23

3. Historical and Current Status of Mortgage Market
In Nigeria26
3.1 An Historical Overview of Mortgage in Nigeria26
3.2 Primary Mortgage Institutions (PMIs) in Nigeria26
3.3 Why did PMIs Fail?28
4. Mortgage Finance Options in Developed and
Emerging Economies30
4.1 Nordea Hypotek30
4.2 Swedbank Mortgage Covered Bonds32
4.2.1 The Swedbank Portfolio32
4.2.2 Covered Bond32
4.2.3 Credit Rating33
4.3 Cagamas Berhad, the National Mortgage Corporation
Of Malaysia 34
5. Future Possibilities of Mortgage Market in Nigeria 37
5.1 Financing Options for Housing in Nigeria37
5.1.1Traditional Financing Option3
5.1.2 Modern Financing Options3
5.1.2.1 Concessionary Mortgage Lending Window38
5.1.2.2 Capital Market (Commercial) Window38
5.2 The Role of the Federal Mortgage Bank of Nigeria (FMBN)3
5.2.1 Nigeria Secondary Market Strategy on the Short Run4
5.2.2 The Role of PMIs and Universal Banks in the Development of
Secondary Mortgage Market in Nigeria4

5.3 Long run Mortgage Finance Option in Nigeria	44
5.3.1 Mortgage Backed Securities through Securitization	44
5.3.2 Liquidity Facility	47
6. Conclusion and Recommendation	49
6.1 Pre-requisites for Mortgage Backed Securities	49
6.2 Prerequisites for Legal and Regulatory Framework	5
References	54

CHAPTER ONE

1. INTRODUCTION AND BACKGROUND

Housing since the Nigeria's independence has been highlighted as major priority. Unfortunately, for over 48 years her independence, a vibrant mortgage market is yet to be developed. Individual houses continue to be provided through problematic traditional method of buying land and building over some years, which could be an entire life time. In many cases such buildings are left uncompleted or individuals have to exhaust their entire life savings in order to build a home. As every Nigerians is desirous of owning their own homes, the Government in its operation is aware of this fact and has always formulate policies and create bureau positioned at increasing the housing stock. The Federal Housing Authority was charged with the obligation of building new houses to be sold to Nigerians. The home ownership desire of Nigerians adds tremendous financial, economic and psychological values to those who are able to achieve this goal.

Apart from rising market values, houses also serve as valuable collaterals for loans. However, building and owning a home in Nigeria has become increasingly difficult over the years as a result of the prohibitive terms of the credit facilities offered by the banks and the limitation on loan-able funds available from the Federal Mortgage Bank of Nigeria (FMBN) and the Primary Mortgage Institutions (PMIs).

According to a study by the Federal Mortgage Bank of Nigeria, which is the apex mortgage institution in the country, about N35 trillion will be required to meet the shortfall in Nigeria's housing needs, which is currently put at about 14 million units. In a recent news report on the Nigerian Housing Sector aired on African Independent Television (AIT), it was stated that between 1973 and 2006, the Federal Housing Authority (FHA) built only 30,000 housing units nationwide. (Akeju, 2007)

It has also been revealed that one of the major challenges facing housing financing system in Nigeria is the mismatch which currently exists between sources and application of fund in the sector. The Central Bank of Nigeria (CBN) has further observed that the amount of investible funds available to the existing primary mortgage institutions was a mere N36.7 billion, and only N22 billion or 60% of this amount stand a reasonable chance of being channelled for mortgage loans origination. Furthermore, the supply of credit by the Federal Mortgage Bank of Nigeria (FMBN) was grossly inadequate to meet the growing demand. As at end September 2000, FMBN mobilised a total of N5.8 billion from 1.8 million contributors to the National Housing Fund (NHF) while it granted N375 million loans to 631 contributors through 20 PMIs for the construction of houses. Overall, there is evidence of declining activities in housing finance generally (Sanusi, 2003).

1.1 PURPOSE AND OBJECTIVE

The purpose of the paper is to discuss the role of Secondary Mortgage Facility in expanding the availability of funds for Mortgage Finance in Nigeria through the development of a Secondary

Mortgage Market. Also a study of the development and type of mortgage in both developed and emerging economies, like Malaysia will be explored. Strategies from both developed economies and emerging economies could be leveraged upon in order to improve the current situation in Nigeria.

The current savings culture in Nigeria is geared towards immediate short term needs based on composite saving pattern (as published in an article by the former Governor of Central Bank of Nigeria, Charles Soludo: 2008) hence financial institutions need to develop attractive long term savings products that will be consistent with long term mortgage finance nature. The study also intends to discuss how Nigeria can develop a direct Secondary Mortgage Facility (SMF) through Bond Market as perhaps initial alternative strategy before an indirect securitization strategy could be adopted on the long run. There is need for Nigerian banks through government regulatory backing to devise attractive and long term saving products in order to mobilise more finance that could be readily invested in the SMF. The deposit and inflation rates are also important and investors should be able to predict them over a long period of time if they are to be attracted to invest in the secondary market. This is because investors want a marginal return above deposit plus inflation rates to invest in real estate products as opportunity costs to their alternative investment opportunities.

Therefore, the goal of this study is to:

- Discuss the development of mortgage finance in Nigeria today and observe if there have been any changes because of the increased globalisation;
- Analyse factors that hinder the development of mortgage markets in Nigeria;
- Discuss the major financial innovation in mortgage market in developed countries and emerging economies with reference to residential sectors through Secondary mortgage facilities like bond, securitization and SMM development; and
- Propose strategies to expedite the development of mortgage market in Nigeria

Government role will also be examined due to the current global financial crises. Will government have a role to play in the housing finance sector? What facilities are required of government in order to have a stable and predictable housing market? All these will be analysed during the course of this thesis.

1.2 METHODOLOGY

The thesis is exploratory, making use of existing data and therefore mostly based upon a literature study. To a large extent, it will rely on published local and international reports and information from financial institutions, academic research, and theoretical reports from governments and relevant regulatory institutions in Nigeria and lastly other thesis and publications from universities. Following the nature of the topic, the collection of information has primarily been through the Internet.

1.3 JUSTIFICATION

The housing sector plays an important role in both developed and developing economies. The significance of a vibrant mortgage financing in the provision of adequate housing can not be over emphasized. The development of mortgage markets is important for the overall development of a country. In Nigeria, the trend has been through various policies from the federal government. Despite, government efforts at developing the mortgage market, not much have been achieved in this sector. According to Sanusi (2003), 'available information reveals that the supply of credit by the Federal Mortgage Bank of Nigeria is grossly inadequate to meet the growing demand. Furthermore, the average share of GDP invested in housing declined from 3.6 percent in the 1970s to less than 1.7 percent in the 1990s. All these point to the fact that there is need to propose and develop strategies to expedite the development of mortgage market. Also, the persistent case of increasing population in Nigeria currently put at approximately 150 million means a radical approach to solve the lingering housing problems in the country. Therefore, mortgage market development is likely to be a key factor in overall financial market development (Jaffe and Renaud: 1996).

1.4 SCOPE OF STUDY

The Primary Mortgage Institutions, Secondary Mortgage Market and the holistic assessment of the mortgage Market in Nigeria form the research scope of this study. The study relates to Nigeria as a whole and will focus on the past and present activities of major actors in Nigerian housing finance sector with reference to developments in both developed and emerging economies. However, due to limited time and resource for this kind of thesis, analysis and discussion are based on future strategies that can be adopted to expedite the development of mortgage market in Nigeria

CHAPTER TWO

2. MORTGAGES AND MORTGAGE LENDING MARKETS: CONCEPTUAL FRAMEWORK

2.1 EVOLUTION OF MORTGAGE

In the beginning, a mortgage was just a conveyance of land for a fee. The buyer paid the seller a set rate, with no interest, and the seller would sign over the land to the buyer. According to Clayton (2007), the classical form of real estate debt is the mortgage, a loan secured by real property as collateral. The word mortgage Clayton added comes from two Middle English words (which are actually French in origin): "gage" meant an obligation or commitment, while "mort" referred to death or dying. Hence mortgage was a "dying commitment" that is, a commitment that was not permanent but had a finite lifetime.

During the medieval period, land was the direct source of most wealth, as a pledge of real property was the guarantee to secure mortgage. This old arrangement in the view of (Barker, 2006) was however very lopsided in that the seller of the property, or the lender who was holding the deed to the land, had absolute power over it and could do whatever they liked, which included selling it, not allowing payment, refusing payoff, and other issues which caused major problems for the buyer, who held no ground at all.

In the U.S., as mortgage evolved, some states have created their own version of the mortgage, which is why they are referred to as "lien states". The mortgage market in the U.S. was not always so successful. According to Taylor (2004), 70 years ago the mortgage market was virtually non-existent. For a prospective buyer, the options were very limited. The investor could either pay cash or, if he was very lucky and had a good relationship with a local banker, could obtain a short or medium term loan – usually less than 10 years in duration.

Mortgages have ultimately evolved into many different forms all over the world; they are still fundamentally the same essential contract that they were in the beginning. Now, there are many more laws and regulations to help protect the buyers, sellers, and creditors.

2.2 CONCEPT OF PRIMARY MORTGAGE MARKET

The Primary Mortgage Market is a market where all the mortgage loans are originated. The market is a place where the mortgage originators and as well as the borrowers come together to set the mortgage deal and negotiate the terms and conditions regarding that deal. The credit unions, mortgage brokers, banks and mortgage bankers etc all are the part of primary mortgage market. The development of a primary mortgage market depends upon macroeconomic stability of the nation. However, primary mortgage market plays an important role behind the development of a successful secondary mortgage market. The secondary mortgage market on its part, loans and servicing rights are traded between the mortgage securitizers, mortgage originators and investors.

The primary market, also called the new issue market, is the market for issuing new securities. Many companies, especially small and medium scale, enter the primary market to raise money from the public to expand their businesses. They sell their securities to the public through an initial public offer. The securities can be directly bought from the shareholders, which is not the case for the secondary market. The primary market is a market for new capitals that will be traded over a longer period.

In the primary market, securities are issued on an exchange basis. The underwriters, that is, the investment banks, play an important role in this market: they set the initial price range for a particular share and then supervise the selling of that share. The issuing firm collects money, which is then used to finance its operations or expand business, by selling its shares. Before selling a security on the primary market, the firm must fulfill all the requirements regarding the exchange.

After trading in the primary market the security will then enter the secondary market, where numerous trades happen every day. The primary market accelerates the process of capital formation in a country's economy.

The primary market categorically excludes several other new long-term finance sources, such as loans from financial institutions. Many companies have entered the primary market to earn profit by converting its capital, which is basically a private capital, into a public one, releasing securities to the public. There are three methods through which securities can be issued on the primary market: rights issue, Initial Public Offer (IPO), and preferential issue.

Ideally, Primary Mortgage Institutions (PMIs) should encourage prospective owners to open accounts with them and deposit regularly to save towards their home acquisition projects. Upon receipt and approval of applications from qualified customers, they should pay the full value of houses to developers on behalf of their subscribers and retain the title documents as collateral until subscribers fully defray the cost through instalment repayments of loans along with the interest charged. When defaults occur, they should be able to recover the full value of the loans from the foreclosure of the arrangement. Where a thriving secondary market exists, they should be able to package their portfolio of loans for sale to other investors in the capital market through securitization and from the proceeds embark on further lending operations.

2.2.1 TRADITIONAL MORTGAGE LENDING MODEL

The traditional model of mortgage lending is the portfolio lending model referred to as the Bundled Home Mortgage Delivery System in which one institution performs the major function of origination, servicing, funding and portfolio risk management as shown in the table below:

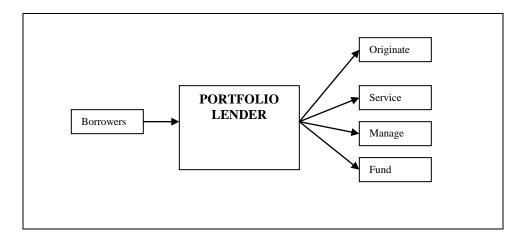


Figure 1: A typical Traditional Mortgage Model Source (Lea and Chiquier: 1998)

The portfolio lender (e.g. commercial banks, building societies) originates a mortgage to the borrower, service it and perform the pipeline risk management and related functions, including funding.

2.2.2 THE ROLE OF PRIMARY MORTGAGE MARKET

According to Lea(1999), a successful secondary market is based on effective management of the basic functions and risks involved in mortgage lending regardless of the institutional entities involved or what separation of functions existing in the market. Lea is also of the view, that the degree of competition in the primary market may have a major bearing on the readiness of lenders to participate in a secondary market. During the Inter-American Development Bank conference of 1999, Lea presented a paper titled "The Development of Mortgage Securitization in Latin America and the Caribbean Conference" and discussed the basic conditions that will make SMM thrive in any economy. These are discussed accordingly below:

2.2.3 MARKET STRUCTURE

Macroeconomic Environment

The competitive environment in mortgage system of any nation is affixed to the policies of government in respective nations. For SMM development, mortgage rates must provide a return that is attractive relative to their alternative investment opportunities (Lea, 1999). The more competitive the mortgage market the greater the potential for secondary market development. According to Lea, special circuit is characterized by specialized lenders that dominate the mortgage market, supported by government incentives, both financial and regulatory. Their preference often lead to the offering of mortgages at less than that necessary to provide acceptable risk adjusted returns of investors.

The state of development of a country's mortgage market will depend in large part upon the degree of macroeconomic stability and past government policies affecting housing finance.

Macroeconomic instability and its consequence of high and volatile domestic interest rates have a disproportionate impact on long-term mortgage finance (Renaud, 2004).

According to Renaud (2004), a variety of factors contribute to greater macroeconomic volatility in emerging economies. Their production structure is typically much less diversified than that of advanced economies, there is dependence on primary commodities; market segmentation tends to be greater for capital, labour, goods, and foreign exchange markets.

The structure of mortgage market is an important factor in the development of secondary market. The interest rates on the mortgages must be market determined and provide investors with a positive, real, risk-adjusted rate of return. The mortgages must be attractive investment and sufficient to cover the investor's marginal funding cost, the risks of mortgage investment and the administrative cost of servicing the mortgages and MBS securities.

Macroeconomic stability is of significance importance within the economy of a nation. The stability has a major effect on the demand for mortgages as high rates of inflation and nominal interest rates are typical features of volatile economies (Lea, 1999).

A volatile economy affects the supply of funds and the mortgages offered by lenders. In a volatile market lenders are reluctant to offer long term loans as they will only offer short maturity loans that in turn are less affordable for consumers because of the difficulties of forecasting inflation and interest rates. Pipeline risk is also much higher in a volatile market. This is typical funding practice among majority of the PMIs in Nigeria.

2.2.4 CHARACTERISTIC OF THE INSTRUMENT

Standardization

Standardization of the mortgage instrument is a key factor in secondary market development. Mortgages should be pooled with similar characteristics to facilitate larger pool size and more liquidity and to reduce the due diligence costs of investors and rating agencies. There can be many types of mortgages present in the housing finance system, but only those with sufficient volume are candidates for sale and securitization. Investors and rating agencies must be able to do due diligence with reasonable cost. The more heterogeneous the terms and documentation of the loans, the greater the cost of due diligence and the less competitive is sale thorough securitization. In order to reduce the transactions costs of evaluating mortgage loans and processing costs of issuing and administering MBS, the characteristic (e.g., rate adjustment, amortization schedule, term) of the mortgages should be uniform.

Documentation

A standardized documentation must be available or all loans. Typical documentation includes the mortgage note (document describing the mortgage obligation) and deed (document conveying ownership to lender as security for the repayment of the mortgage). A key legal prerequisite is the timely and cost effective registration of title and lien. A barrier that exists in many developing

countries is the imposition of transfer taxes or stamp duties on title and lien registration or transfer. Long delays in the registration process can also increase the risk of both primary market and secondary market transaction.

The final major document requirement is the title report or title insurance policy. A title search verifies that the mortgagee owns the property being pledged as security for the lien. The title insurance policy insures against the risk that the mortgage may not have clear title or may have encumbered the property with other liens (which could exceed the value of the property or have a priority to the loan being applied for). Lenders also require property and casualty insurance.

2.2.5 MORTGAGE ORIGINATION

Functions

Loan origination involves all the processes necessary to create a mortgage. It starts with finding the borrower and includes all the activities involved in the generation of a "good" loan that is marketable in secondary mortgage markets. This involves:

- Finding the borrower, using a variety of distribution channel and marketing tools.
- Collecting information about the borrower, loan, and property needed to underwrite the loan.
- Underwriting the loan
- Getting any required investor approvals and obtaining all appropriate legal and other documents designed to protect the interest of the investor and support for the underwriting decision.
- Arranging for collection of property taxes and insurance, as well as any mortgage insurance that may be required to protect the investment.
- Closing the loan and presenting required disclosures of interest and settlement cost.

Underwriting

Solid and consistent underwriting is significant to secondary mortgage market development. Investors must have confidence that lenders are properly judging risk and using a consistent set of criteria in evaluating loans. A degree of standardization is necessary to lower costs of due diligence and allow investors, rating agencies, guarantors to quantify credit risk.

The objectives of home mortgage underwriting are:

- To control the probability and cost of default losses;
- To ensure that all legal and financial requirements are completed satisfactory on the property that serves as collateral for the mortgages so that the interests of the mortgage holder are protected;
- To meet requirement of third parties who have an interest in the safety of the mortgage including such group as:
 - Regulators who are concerned about the safety and soundness of the lending institution.

- Secondary market organization who may be interested in purchasing the mortgage
- Security rating services who may be called upon to provide a quality rating for a security that may include the mortgage as called.

Mahoney and Zorn [1997] described all mortgage underwriting, whether traditional or automated, is based on a wide variety of factors, broadly categorized as the "three Cs": collateral, credit reputation and capacity, as illustrated in figure 2.

The Three Cs of Mortgage Underwriting **Investment Quality** Borrower Creditworthiness Collateral **Credit Reputation** Capacity . House value . History of repayment . Income . Down payment . Current Account balances . Debt . Recent Inquires . Cash reserves . New Accounts . Age of Accounts

Figure 2: The Three Cs of Mortgage Underwriting

Mahoney and Zorn, 1997 cited in Lea(1999)

Collateral

Mortgage is backed by real property, either an owner-occupied home or an investor-owned dwelling. An accurate assessment of the value of the property is fundamental to determine whether, in the even of borrowers default, the lender could recoup enough from the sale of the home to cover loses. The amount of a borrower's own funds invested in the property, also referred to as borrower equity, factors heavily into the lending decision. For years, mortgage research consistently has shown that a borrower with a significant financial stake in the property is less likely to default.

Appraisal

The key factor in assessing the adequacy of the collateral is the appraisal. The appraisal contains a detailed description of the property and three approaches to value: the cost, market and income approaches. The *cost approach* includes an estimate of the value of the land as vacant, the cost of replacing the improvement and an adjustment for estimated depreciation due to physical deterioration and functional and economic obsolescence of the property. *The market approach* estimates the value of the property based on sales prices of similar properties (comparables) in the neighbourood. The appraiser will generally utilize at least three comparables and make adjustments to the comparables for differences in the physical characteristics and condition of the properties. *The income approach* value the property based on the potential rent that could accrue to it. The appraiser will capitalize the potential rent of the property using an income multiplier or capitalization rate. Because of the importance of the market approach to value, a critical factor in underwriting mortgage loan is good quality house price data. Paucity of data may hinder smooth appraisal functions when it is required by underwriters for loan assessment.

Capacity

A borrower's financial wherewithal to repay a mortgage is a third important underwriting factor. Typically, capacity is evaluated using two ratios that express the percentage or an applicant's income needed to cover monthly debt obligations, including the mortgage payment. The housing-debt-to-income ratio between monthly mortgage payments (including taxes and insurance) and gross monthly income. The total-debt-to-income ratio, or "back-end" ratio, also includes non-housing debt, such as car payments and consumer installment debt.

2.3 SECONDARY MORTGAGE MARKET (SMM)

Owning to the shortfall of PMIs, the introduction of Secondary Mortgage Market (SMM) may solve the problems that have impeded the operational functions of PMIs.

For housing finance to be successful, continuous flow of funds must be guaranteed. SMMs are a mean to an end. The end is to increase the flow of funds housing. Therefore, a secondary market provides the means to accomplish this end by bringing together the originators of mortgage loans with the ultimate investors. It does this by developing new instruments and institutions that can lower the risks of mortgage lending for originators and provided them with new funding outlets. The mechanism of capital mobilization through mortgage securitization as found in advanced economies like the US, Germany, France, Italy, and others will serve as a potent driver of real estate growth and housing finance in Nigeria. Similar examples are obtainable in Asia, where the National Housing Fund thrives on, not only the deposit subscriptions, but also on housing bonds issued by the Housing Bank to finance housing development programmes (The Punch Newspaper 2008).

2.3.1 MODERN MORTGAGE LENDING MODEL

The modern Unbundled Mortgage Delivery System functions as SMM. The functions of origination, servicing, risk management and funding are unbundled and managed by different specialized entities

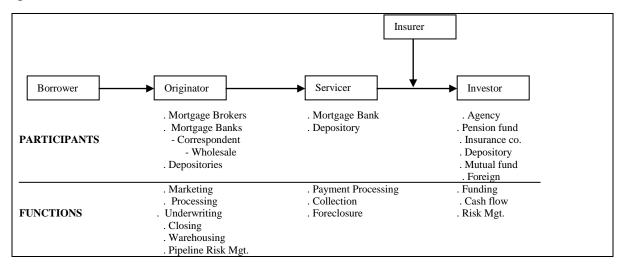


Figure 3: A typical Modern Mortgage Model

In this model, there are a wide variety of investors ranging from depositories to mutual funds (Lea, 1999). The risk management is often specialized as well provided by third parties like mortgage or bond insurance companies. Origination specialist must be more cognizant of pipeline risk which is the risk between the time a lender makes a binding commitment to borrower and the time the loan is either sold or placed in portfolio because the loans are sold after origination.

The quality of mortgages produced by the primary market becomes much more important in a SMM. The SMM separates the act of making mortgage loans from the act of holding mortgage loans. The mortgage holding function is the strategic focus for dealing with the risks of mortgage lending (Renaud, Jaffee, 1996). According to them, the basic principle of SMM is to tap capital market investor as the long-term source for the mortgage market, thus mitigating risks of interest rate and credit risk. The bond market can be a veritable sector to further strengthen the SMM in Nigeria.

2.3.2 SECONDARY MARKETING

Functions

The secondary marketing is the function of financing and, subsequently, selling the originated mortgage to institutional investors. This activity includes the warehousing of the mortgage between the time the mortgage is closed and subsequently sold to an investor. It is arguably the most critical function in the secondary market.

Risk Management

The secondary marketing function is responsible for finding investors that will purchase loans from the mortgage banking operation and for managing the financial risks involved in making loans with an established interest rate in a changing interest rate environment, as well as other risks associated with the process. Although referred to in totality as pipeline risk, there are in fact four major risks the seller must manage as part of the secondary marketing function.

Commitment risk: The risk that an interest rate commitment ("rate lock") offered to a home buyer for a loan is made (fixed) and the firm is unable, generally due to market forces, to earn an adequate sale price to cover the cost of providing the commitment. The risk may be reduced or offset by purchasing offsetting commitments (i.e., committing in advance to sell a loan or pool of loans at a particular rate).

Pipeline risk: the risk that a closed loan will change in value between the time of closing and shipment to an investor. This risk is often hedged using forward, option or futures contracts.

Documentation risk: The risk that a closed loan is underwritten improperly and does not conform to the investor's requirements. These loans are known as "lame loans" and frequently can be converted into acceptable loans for delivery, but usually after months of seasoning and additional documentation. The delays in delivery, or inability to deliver, produce cost for the originator.

Liquidity risk: The risk that certain types of mortgage loans may face large buy price – sell price (bid-ask) spreads. This can happen if the firm buys loans wholesale (i.e., from other lenders) and is unable to generate sufficient volume to securitize or sell the loans at a profit. Problems in reselling the loans may produce losses for the firm.

2.3.3 SERVICING

Functions

The servicing of mortgage is a critical component of a viable secondary mortgage market. The collection of mortgage payment and the periodic remittance of these payments to the investor (or conduit) is the major task of servicers (whether they are originators of third parties). In addition, services are the primary repository of information on the mortgage loans. Thus, they must maintain accurate and up-to-date information on mortgage balances status and history and provide timely report to investors.

Mortgage loan servicing involves all the activities related to:

- Collecting mortgage payments
- Accounting for all financial transactions
- Collecting past due accounts
- Remitting payments to investors
- Foreclosing on seriously delinquent properties
- Deposing of foreclosed real estate.

Additional responsibilities may include administering an escrow account for real estate taxes and insurance, furnishing tax information to mortgagors when applicable and safekeeping collateral (custodial function).

Collections and Default Management

An important part of the servicing is establishment of clear guidelines for the collection of mortgage payments. The documents must spell out payment obligation (dates, amounts, terms of adjustments, obligations for taxes and insurance) and procedures to be followed in the event of default. Although lender's discretion in working with borrowers is an important part of the collection process, third investment (in order to assess the degree of default risk) and what latitude exist in dealing with the borrower (e.g., forbearance or restructuring). Services also must make decisions about and implement procedures leading to foreclosure and repossession in the case of defaulted loans.

Default managing is a major responsibility of the servicer. Loans that are delinquent present the servicer with additional costly activities for which they receive no additional revenue. In extreme cases, a delinquent loan may require initiating an even more costly foreclosure process. Delinquency refers to a situation in which a borrower has not made a payment by due date, typically the 15th of the month. Mortgage lenders typically classify mortgage delinquent loans on the basis of 30, 60, and 90 days delinquent.

2.4 THE SECONDARY MORTGAGE MARKET CHARACTERISITCS

A firm definition of a secondary mortgage market is a market in which mortgages trade; i.e., one that involves the sale and purchase of the mortgage asset (Lea: 1999, Chiquier 1998). They further added that Secondary markets can exist for both whole loans and mortgage-backed securities. Loan instruments traded in the secondary market are packaged to suit varying investors' requirements and come under various types. These are described as below.

2.4.1 WHOLE LOANS

The simplest and oldest version of a secondary market is the purchase and sale of whole loans among portfolio lenders. The whole loans are typically not large or widespread for two reasons: credit risk assessment is costly and the heterogeneous nature of mortgage loans makes it difficult to develop liquidity (i.e., low bid-ask spreads) in the market.

Due diligence is costly in whole loan sales because loan structure, documentation and underwriting are typically not standardized across lenders. In addition, sellers need to generate portfolio performance data, which requires a certain level of system integration and sophistication. The due diligence costs and the risks of whole loan purchase can be reduced if the seller agrees to recourse (i.e., agrees to buy back some or all of the loans in the event of default). While recourse makes

whole loan purchases more attractive to buyers it makes it less attractive to sellers which retain substantial risk against which they must continue to hold capital.

2.4.2 MORTGAGE-BACKED SECURITIES

Mortgage-Backed Securities (MBSs) are securities backed by mortgage loans. Yakubu (2006) opined that they are created through the aggregation of mortgage loans with similar features (as to tenor, pricing, etc.) into pools of securities for issuance to investors through the capital market. These certificates will be available for trading in the capital markets. "MBSs represent an ownership interest in mortgage loans made by financial institutions to finance the borrower's purchase of a home or other real estate", he added. As the underlying mortgage loans are repaid by the mortgagors, MBS investors receive payments of interest and principal. What is traded in essence is the right to receive the repayments on the mortgages, without a transfer of title in any.

Al-faki, 2006 is of the view that (MBSs) are essentially special bonds backed by a stream of cash flows coming from pools of mortgages. MBS could be in either of the following forms:

- i. <u>Collateralised Debts</u>. Similar to conventional borrowing where the market value of the future stream of cash flow generated by the asset is pledged. This is the practice in USA and other Western markets.
- ii. <u>Pass through obligations</u>. This entails direct equity interest in underlying asset pool. Assets are pooled into a special purpose Trust which issues certificates to investors buying direct equity claims on the underlying assets. This is practiced in Philippines.
- iii. <u>Pay Through Structure</u>. This allows the transfer of Assets to a Special Purpose Vehicle which issue debt securities collateralized with the assets. Such is practiced in India, Malaysia and Indonesia.

Regardless of the status of repayments from the underlying mortgage loans, holders of the instruments according to Yakubu (2006) expect periodic payments from the issuer of the MBS. Mortgage securitization, the process through which MBSs are issued, he added, is typically structured thus:

Originator or Issuer

- Purchases mortgages from a network of primary lenders (such as mortgage banks and savings & loans) in exchange for funds which the latter use to create more mortgages for home buyers.
- Warehouses mortgages for securitization.
- Issues MBSs or may create a Special Purpose Vehicle for the purpose.

Special Purpose Vehicle (SPV)

- Issues mortgage-backed securities by pooling mortgages transferred to it by the originator entity.
- Repayment of debt obligations (principal and interest) to MBS holders comes strictly from the cash flows of the securitized mortgages and not from the originator's own money.
- The SPV is bankruptcy remote from the originator entity.

Trustee

- Receives the repayments on the underlying mortgage loans and ensures monthly payments (interest and principal) to MBS holders.
- Operates under a trust deed.
- Protects the interest of MBS investors.

Investing public

- Made up mostly of institutional investors such as life funds, insurance companies, pension funds, trust funds, banks, mortgage banks, etc.
- Other features
- The primary mortgage lenders (i.e. the savings & loans, building societies, mortgage banks, universal banks) that originate mortgages by granting loans to home buyers. Mortgages that conform to the prescribed underwriting standards are normally selected for securitization.
- Credit enhancement machinery (particularly in the forms of guarantees and insurance).

Yakubu (2006) further discussed that the first type of MBSs is pass-through securities. A residential pass-through security ensues from the mortgage pool created simply by combining a large number of individual mortgages. Each investor in the mortgage security receives a prorated share of the net cash flow arising from the mortgage pool. The cash flow consists of all categories of borrower payments: interest, amortization of principal, and prepayment of principal. The securities Yakubu described as "pass-through" because all payments made by the borrower pass through to the investor. The cash flow received by the investor, however, is net of a fee charged by the mortgage conduit (the pool manager or the issuer) for

- (a) Servicing the mortgages,
- (b) Bearing or insuring credit risk, and

(c) Changes in interest rate levels from the date of mortgage origination to the date of security issuance.

While the pass-through securities form the largest class of MBSs, other types that are largely derivatives of the former now exist. Their introduction is basically informed by the need to make MBSs more attractive to investors; especially by making available securities designed to manage the interest rate-related risks typical of the traditional long-term pass-through securities. The risks refer to the usual risk of any long-term security that its value will fall when rates rise and the borrowers' or mortgagors' tendency to refinance (i.e., call the mortgage) when rates fall, which is referred to as prepayment risk.

There are thus mortgage pay-through securities which are multiple securities issued against a single collateral pool, pass the payments through in non pro rata ways and modify the cash flows to permit a sequential issuance of short-, medium- and long-term securities (bonds). This carving up of mortgages does not eliminate interest rate risk, but it does allow the risk to be allocated more efficiently. Suffice to say that just as the mortgage securitization has grown in complexity over the years so have the types of securities.

2.5 MAJOR PREREQUISITES FOR SECONDARY MORTGAGE MARKET DEVELOPMENT

The development of secondary mortgage market has become a major discussion throughout the world. However, what is often overlooked in such especially within the developing economies is the readiness of the primary market. An efficient and sustainable secondary market development cannot proceed unless and until the primary market is able to produce a sufficient volume of high quality mortgages that meet the servicing and performance requirements of investors.

Reside et al, (1999) asserted that to determine the feasibility of establishing MBSs market and Secondary Mortgage Institutions (SMIs) in the Asian countries surveyed, key variables, such as market demand and supply in the mortgage and mortgage-backed securities markets, were analyzed. It was also opined that for the MBSs market and SMIs to be sustainably viable, reforms and improvements should start with the primary and secondary mortgage markets, and later involve the primary and secondary bond markets. Reside et al, (1999) however summarized the important factors to be considered in establishing a Secondary Mortgage Market.

Factors conducive to the development of secondary mortgage markets:

	FACTOR	PREREQUISITES	EFFECT ON SMI VIABILITY
1	Adequate demand for mortgages	Macroeconomic stability robust economy	Sustain demand for mortgage and long-term securities, such as MBS
2	Legal and regulatory framework conducive to liquidity in primary and secondary mortgage markets	Foreclosure laws that facilitate recovery of foreclosed properties. Ability to convey mortgages without need for consent of all mortgagors. Clear rules of conveyance or assignment and definition of true sale of mortgages. Low transaction taxes on creation of mortgages, adequate regulatory and supervisory capacity.	Reduces SPV's credit risk. Facilitates securitization. Reduces uncertainty in legal and accounting treatment of conveyance of mortgages. Improves liquidity in primary and secondary market for MBSs. Reduces systemic risks in MBSs market; increases certainty of MBSs investment.
3	Adequate underwriting and servicing capacity of mortgage lenders	Prudent lending guidelines and supervision by financial authorities and regulators. Standard underwriting procedures.	Reduces SPV's credit risks. Facilitates securitization; takes advantage of scale economies in securitization
4	Adequate capacity of assess mortgage lending risks	Low NPL rate for mortgages	Reduces SPV's credit risk; improves overall quality of MBSs
5	Ability to standardize mortgage underwriting	Use of credit scoring	Facilitates securitization
6	Availability of support institutions and timely information about mortgage markets	Credit bureaus. Mortgage insurers	Facilitates risks assessment of potential borrowers. Enhances quality of MBSs
7	Clear accounting rules for MBSs	Well-defined accounting treatment of true sale and modes of conveyance	Reduces uncertainty in treatment of MBSs transaction and conveyance of mortgages
8	Adequate demand for MBSs	Lower tax burden on potential buyers of MBSs. Less institutional restrictions on MBSs investments	Enhances liquidity in primary and secondary markets for MBSs
9	Legal, regulatory and tax framework conducive to bond market liquidity	Special MBSs/SMI laws. Low transaction costs for primary and secondary trades. Flexibility in allowable MBSs structures and eligible issuers. Adequate regulatory and supervisory capacity.	Simplifies process of drafting rules and guidelines. Enhances liquidity in primary and secondary market for MBSs. Widens variety of instruments available to issuers and investors. Reduces systematic risk in MBSs market
10	Yield curve for pricing MBSs	Longer yield curve with liquid market for	Improves accuracy in benchmark

		standard maturities	pricing of MBSs
11	Adequate credit-rating capacity	MBS rating (may be mandatory)	Encourages prudent and independent assessment of MBSs risks
12	Bankruptcy-remote SMI	Clear laws on bankruptcy-remoteness	Ensures MBSs quality and integrity
13	Adequate financial market infrastructure	Adequate clearing and settlement facilities	Ensures MBSs quality and integrity; facilitates securitization.

CHAPTER 3

3. HISTORICAL AND CURRENT STATUS OF MORTGAGE MARKET IN NIGERIA

3.1 AN HISTORICAL OVERVIEW OF MORTGAGE IN NIGERIA

Mortgage lending in Nigeria prior to 1976 was largely restricted to a single public-owned housing bank, the Nigerian Building Society (NBS), and supported by some mandatory and state contributions. The NBS was created in 1956 and converted in 1976 into the Federal Mortgage Bank of Nigeria (FMBN). The FMBN mobilized some limited deposits and granted a few mortgage loans mostly to higher-income borrowers.

Decree No. 53 of 1989 authorized the licensing of Primary Mortgage Institutions (PMIs) as specialized institutions to collect households' savings and originate mortgage loans. PMIs were based on the British model of building societies and were expected to support the development of a more vibrant and competitive housing finance sector. The Ministry of Works and Housing (MWH) and the FMBN were appointed as regulators and supervisors for PMIs. However, FMBN's regulatory and supervisory responsibilities were transferred to the CBN in 1997.

A National Housing Fund (NHF) was created by Decree No. 3 of 1992 to subsidize "affordable" mortgage loans and catalyze long term funding for PMIs and is managed by the FMBN. Collections began in 1994 and it is funded by mandatory contributions from all employees of 2.5% of basic wages with the employees earning 4% per annum on this money and becoming eligible for NHF financed loans.

By this decree, banks were expected to fund the NHF in amounts equal to 10% of overall loans and advances, to be remunerated at current account interest rate plus 1% (i.e. about 5%). Life and non-life insurance companies were also to invest 20% and 10% of their premiums respectively in the NHF, remunerated at a low fixed rate of 4%. Given inflationary conditions, CBN has never applied this requirement to banks, nor have insurance companies complied with these requirements. Such rules would have contradicted the liberalization of the financial system, undermined the interest rate structure, and put at risk the development of contractual savings institutions. However, the enacted decree has not been amended and the resulting ambiguity still affects relations between FMBN (manager of the NHF), banks and insurance companies.

3.2 PRIMARY MORTGAGE INSTITUTIONS IN NIGERIA

The Nigeria Primary Mortgage Institutions (PMI) was based on the British model of building societies and was expected to support the development of a more vibrant and competitive housing finance sector. The promulgation of Decree No. 53 of 1989 authorized the licensing of Primary Mortgage Institutions (PMIs) as specialized institutions to collect households' savings and originate mortgage loans.

By 1991, housing shortages were estimated at 5 million units, the result of a state policy favouring the government as a direct producer and financier of housing. A National Housing Policy was developed to "ensure that all Nigerians own or have access to decent housing accommodation at affordable costs by the year 2000."

In the year 1994 the National Housing Program was assigned the goal of producing 121,000 housing units. The Housing Policy Council and the Implementation Committee of Housing Policy were created to measure progress, identify issues, and recommend changes. Ministries of Work and Housing (at both federal and state levels), public housing corporations, property development agencies (including the Federal Housing Authority, FHA) were to develop partnerships with the private sector, in order to develop land and produce affordable housing units, supported by cheap land and subsidized infrastructure. This marked a turning point from the erstwhile direct government approach to housing development and finance.

Sites and services projects were encouraged, as well as cheaper housing solutions and new technologies. In addition, the Urban Development Bank was expected to fund infrastructure projects.

The former FMBN was in 1993, split into two separate federal financial institutions:

- i. The FMBN which was modified to become a second-tier apex and regulatory institution for PMIs, acting as an executing agency for the MWH and to be supervised by the CBN; and
- ii. The Federal Mortgage Finance Limited (FMFL), a public-owned retail PMI, which inherited most of the former FMBN's loan portfolio and was expected to become a role model for the primary mortgage industry.

The government licensed 195 PMIs between 1991 and 1994 to alleviate the housing deficit by providing finance for the players in the industry. Unfortunately, of the licensed PMIs, only 74 or 38% regularly send returns to the CBN while the rest that did not report were believed to be either dormant, insolvent or no longer in existence.

Many PMIs were founded by individual shareholders who invested the minimum N5 million in paid-up capitals often without any knowledge of the housing finance industry. Some PMIs were founded as a second-best alternative to banks (that required larger initial capital). Shareholders were mostly private individuals, state governments, and real estate developers.

The largest privately-owned PMIs were Union Homes Savings & Loans, part of the Union Bank Group, Abbey Building Society, Finacorp Building Society, Safe Trust Savings & Loans, and Aso Savings & Loans.

The enactment of National Housing Policy (NHP) in 1991 heralds the proliferation of PMIs. By 1996, 249 were registered. While many never took off, the operating lapses of those that did are have not really helped in the development of real estate finance sectors of the Nigerian Economy. Geographically, PMIs are not diversified as most of those that are active had their headquarters in Lagos and had few or no branches in other parts of the country. PMIs are perhaps poorly positioned to play a significant role in housing finance while their volatile, costly and short-term deposit base is not well suited to support long-term lending. Current accounts and fixed, short-term

deposits constituted 75% of their total resources in 1997, while the proportion of cheaper and more stable savings is small. This has resulted in high costs of funds and lending constraints as the corresponding transformation risks were too high for substantial mortgage lending to occur (World Bank Report, 2000). Currently, there are 98 Primary Mortgage Banks in Nigeria with 59 of them or 60% are in Lagos, the commercial capital, and 10 which represent 10% in Abuja, the administrative capital while the remaining 29 banks representing 30% are scattered around 24 out of 36 states in the country.

However, in their bid for greater profit, several PMIs engage in direct construction of houses for sale thereby competing with the operators they are expected to be financing. Many also engage in non-housing businesses, which are very risky. Nubi (2006) discovered that no less than 80% of PMIs sampled in his study were engaged in direct construction for sale. 57% were concentrating on Local Purchasing Order (LPO) financing, 60% were into merchandising while 70% were more accustomed to giving out short-term loans to traders. As a result, the performance of PMIs has been abysmally low in terms of the number of housing units actually produced through their financial assistance. Very few could boast of 100 units produced through their loans. This is a major departure from their primary mortgage financing role and such activities should be reviewed in order to offshoot a virile secondary mortgage market.

The PMIs are largely mistrusted by the Nigerian population due to:

- i. A large number of unprofessional institutions, operating under inadequate regulatory and supervisory oversight;
- ii. Absence of deposit insurance coverage; and
- iii. A lack of confidence in the low interest rate savings and loans system which has been undermined by inflation as well as the economic and political uncertainties.

3.3 WHY DID PMIs FAIL?

Problems that have hindered the PMIs' operations are evaluated as follows:

- i. **Ineptitude of Supervisory Body**: Nigeria Building Society (NBS) metamorphosed into Federal Mortgage Bank of Nigeria (FMBN) in 1977 with a take off capital of N20 million from Federal Government. This forerunner institution lacked prerequisite experience required to run mortgage banks. The bank at no time was able to meet up with the pressure of demand. It is therefore imperative that other sources of funds must be exploited if the bank is to make any meaningful impact on the housing sector.
- ii. **Lack of Expertise**: Pure commercial and merchant bankers led the pioneers of PMIs with management staff drawn from among fresh graduates, underemployed graduates under National Directorate of Employment (NDE). It is suffice to say that the PMIs were probably inexperienced with both human and material resources required in the subject of mortgage operations during early development stage.

- iii. Savings: With rare and unusual exceptions, domestic savings in emerging market countries annually exceed foreign investment flow into these countries from both official and private sources. The intermediation of these domestic savings through institutions' instrument and market is critical to macroeconomic development. Foreign investment is an important complement to, but not a substitute for domestic savings and investment. Furthermore, the poor response to National Housing Fund (NHF) in terms of voluntary savings is not unconnected to the poor performance of the mortgage institutions in 1990s. NHF provided that 2.5% of the income of workers be paid to a dedicated fund as mandatory savings. This has generated a lot of controversies and criticism. On the other hand, the compulsory savings mobilizes relatively large amount of funds in a short period of time and can provide a stable flow of resources to housing finance institutions. This scheme has been used successfully in countries like Singapore and Korea. Although, Okunmadewa (1998) noted that low incomes and a poor savings culture are to a large extent to be blamed for this, PMIs have also not explored the full potential of their positions in this area.
- iv. Overdependence on Primary Mortgage System: In nations where Mortgage banking is efficient e.g. United States it was noted that holistic approach of mortgage finance was adopted. The PMIs grew along side secondary mortgage institutions the much needed second wing required by the eagle of housing finance system to fly (Nubi, 2002). While developed nations had developed their secondary market, banking in Nigeria remained traditionally primary. The Stock Market, Insurance industries, Information Technology (IT), Legal/Regulation instruments and other basic infrastructure needed for secondary banking are not yet fully developed.
- iv. **Low capitalization**. PMIs' capital base of N100m is inadequate to finance housing on the scale the economy requires. In fact, most of them have not been able to grant individual loans exceeding N3m and generally they have also not been able to cope with the volume of demands from their customers. Although access to NHF is available to them through the FMBN, there is no doubt that a stronger capital base would better position them for greater efficiency in their operations.

CHAPTER FOUR

4. MORTGAGE FINANCE OPTIONS IN DEVELOPED AND EMERGING ECONOMIES

Commercial banks have traditionally shunned mortgage lending because of liquidity risks. Liquidity risks can arise because mortgage loans are long term and deposit liabilities are short term. Interest rate risk arises when there is a mismatch in the maturities and interest rate characteristics of assets and liabilities. Specialized depository institutions like building societies and savings and loan associations are faced with much the same risk. The failure of many US savings and loans in the 1980s was due to excessive interest rate risk associated with using short term deposits to fund 30-year fixed rate loans.

Mortgage bond markets are common in a number of European countries including Denmark, France, Germany, Greece and Sweden, and they constitute a major funding source for housing in Chile. They are being developed in Hungary, Slovakia, the Czech Republic, and Poland. In Europe, mortgage banks are portfolio lenders that raise funds through the issuance of bonds backed indirectly by the mortgage loan assets of the lender. Bond investors are secured against the issuer's bankruptcy by a privileged access to the cash flows generated by a quantity and quality of mortgage loan assets sufficient to service their bonds. Mortgage bonds can also be issued by banks and other depository institutions that use their loans as collateral for the securities. For example, in Sweden, Nordea Hypotek cover pool also consists of loans originated by Nordea Bank AB.

In many countries, a form of secondary market institution exists that can help portfolio lenders manage these risks. These institutions, referred to as liquidity, rediscounting or secondary mortgage facilities, issue general obligation bonds in the capital markets and use the proceeds to refinance the portfolios of primary market lenders (see figure 4). They provide funds to primary market or retail lenders through collateralized loans or recourse purchases. In the US, the Federal Home Loan Banks have been making collateralized loans to mortgage lenders since the 1930s. In France, the Caisse de Refinancement de Hypothecaire (CRH) performs a similar function. Other examples of liquidity facilities include the Swiss Pfandbriefbank der Schweizerischen Hypothekarinstitute, the Jordan Mortgage Refinance Company, Cagamas in Malaysia, the National Bank of India and the Home Mortgage Bank in Trinidad and Tobago. (Lea/Chiquier: 1998). In Sweden, Nordea Bank AB's Hypotek and Swedbank Mortgage Covered Bonds are also good examples of secondary market institution and may be attracted by FMBN as major housing funding source in Nigeria.

4.1 NORDEA HYPOTEK

The issuer is a public limited liability company and is a wholly owned and fully integrated subsidiary of Nordea Bank AB. Nordea Hypotek is registered in Sweden. Its registered office is in Stockholm. The issuer holds a license from the Swedish Financial Supervisory Authority (Finansinspektionen) (the Swedish FSA) to conduct financing business as a credit market company

as well as a license to issue covered bonds in accordance with the Swedish Covered Bonds Issuance Act (2003:1223) "Lagen om utgivning av säkerställda obligationer" (LUSO).

Nordea Hypotek operates in the Swedish market and grants loans, primarily long-term in nature, to private individuals, corporate, municipalities, county councils, and other legal entities through Nordea Bank's branch office network. The purpose of the lending is primarily to finance properties, as well as municipal and agriculture activities, with a particular emphasis on housing financing. Collateral consists mainly of mortgages on residential property, pledges over tenant-owner rights, or of municipal guarantees.

Nordea Hypotek is a key part of the Nordea group, as it grants a large majority of the Swedish mortgage loans for the group. In addition, Nordea staff handles Nordea Hypotek's finance unit, product development, and marketing activities. Nordea Hypotek has thus effectively become a funding vehicle with issue proceeds used to fund Nordea Hypotek business. Nordea Hypotek focuses on credit control, portfolio analysis, and approval.

Nordea Hypotek's operating profit for 2005 amounted to approximately €172 million. In Dec. 31, 2005, total assets measured approximately €28 billion, with lending to households accounting for approximately €18.7 billion and lending to legal entities for approximately €9.3 billion. Nordea Hypotek is the third-largest mortgage credit institution in Sweden with a 17.0% market share at the year-end 2005.

Nordea Bank AB (the parent, account bank, and interest rate swap provider)

Nordea Bank is incorporated and legally domiciled in Sweden and is the parent company of the Nordea group (Nordea Group or Nordea), a financial services group in the Nordic and Baltic Sea region. The Nordea Bank shares are publicly traded and Nordea Bank is listed on the Stockholm, Copenhagen, and Helsinki stock exchanges.

Nordea Bank is regulated by the Swedish Act on Banking and Financing Activities (Lag (2004: 297) ("om bank- och finansieringsrörelse") and is subject to the supervision of the Swedish FSA to which it reports. Nordea Bank is registered in Sweden and has its registered address in Stockholm.

With assets of €325.5 billion at Dec. 31, 2005, Nordea is one of the two largest banking groups in the Nordic region, and for the past two years has reported increasing earnings and much improved asset quality. Standard & Poor's expects Nordea's asset quality to remain strong in the short- to the medium-term, given the group's well-diversified asset portfolio.

The ratings on Nordea group's banking operations in the Nordic region reflect its consistent and sensible strategy. This has resulted in a successful integration, solid earnings from core banking operations, substantial diversification of revenues and risk, and satisfactory asset quality and capitalization given the current risk profile. Nordea's banking operations in the Nordic region comprise Sweden-based Nordea Bank AB, Finland-based Nordea Bank Finland PLC, Norway-based Nordea Bank Norge ASA, and Denmark-based Nordea Bank Danmark A/S.

The stable outlook on Nordea Bank reflects Standard & Poor's expectation that Nordea will maintain its satisfactory profitability ratios through the business cycle with a more normalized

level of loan losses, while maintaining its current low risk profile. Progress in operational integration is anticipated to continue in all business areas and maintained control of operational costs. Moreover, the outlook incorporates Standard & Poor's belief that Nordea will keep capitalization levels comfortably above its stated targets.

Any unexpected change in Nordea's prudent expansion strategy in Eastern Europe, a failure to contain costs, or a sharp deterioration in asset quality could have negative implications for the counterparty credit ratings on Nordea Bank AB.

4.2 SWEDBANK MORTGAGE COVERED BONDS

Swedbank Mortgage is a Swedish mortgage institution with a leading position in the Swedish market. The business of Swedbank Mortgage is long-term mortgage financing, and its customers number over one million. This means that the company finances more than one third of all the houses in Sweden.

Swedbank Mortgage is a fully-owned subsidiary of Swedbank. The products are mainly sold through the branch network of Swedbank and the savings banks. This gives the company access to Sweden's largest bank-owned distribution network with its 680 branches. There is no lending outside of Sweden.

Swedbank Mortgage's lending for single-family housing is generally limited to 75 per cent of the property's estimated market value. Loans are secured by first ranking Pantbrev on residences/single family homes, condominiums and directly to municipalities or other borrowers guaranteed by a municipality. Lending to the forest- and agricultural sector is made directly by Swedbank Mortgage, but with the secondary named Swedbank Jordbrukskredit.

4.2.1 THE SWEDBANK PORTFOLIO

The main part of the credit collateral in the register consists of residential property. This means single family houses, condominiums and multifamily houses. Only a small part is secured by loans to municipalities and a very limited part by loans secured by commercial real property. This does well reflect the profile of the total loan portfolio. Going forward, agricultural property will also be included in the register.

As for geographical concentration of the collateral (the properties) in the register, these are well distributed throughout Sweden, mirrowing the typical population density.

Funding of SwedBank

4.2.2 COVERED BONDS

Covered bonds are the company's primary source of funding. The quality of the covered bonds rests on the very high quality in Swedbank Mortgage's loan portfolio, where the average loan-to-value ratio is approximately 44 percent (Interim Report: January - June 2009).

Since 2004, Swedish banks and credit market companies may issue covered bonds (Sw. Säkerställda Obligationer). These securities give the investor a priority right over certain of the issuer's assets in case of bankruptcy and are thus typically considered as a safer investment than other bonds. The assets must be recorded in a special register, they must comply with certain quality criteria and their value must exceed the value of the covered bonds. The Financial Supervisory Authority (Sw. Finansinspektionen) appoints an independent controller to supervise the issuer's compliance with the applicable requirements.

On 21 April 2008, virtually all outstanding long-term debt instruments were converted into covered bonds. Only a minor volume of bonds issued under the company's EMTN programme were not converted. Commercial paper and other short term debt obligations are not affected by the conversion. The conversion was carried out in connection with a minor issue of a covered bond under the company's Swedish MTN programme. A European Medium Term Note (EMTN) programme is a platform from which debt issues can be launched, in a very efficient way.

The half yearly interim report as of July 2009, Swedbank Mortgage has issued covered bonds amounting to SEK 59bn in the Swedish market and SEK 21bn in the international market. Swedbank Mortgage also regularly issues covered bonds to the parent company in order to utilize the funding facilities offered by the Riksbank and the National Debt Office, which have provided cost-effective short-term funding. Recently, Swedbank Mortgage also decided to participate in the Swedish state's guarantee programme, which guarantees new unsecured funding and covered bonds. At the end of the period, Swedbank Mortgage had a nominal outstanding volume of SEK 16,7bn in commercial papers to external investors under this guarantee

Within the period under review, Operating Profit amounted to SEK 1 813m (1 613). Net interest income was SEK 212m higher than the previous year and amounted to SEK 2 041m (1 829). The average lending margin was higher and the volumes have grown, which have contributed to an improved net interest income. The funding situation has improved slightly and contributes positively. The strategy of reducing liquidity risk by extending the maturities of the outstanding funding has had a negative effect on net interest income.

Commission expenses, arising from business interchange with the savings banks and the partly owned banks, were SEK 332m (235). The increase is due to growing volumes and higher margins. Swedbank Mortgage applies the fair value option according to IAS 39 on the main part of the balance sheet and accounts for changes in the value of assets and liabilities, including derivatives, in Net gains and losses on items at fair value. The change in value for the period, mainly consisting of unrealized results, amounted to SEK 96m (13). As from April, hedge accounting is applied on a share of newly issued bonds.

4.2.3 CREDIT RATING

The covered bonds of Swedbank Mortgage have been assigned Aaa by Moodys and AAA by Standard & Poors. To maintain this level, the Company has undertaken that if its short term Standard & Poors rating falls below A-1 the Company agrees, within 30 calendar days of such

downgrade, to provide additional liquid assets to the cover pool or to take any other suitable action in order to maintain a sufficient level of liquidity to support the rating assigned to the covered bonds.

Funds originating from the assets in the cover pool, or from derivative contracts or issues of covered bonds, "covered bond funds", will be segregated from the company's other funds by being deposited on separate cash accounts in Swedbank AB (publ), "Swedbank", on a daily basis. If Swanbank's short term unsecured, unsubordinated debt rating by Standard & Poors would decline below A -2, the company will within 30 days thereof, (i) transfer the covered bond funds to a cash account in another bank whose short term unsecured, unsubordinated rating by Standard & Poors is at least A-2 and (ii) re-direct future covered bond funds to a cash account in such bank.

4.3 CAGAMAS BERHAD, THE NATIONAL MORTGAGE CORPORATION OF MALAYSIA

One of the emerging economies is Malaysia where a long term Secondary Mortgage Market facility was developed in response to its financial crisis. Nigeria and Malaysia have similar housing finance system because of their respective past government interventions and also, they are both based on British models. For instance, Building Societies were set up in Malaysia in the early 1950s (Lea and Chiquier (1998) while the Nigerian Building Society (NBS) supported by some mandatory and state contributions was created in 1956. Albeit, it is important to mention that Malaysia also practices Islamic banking, the purpose of this thesis is to discuss the concept of Cagama Berhad as one of the mortgage finance options that Nigeria could implement.

Cagamas Berhad, the National Mortgage Corporation of Malaysia, is perhaps the most successful example of a Secondary Mortgage facility in a developing country (Cheng, 1997 and 1998). Cagamas was created in 1986 and commenced business in 1987. The corporation was set up to alleviate the liquidity problems of primary market lenders by allowing them to use their mortgage loan portfolios as collateral to obtain additional funds. In addition, it allows them to reduce interest rate risk by making available longer term fixed rate funds, narrowing the difference between the maturities of their assets and liabilities. An additional objective of the company was to deepen of the financial sector by creating a new source of fixed-income securities and to widen the range of low-risk placement alternatives for banks' liquidity reserves.

It functions as a liquidity facility providing short and medium term finance and capital market access to mortgage lenders. Cagamas purchases mortgage loans from mortgage originators, with full recourse, at a fixed or floating rate for three to seven years. This is in effect a secured financing with Cagamas looking first to the credit of the financial institutions when mortgage loans default. Cagamas issues unsecured debt securities to investors, in the form of fixed or floating rate bonds, short-term notes, or Cagamas Mudharabah (Islamic) Bonds. Cagamas is the largest non-government issuer of debt in Malaysia.

Although Cagamas is the beneficial owner of purchased mortgage loans, it is best characterized as a liquidity facility. This is because it takes very little credit risk (all loans are purchased on

recourse so the main credit risk is bank failure) and primarily serves as a centralized funding source for mortgage lenders.

A mortgage seller is assigned a maximum purchase ceiling by Cagamas reflecting its recourse exposure. Mortgage loans are subject to eligibility rules, including a first-ranked mortgage on the residential property title, in an amount less than or equal to Ringgit (RM) 150,000 (US\$40,000 as of late 1998) which excludes high-cost units, and no arrears of more than three months. There is no over-collateralization requirement. All mortgage payments including scheduled principal and prepayments are passed through to Cagamas. The seller remains the custodian, trustee of the loans and services the loans on behalf of Cagamas. The seller passes through principal and interest to Cagamas at pre-determined rates, retaining the difference between the loan coupon rate and Cagamas's required yield as its servicing and recourse fee. Loans that become fully amortized or that are ineligible are replaced by the seller, which must report the performance of the pool to Cagamas quarterly. Controls are limited to the seller's auditor's yearly review, as Cagamas does not conduct on-site inspections.

Cagamas was created in response to a financial crisis. A collapse in commodity prices and a sharp rise in interest rates caused liquidity problems for banks, building societies and finance companies which were forced to make a large volume of loans to priority sectors including housing. Selling their loans to an intermediate institution that could raise funds from the capital markets allowed these lenders to obtain additional funds to meet their mandates. Also, through refinancing with Cagamas an originating bank could significantly reduce the maturity mismatch of funding 15 year housing loans with deposits having maturities of one year or less.

In several respects, Malaysia was a good candidate for creating a secondary market institution. It has a well developed legal and regulatory system based on the British model which underlies the successful mortgage markets in Australia, Canada, the UK and US. In particular, the Torrens system of land registration was put in place in 1966 and security of tenure has been a major emphasis of post war governments (Cagamas, 1997). A substantial body of case law has established the right of property owners to mortgage their holdings and the right of lenders to foreclose and repossess in the event of default. The banking system was relatively well developed and through past government mandates was already significantly involved in housing finance. A relatively well developed government bond market also existed at the time of Cagamas' creation.

To promote the secondary mortgage market in Malaysia, the government provided a number of incentives to institutions selling loans to or investing in bonds issued by Cagamas:

• Funds received by the financial institutions from the sale of housing loans to Cagamas are exempted from statutory and liquidity reserves requirements (fully for housing mortgages, half of statutory reserves for industrial property loans), thus lowering the cost of these funds to the seller. The required level of these reserves was 13.5% until January 1998, gradually reduced to 4% by September 1998. These reserves are held as non-interest-bearing cash, making Cagamas refinance quite attractive. Reduction in the required level of reserves freed up additional liquidity and reduced the appetite for Cagamas refinance.

- Cagamas securities are recognized as liquid assets by the Central Bank. Those refinancing housing loans of RM150, 000 and below are classified as Tier-1. Securities are then risk-weighted at 10%, compared with 50% for housing loans, making them attractive to banks. They are eligible as low-risk technical reserves for insurance companies on the same basis as government securities. This has the effect of lowering the required yield for Cagamas securities, as it creates strong demand from financial institutions.
- Housing and industrial property loan transactions are exempt from stamp duties. The exemption has been given by the government for transactions with Cagamas and dealings in Cagamas debt securities. This lowers the transaction cost of issuing debt.

Cagamas does not have to obtain approvals from the Securities Commission or the Central Bank to issue debt securities, which expedites issuance. Cagamas is also exempt from having to provide a prospectus for its debt securities, lowering its cost of funding. Cagamas securities were traded under particularly favourable conditions like government securities through the 16 appointed dealers.

From the foregoing, Nigeria could as well emulate the Sweden, Nordea Bank AB's Hypotek, Swedbank Mortgage Covered Bonds and Cagamas Berhad of Malaysia model as an offshoot towards the development of a virile and sustainable Secondary Mortgage Market. Government, other financial institution regulators and market mediums will have a big role to play in the development of a sustainable housing finance system in Nigeria.

CHAPTER FIVE

5. FUTURE POSSIBILITIES OF MORTGAGE MARKET IN NIGERIA

5.1 FINANCING OPTIONS FOR HOUSING IN NIGERIA

There are various options of financing options of housing before the evolvement of the modern means of financing housing development in Nigeria. The two major options will be discussed accordingly:

5.1.1 TRADITIONAL FINANCING OPTION

Before the advent of modern methods of housing finance, Nigerians had several methods of financing home ownership. Prominent among these were the 'Esusu' and 'Ajo', which involved group of people contributing money equally for a period of time and handling a lump sum over to one member of the group usually at the end of each month or specified period of time. The 'Aro' and 'Owe' involved group members contributing by providing labour for each member. Others are loans from traditional moneylenders and social club contributions.

These methods of financing may have proved effective for the nature of buildings that were being erected at the time, but with the downward slide in the economy, double-digit inflation and high cost of building materials in recent time, many of these methods have proved ineffective

5.1.2 MODERN FINANCING OPTIONS

The following are some of the modern methods of finance available for housing developments and purchase in Nigeria.

- i. The Federal Mortgage Bank of Nigeria (FMBN): The FMBN commenced operation in 1978, following the promulgation of the FBMN Decree No 7 of January 1977 as a direct Federal Government intervention to accelerate its housing delivery programme. The FMBN is expected to expand and coordinate mortgage lending on a nation wide basis, using resources from deposit mobilized and equity contributions by the Federal Government and CBN at rates of interest below the market rates. By mid-1980s, the FMBN was the only mortgage private institution in Nigeria.
- ii. **Primary Mortgage Institutions (PMI)**: The Mortgage Institutions Decree No.53 of 1989 provided the regulatory framework for the establishment and operation of PMIs by private entrepreneurs. The FMBN was empowered to license the PMIs as second tier housing finance institutions. The PMIs were to mobilize savings from the public and grant housing loans to individual, while the FMBN mobilizes capital fund for the PMIs.
- iii. **Personal and Family Savings**: This constitutes a major source of finance especially for individuals who wish to build their houses themselves. In this case, individuals buy land

in area zoned for housing and build their own houses, while government is expected to provide infrastructure to service the houses.

iv. **Corporate organizations:** With the promulgation of employee Housing Scheme (Special provision) Decree 54 of 1979, any employer of up to 500 employees is expected to provide minimum of 50 housing units out of which three quarters are to be made available to non-executive staff.

Federal Mortgage Bank of Nigeria (FMBN) is the first operator in Nigeria's formal institutional mortgage lending sector. The Bank thus has a history of retail, supervisory, regulatory and wholesale activities in the country's mortgage industry. The funding vehicle for its wholesale mortgage lending is the National Housing Trust Fund (NHTF). As the fallout of housing reforms started in 2002, the FMBN is now re-organized to perform mainly secondary mortgage and capital market operations. According to FMBN, they are now offering the following services:

5.1.2.1 CONCESSIONARY MORTGAGE LENDING WINDOW

This operation is funded by the National Housing Trust Fund (NHTF) to finance social housing. Two types of mortgage facilities are granted from the window at subsidized rates of interest. Both have the goal of facilitating affordable homeownership by contributors to the Fund. On contributing continuously for a minimum of six months, contributors become pre-qualified to access home loans from the Fund by forwarding applications to the FMBN via accredited primary mortgage institutions (PMIs). Such loans are granted by the FMBN at 4% interest per annum to PMIs for on-lending to contributors at 6%, subject to an individual loan ceiling of N5 million, who repay over a maximum period of 30 years. The other facility is estate development loan (EDL) granted to housing estate developers (Private Developers, Housing Corporations and Housing Cooperatives) to build houses within affordable target prices for sale to NHTF contributors. It attracts 10% interest and is repayable in 24 months. Membership of the Real Estate Developers Association of Nigeria (REDAN) is part of the conditions for accessing the EDL.

5.1.2.2 CAPITAL MARKET (COMMERCIAL) WINDOW

It is the Bank's prime function. The operation is designed for the FMBN to issue mortgage related debt securities (under FG guarantees and other incentives) to raise capital market funds at low costs for sustained liquidity in both Nigeria's secondary and primary mortgage markets. Such debt instruments are targeted at institutional investors, pension funds, insurance companies and their life funds, consolidated universal banks, etc. The funds so raised are channelled by wholesale mortgage on-lending by the Bank at market rate (via secondary mortgage transactions) to endusers particularly home loan originators (PMIs and universal banks) and housing estate developers. The proceeds of the capital market operation are also for funding the Banks Mortgage Refinancing Window. The operation is pursued to also strengthen the primary mortgage market as a platform for the emergence and development of a viable secondary mortgage market in the country. Universal banks in Nigerian are commercial banks that include investment services in addition to services related to savings and loans.

According to FMBN, the capital market instruments for use now and in future include:

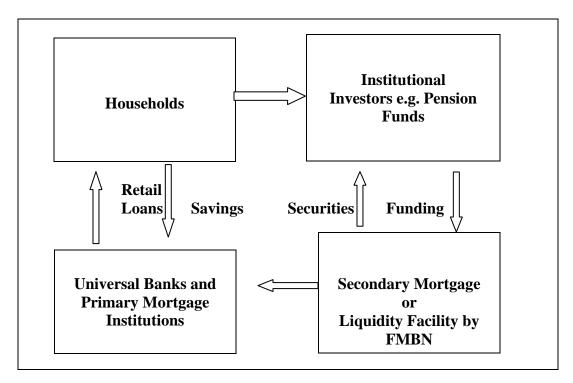
The National Housing Trust Fund; Issuance of securities tied to FMBN assets; Sale of Promissory Notes based on FGN Guarantees, explicit or implicit to source funds for on-lending through rated mortgage originators; Securitization of mortgage assets surplus to its portfolio requirements to raise funds to finance both the primary and secondary mortgage markets; Sale of certificates of deposits to raise funds from investors including financial institutions. Such instruments though long-tenured could be rediscountable with the support of the Central Bank of Nigeria.

All hands are on deck to launch FMBN into the capital market in 2005 through floating of a N100 billion bond to raise funds to facilitate the disposal of some 30,000 Federal Government owned non-essential residential properties in Abuja to civil servants and the public as a result of the monetization policy.

5.2 THE ROLE OF THE FEDERAL MORTGAGE BANK OF NIGERIA (FMBN)

Like the Malaysian experience, The FMBN will be repositioned as a corporation to alleviate the liquidity problems of primary market lenders (PMIs and Universal Banks) by allowing them to use their mortgage loan portfolios as collateral to obtain additional funds. In addition, it allows them to reduce interest rate risk by making available longer term fixed rate funds, narrowing the difference between the maturities of their assets and liabilities. An additional objective of FMBN will be to deepen of the financial sector by creating a new source of fixed-income securities and to widen the range of low-risk placement alternatives for banks' liquidity reserves. As a provider of liquidity and long-term funds FMBN could play a positive role in standardizing loan terms, documentation and servicing in addition, its regulatory role that is useful for overall financial system supervision. As a special purpose vehicle, FMBN can help portfolio lenders manage these risks. The FMBN will provide liquidity, rediscounting or secondary mortgage facilities, issue general obligation bonds in the capital markets and use the proceeds to refinance the portfolios of primary market lenders (figure 4). They provide funds to primary market or retail lenders through collateralized loans or recourse purchases. The liquid facility is depicted through the table below:

Figure 4: Proposed Liquid Facility



Liquidity facilities by FMBN will provide both short-term funds and capital market access to PMIs and universal banks. As such they can be viewed as either adjuncts to the portfolio lending model, or as an intermediate step before an actual securitization through secondary markets. They can operate with very low credit risk, purchasing loans on recourse or lending on an over-collateralized basis. The mortgage collateral is a form of credit enhancement to be tapped only if the borrowing institutions become insolvent and unable to repay the liquidity facility. Their borrowers are typically also their owners, either partially or totally. As centralized bond issuers, PMIs and universal banks can often obtain better access on more favourable terms than their owners/members. With a greater volume of assets, they can be able to access the markets more frequently, creating greater liquidity in their debt and negotiating better terms with underwriters. By lending to a number of institutions they can achieve greater diversification in their asset base. FMBN will apply strict and transparent standards to mortgage loans and to primary mortgage lenders, which can help to develop prudential norms and standardization in primary mortgage markets.

Liquidity facilities from FMBN can also reduce liquidity risk for primary market lenders by providing them access to the capital market based on the quality of their asset portfolios. In addition, these facilities may reduce interest rate risk by giving lenders access to longer term funds with rate structures different from those they can raise on a retail basis (e.g., fixed rates). In fact, one of the greatest role to be provide by the FMBN is liquidity risk bearing on behalf of banks and

savings institution in order to funding housing demands by households thereby deepening Primary Mortgage Institutions' financial base and stabilizing housing finance market.

Liquidity facilities can facilitate participation in the mortgage market and an increased volume of lending by re-allocating liquidity and interest rate risk. However, they do not address other problems that can constrain the flow of funds and/or increase the relative cost of mortgage credit. For example, lenders may believe that the credit risk associated with mortgage lending is too high. This can be due to a number of factors including weak title and lien registration systems or non-existent or unenforceable foreclosure laws that deny lenders access to collateral in the event of default. Another credit risk problem some lenders may have is excessive geographic concentration. Finally, lenders may not have sufficient capital to expand their lending (Lea/Chiquier: 1998).

Mortgage requirements must be standardized in order to bring credit risk to the tolerable minimum. Risky mortgages from PMIs are often turned down by Federal Mortgage Bank of Nigeria most often for their inability to meet standard requirements. Origination of mortgage still depends on relationship and not ability to pay back. Unstandardized mortgage cannot be purchased in the Secondary Mortgage Bank. Apart from this, buildings in Nigeria vary in size, shape, height and construction standard, pooling them together will be very difficult because of the array of risk combination they possess Nubi (2002). However, standardization in this instance will affect variables like interest rates, amortization, property appraisal, and tenure among others and not necessarily the building design. Most mortgage banks and activities are concentrated in Lagos, western Nigeria unlike the Nordea Hypotek and Swedbank Cover Bond with nationwide spread throughout Sweden. Also, land titling system in Nigeria could be harmonised through a well functioning and searchable land information system that can be easily tradable in the property market without administrative difficulty in order to further reduce the credit risks. It is important to mention that secondary markets cannot develop unless the legal system is favourable. A strong legal framework is a prerequisite for both primary and secondary market development in Nigeria. Furthermore, a market in which mortgages can be bought and sold can address the other credit risk factors that impede mortgage lending.

Generally, FMBN funding intervention towards the PMIs in the manner discussed above is through direct sale secondary market option.

5.2.1 NIGERIA SECONDARY MARKET STRATEGY ON THE SHORT RUN

The current savings culture in Nigeria is geared towards immediate short term needs based on composite saving pattern (as published in an article by former Governor of Central Bank of Nigeria) hence financial institutions need to develop attractive long term savings products that will be consistent with long term mortgage finance nature. This is because, currently, over 90% of deposits mobilized by banks are short-term (0 – 365days), hence they are constrained to lend short (Soludo:2008). However, Nigeria can develop a Bond Market as perhaps an initial alternative funding option before securitization strategy could be adopted on the long run. The deposit and inflation rates are also important and should be clearly predicted by investors over a long period of time if they are to be attracted to invest in the secondary market. Investors want marginal returns above deposit plus inflation rates and can only benefit from long-term savings when inflation is

tamed by the Central Bank of Nigeria (CBN). The country is still struggling to understand traditional mortgage practice. The good news is that the banking sector is evolving and is trying hard to meet with international standard (Nubi: 2002). However, the extent to which standards have been developed is still not clear probably because the enthusiasm of all actors towards the development of mortgage market has not been matched with the required skills and innovations, strategies and actions.

According to Lea/Chiquier (1998), one of the main difficulties in a true secondary market in developing countries where the sale of loans also transfers risk is the monitoring of sellers and servicers. Secondary market institutions are subject to adverse selection, fraud and moral hazard. Lenders may sell their weak or bad credits to the facility, particularly if it is government owned, as a way of reducing their problem loans. Or servicers may divert cash flows from loans or not effectively collect on defaulted loans if they bear no risk. The current traditional lending model of FMBN assumes 100% risk by providing the whole loan through the PMIs to homeowners without strict supervision and adequate mortgage insurance has resulted in failure and loss of fund. This is because PMIs often diverted the funds to non housing sectors including; short term contract financing, lack of individual borrower's credit worthiness, and direct construction of housing since they bear no risk. With great emphasis, credit risk transfer is an important factor to consider for future secondary mortgage market in Nigeria. Mortgage insurance can be a veritable strategy to mitigate credit risks on the short run.

Although, the FMBN is trying to re-develop the mortgage market in Nigeria, the long run objective for Primary Mortgage Banks is to improve on their current practice and adopt the international standard of portfolio lending models explained by performing all major functions of originating a mortgage to a homebuyer, servicing it (primarily collecting and processing payments from borrowers and record keeping) and performing all the risks and portfolio management functions including funding. They will function as specialized mortgage institutions like Nordea Bank AB's Hypotek and Swedbank Mortgage Covered Bonds. In the early stages of secondary market development, in almost all cases it is preferable for the originating lenders (FMBN) to retain most or all of the credit risks. However, only when the systems and sophistication of the facility and the lenders are sufficiently well developed should true securitization and liquidity risk transfer to the PMIs should occur. In order words, as the market becomes deeper and more sophisticated, a secondary mortgage facility through conduits can perform a valuable function by purchasing loans from PMIs and Universal Banks on a non-recourse basis, enabling lenders to get them off balance sheet. This can free up capital for primary market lenders, allowing them to make more loans. Also, it may facilitate the offering of longer fixed rate terms. Furthermore, this development can stimulate the formation of specialized mortgage companies like Nordea Bank AB's Hypotek and Swedbank Mortgage Covered Bonds, providing a competitive alternative to banks and other established lenders.

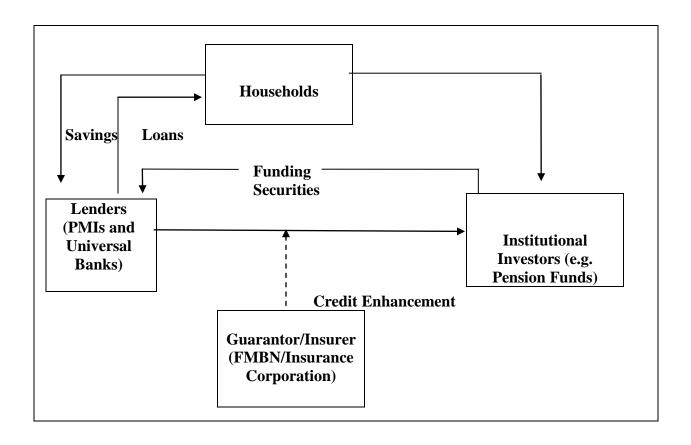
5.2.2 THE ROLE OF PMIs AND UNIVERSAL BANKS IN THE DEVELOPMENT OF SECONDARY MORTGAGE MARKET IN NIGERIA.

On the short run, the direct sale secondary market approach could be adopted by the mortgage banks with the use of mortgage pass-through security. A mortgage pass-through security represents a sale of the underlying loan. The PMIs and Universal banks will sell the mortgage assets to the

Special Purpose Vehicle, that is, Federal Mortgage Bank of Nigeria (FMBN) which then issues the securities to investors in the capital market, or to a conduit institution (i.e. set up subsidiaries like Nordea Hypotek and Swedbank) on the long run. The conduit will purchase mortgage loans from a number of lenders, pools the loans and issues the securities guaranteed by their corporate goodwill and external rating. The PMIs and universal banks are the retail loan originators and mortgage-backed security issuers. The Federal Mortgage Bank of Nigeria will therefore provides credit enhancement of the securities through well functioning and supervised cash flow insurance.

In other words, the mortgage banks pool the loans, obtain a FMBN insurance certificate and then sell the pools as FMBN securities to investors (see Figure 5 below). The collateral behind FMBN securities will be the FMBN insured mortgage loans. Although these loans will carry 100% default risk, there are other factors which can impede the smooth running of this strategy. For instance, collection of mortgage insurance on the principal, the timing of receipt of the principal and interest are uncertain because houses are frequently bought and sold: a sale usually results in repayment of the mortgage in full. The main risks to an investor in pass-through securities issued by a mortgage company are the failure of the company (or third party agent) that services the loans and the delay in collecting the mortgage insurance. To mitigate this risk, FMBN can provide cash flow insurance, a guarantee of timely payment of interest and principal to the investors (e.g. Pension Funds etc). The risk it takes is the delay in receiving mortgage insurance proceeds and the failure of the servicer. FMBN insurance through a specialized and dedicated insurance company enables mortgage companies to sell portfolios of FMBN insured loans directly in the capital markets.

Figure 5: Proposed Direct Sale Secondary Market Model



Through well defined conditionalities and strict compliance by mortgage banks, the pass through mortgage backed security option can prove viable at the developmental stage before actual securitization. For instance, FMBN must ensure mortgage sellers' assigned maximum purchase ceiling is not exceeded because of its recourse exposure. Mortgage loans will be subject to eligibility rules, including a first-ranked mortgage on the residential property title, in an amount pre-determined which may exclude high-cost units, and no payment arrears of more than say, three months. There will be no over-collateralization requirement since FMBN will have direct equity interest in underlying assets. All mortgage payments including scheduled principal and prepayments are passed through to FMBN. The PMIs and Universal Banks remains the custodian, trustee of the loans and services the loans on behalf of FMBN. The seller passes through principal and interest to FMBN at pre-determined rates, retaining the difference between the loan coupon rate and FMBN's required yield as its servicing and recourse fee. Loans that become fully amortized or that are ineligible will be replaced by the mortgage banks, which must report the performance of the pool to FMBN within the pre-determined timeframe.

Thus, FMBN can now obtain more funds in the capital market by issuing bonds. The bonds are not backed by specific mortgage loan pools but are guaranteed by the company. FMBN will refer to its bonds as mortgage-backed securities while the refinancing function is independent from the mortgage pool.

Borrowing from the Swedish model, the starting place for the discussion of the requirements for a successful secondary market is the primary mortgage market and within the mortgage instrument itself. First and foremost, mortgages must be attractive investments. The interest rates on mortgages must be market determined and provide investors with a positive, real, risk-adjusted rate of return. Thus, the mortgage rate must be sufficient to cover the investor's marginal funding cost (both debt and equity), the risks of mortgage investment and the administrative cost of servicing mortgages and MBS. In addition, the mortgage market must be sufficiently developed to produce a significant volume of loans to justify the up-front costs of secondary market infrastructure (Lea/Chiquier 1998). The 25 commercial banks in Nigeria have strong geographical spread to originate mortgage loans through their own mortgage subsidiaries. Like the Swedish mortgage model, commercial banks can establish a bond issuing companies when they are able to shoulder liquidity and credit risks in order to have a competitive advantage of obtaining funds through a Secondary Mortgage Market. The issuer of these covered bonds will a public limited liability company and is a wholly owned and fully integrated subsidiary of the commercial banks. Currently, the well developed tools and expertise may still be lacking to set up conduits but future investments in human and material resources could prove productive in this regard.

5.3 LONG RUN MORTGAGE FINANCE OPTION IN NIGERIA

The mortgage pass through option explained above entails direct equity interest in underlying asset pool. Assets are pooled into a special purpose Trust guaranteed by FMBN which issues certificates to investors buying direct equity claims on the underlying assets. However, other option that could be adopted on the long run is the model of mortgage backed securities through securitization.

A quick recap of this concept is important in order to shed more light into its structure. Mortgage-Backed Securities (MBSs) are securities backed by mortgage loans. They are created through the aggregation of mortgage loans with similar features (as to tenor, pricing, etc.) into pools of securities for issuance to investors through the capital market. These certificates will be available for trading in the capital markets. MBSs represent an ownership interest in mortgage loans made by financial institutions to finance the borrower's purchase of a home or other real estate. As the underlying mortgage loans are repaid by the mortgagors, MBS investors receive payments of interest and principal. What is traded in essence is the right to receive the repayments on the mortgages, without a transfer of title in any. Regardless of the status of repayments from the underlying mortgage loans, holders of the instruments expect periodic payments from the issuer of the MBS.

5.3.1 MORTGAGE BACKED SECURITIES THROUGH SECURITIZATION

The alternative model of MBS issuance is the conduit. Conduits purchase mortgages and issue MBS (figure 6). The conduits can be sponsored by government through FMBN or their parent companies. This conduit can operate like the Nordea Hypotek and Swedbank Covered Bond and will be able to attract investors to buy their securities thereby able to withstand credit and liquidity risks and enjoy great cover from interest rate risks.

Households **Savings Savings** Loans Loans Universal Banks and Savings Institutional Institutions **Primary Mortgage** Investors:e.g Banks (PMIs) **Pension Funds Mortgage Loan Sales Securities Securities Secondary Market Conduit Mortgage Loan Sales Funding**

Figure 6: Proposed Secondary Market with a Conduit

The pass-through securities issued is a covered bond and will differ in several significant ways from those guaranteed by FMBN. First they are backed by non-government-insured mortgages. By charter they will be required to have some form of credit enhancement on loans they purchase with pre-determined loan-to-value ratios (LTVs) which is typically in the form of private mortgage insurance. They can also purchase a large volume of loans from a large number of lenders (PMIs and Universal banks) and this empower them to issue larger securities with more diversified loan collateral and greater liquidity. As purchasers of the loans they receive the cash flows and repackage them for payment to investors that buy into their covered bonds. Thus, they can metamorphose into well-built organizations with huge manpower and resources. Furthermore, they can provide their corporate guarantee on their securities to investors in capital market when they market the covered bond through their prospectus unlike FMBN that provides a full faith and credit of the government guarantee. Although they will be private corporations, their unique status

as perhaps Government Sponsored Enterprises can allow them to issue debt at yields lower than comparable issues of AAA-rated corporations but higher than comparable maturity Government Treasury bonds.

The securities issued by private conduits will be similar to those of FMBN with the exception of loan size. If they are sponsored by government through FMBN that might still be subjected to loan limits. In this market, investors rely on information supplied by rating agencies and enhancement from either the collateral (i.e., over-collateralization), priority claims on cash flow (e.g., seniorsubordinated securities and reserve funds) or third parties (e.g., pool insurance provided by mortgage insurers or bond insurers) to protect them from the credit and agency risk inherent in third party origination and servicing. Currently, the credit rating agencies in Nigeria are Agusto & Co. Ltd. and CMC International, Ltd. For instance, Agusto & Co. currently provides short term Issuer ratings of PMIs on a solicited basis (probably by corporate or high net worth investors due to cost implications). An Agusto & Co. PMI Rating is an assessment of the financial condition of the PMI and its capacity to meet its obligations -in local currency, as at when due. Some of the factors considered in their quantitative analysis include: capital adequacy and leverage, asset quality, performance, funding and liquidity and ownership, management and staff structure. In fact, these rating agencies can provide services for the conduits and publish their performance thereby providing more information to investors and subsequently boost their confidence in the viability securitization.

The development of the senior-subordination structure has been a key factor in the growth of the private MBS market. In this structure, the senior security has priority claim on the pool cash flows. All defaults and cash flow shortfalls will be borne by the subordinate tranches until (in a worst case scenario) they are depleted. The rating agencies have developed models that predict the default rates on pools of mortgages based on loan characteristics (underwriting ratios, loan type), servicer performance, geographic location etc. Based on their estimate of default rates over the life of a pool they determine the size of the subordinate tranch(es) necessary to get the desired rating (Lea/Chiquier:1998). This is similar to Nordea Hypotek and Swedebank Mortgage Covered Bond where sustained liquidity usually helps to stabilize their cover pool during rating fluctuations. For instance, the covered bonds of Swedbank Mortgage have been assigned Aaa by Moodys and AAA by Standard & Poors. To maintain this level, the Company has undertaken that if its short term Standard & Poors rating falls below A-1 the Company agrees, within 30 calendar days of such downgrade, to provide additional liquid assets to the cover pool or to take any other suitable action in order to maintain a sufficient level of liquidity to support the rating assigned to the covered bonds. The covered bonds of Swedbank Mortgage have been assigned Aaa by Moodys and AAA by Standard & Poors. To maintain this level, the Company has undertaken that if its short term Standard & Poors rating falls below A-1 the Company agrees, within 30 calendar days of such downgrade, to provide additional liquid assets to the cover pool or to take any other suitable action in order to maintain a sufficient level of liquidity to support the rating assigned to the covered bonds. (Swedbank's website: 2009)

Funds originating from the assets in the cover pool, or from derivative contracts or issues of covered bonds, "covered bond funds", will be segregated from the company's other funds by being deposited on separate cash accounts in Swedbank AB (publ), "Swedbank", on a daily basis. If Swedbank's short term unsecured, unsubordinated debt rating by Standard & Poors would decline below A -2, the company will within 30 days thereof, (i) transfer the covered bond funds to a cash

account in another bank whose short term unsecured, unsubordinated rating by Standard & Poors is at least A-2 and (ii) re-direct future covered bond funds to a cash account in such bank. (Swedbank's website: 2009)

From the foregoing, the PMIs and Universal banks will sell the mortgage backed assets to conduit institutions (i.e. set up subsidiaries like Nordea Hypotek and Swedbank) on the long run. The conduit will purchase mortgage loans from a number of lenders, pools the loans and issues the securities guaranteed by their corporate goodwill and external rating. Through this arrangement, the PMIs and universal banks are the retail loan originators while their subsidiaries (conduits) functions as mortgage-backed security issuers. When they have matured enough to manage both liquidity and credit risks, they can therefore issue covered bond and sell to investors through the capital market to finance their debts. Their marketing strategies, large loan pool size through diversification, geographical spread, rating by credit rating companies will provide them a high liquid advantage to finance their debts.

While the pass-through securities now form the largest class of MBSs, other types that are largely derivatives of the former now exist. Their introduction is basically informed by the need to make MBSs more attractive to investors; especially by making available securities designed to manage the interest rate-related risks typical of the traditional long-term pass-through securities. The risks refer to the usual risk of any long-term security that its value will fall when rates rise and the borrowers' or mortgagors' tendency to refinance (i.e., call the mortgage) when rates fall, which is referred to as prepayment risk. Hence, funds originating from the assets in the cover pool can also be from derivative contracts. The term "Derivative" indicates that it has no independent value, i.e. its value is entirely "derived" from the value of the underlying asset. The underlying asset can here is the mortgage backed securities, In other words, derivative means a forward, future, option or any other hybrid contract of pre determined fixed duration, linked for the purpose of contract fulfilment to the value of a specified real or financial asset or to an index of securities.

There are thus mortgage pay-through securities which are multiple securities issued against a single collateral pool, pass the payments through in non pro rata ways and modify the cash flows to permit a sequential issuance of short-, medium- and long-term securities (bonds). This carving up of mortgages does not eliminate interest rate risk, but it does allow the risk to be allocated more efficiently. Suffice to say that just as the mortgage securitization has grown in complexity over the years so have the types of securities.

5.3.2 LIQUIDITY FACILITY

Liquidity Facility is letter of credit, standby bond purchase agreement used to provide liquidity to purchase securities that have been tendered to the issuer or its agent but which cannot be immediately remarketed to new investors. The provider of the liquidity facility, typically a bank, purchases the securities (or provides funds to the issuer or its agent to purchase the securities) until such time as they can be remarketed.

Liquidity facilities like covered bond issued to investors by the conduits can reduce liquidity risk for primary market lenders by providing them access to the capital market based on the quality of their asset portfolios. In addition, these facilities may reduce interest rate risk by giving lenders

access to longer term funds with rate structures different from those they can raise on a retail basis (e.g., fixed rates).

Liquidity facilities can facilitate participation in the mortgage market and an increased volume of lending by re-allocating liquidity and interest rate risk. However, they do not address other problems that can constrain the flow of funds and/or increase the relative cost of mortgage credit. This is a major problem that must be addressed if Nigeria is to attain a fully robust mortgage finance sector.

The recent World Bank report has noted that a liquidity facility could provide an interim step for Nigeria between having a fully functioning secondary market and the need to extend the maturity of the liabilities base from deposit funding. The mortgage liquidity facilities can fulfil a dual role. First, they can provide direct funding, by purchasing mortgages or lending on the basis of mortgages being assigned. The second role is to provide liquidity to lenders. This facilitates a much greater level of maturity transformation and enables banks to better leverage their deposit base for lending as mortgage loans. This would be a particularly useful function for many Nigerian banks that are not capital constrained and are also relatively liquid, but just lack long-term funds.

"The liquidity facility would fund itself by issuing standard bonds with tenors of five years or longer depending on market conditions. These would guarantee the liquidity facility and if it is in public hands therefore benefit from a quasi-sate guarantee. Ideally, the facility should be well capitalised and the bonds rated so as to provide the basis for non-distortive market pricing" the report concluded.

CHAPTER SIX

6. CONCLUSION AND RECOMMENDATION

From the foregoing discussion, it can be clearly understood that the mortgage finance industry has gone global. Based on literature reviewed, it has been identified that there is urgent need to redesign the erstwhile conventional mortgage practice between FMBN and PMIs to conform to a more viable global funding strategies through secondary mortgage market development. Furthermore, the progressive interest and involvement of central government and Federal Mortgage banks in this industry cannot be overemphasized. However, in spite of this global trend, both FMBN and mortgage banks in Nigeria have not fully engaged in modern mortgage financing options discussed in the earlier chapter hence the need to adopt radical approach for the benefit of all actors.

A properly structured secondary market can provide significant benefits to a housing finance system, and ultimately to the entire economy. The primary benefit is an increase in the availability of funds for housing. A secondary market can overcome a geographic mismatch between the suppliers and demanders of funds in the absence of nationwide banking or of an efficient payments system. It can overcome a mismatch between institutions having different capacities or inclinations to hold and originate long-term assets. By expanding the pool of funding options available to retail or primary market lenders, there is less pressure on governments to provide direct (and often subsidized) credit to homebuyers. In turn, governments can target scarce resources to the most deserving groups (Lea/Chiquier: 19988).

In view of this, the role of the Primary Mortgage Institutions (PMIs) in Nigeria to the development of a successful and sustainable Secondary Mortgage Market (SMM) can only work by paying more emphasis on the strategies to be adopted by the PMIs with respect to the standardization of loan applications; credit policy; property evaluation, loan underwriting, government regulation and legal framework as these requirements are particularly important to lower overall transaction and processing costs. Hence the following recommendation could assist to attain the long overdue strategic position in the committee of nations.

6.1 PREREQUISITES FOR MORTGAGE BACKED SECURITIES (MBS)

There are a number of infrastructure requirements underlying MBS issuance. Most important are the legal prerequisites. For Nigeria to be able to utilize MBS for the provision of affordable housing, these prerequisites are:

Imperatives for Primary and Secondary Mortgage Markets Development in Nigeria Capital Market Operations

a) The existence of a viable primary market is indispensable to the development of an effective mortgage finance industry. Universal Banks in Nigeria may have the geographical spread to facilitate homeownership but the practice of mortgage origination among them is not consistent with the global mortgage norms. Efforts should be made by government

agencies to ensure practice is standardized throughout the banks. A SMF can reduce the transaction costs of mortgage lending and investment through standardization of mortgage loan documentation, underwriting, servicing and creation of standardized securities. Expansion of the market and functional specialization can reduce costs through economies of scale. By expanding the funding sources for mortgages, a secondary market improves competition, which can reduce cost for participants and borrowers.

- b) The major contribution of the secondary market is to constantly replenish the liquidity used up by the primary mortgage market for the latter to originate yet more residential mortgages. Successful supply of liquidity by the secondary to the primary mortgage market in other jurisdictions has led to the empirical conclusion that this is about the best way to enhance the sustainable flow of funds to housing. All of these factors can lead to lower relative mortgage rates. A secondary market also can improve access to finance for housing by offering longer maturity mortgages and alternative mortgage instruments such as indexed loans and graduated payment mortgages.
- c) The paucity and unsustainability of depository funding sources including budgetary allocations or market-making by governments, however desirable, has made for recourse to the capital market which, for the last forty years, has shown its capacity to sustain local and international supply of capital into housing. But the total investment climate must be agreeable. Interest rate regime should encourage long term savings and lending while inflation should be tamed by the central bank to create an enabling environment for smooth operation of both PMIs and Secondary Mortgage Market finance through the capital market. Market should be allowed to determine fair rate for funding and investing in the mortgage market. Costs will be reduced when large volume of mortgage transactions are made daily on the Nigerian and perhaps international Stock markets.
- d) Passage of foreclosure and securitization laws (which drafts are in the pipeline) would greatly overcome the legal and regulatory gaps observed in this paper. This will make mortgage attractive to investors and other actors in the market.
- e) The FMBN although is being reformed and repositioned to act as a real secondary mortgage operator with mandate to provide liquidity to lenders through capital market operations, neither the existing FMBN Act nor the amended one has really captured this mandate by way of conferring the Bank with the following statutory privileges:
 - Using FMBN debts as collateral for public savings deposits;
 - Making FMBN securities available for CBN open market operations;
 Mortgage-backed Securities
 - Excluding FMBN from the Securities and Exchange registration requirements;
- Making budgetary allocations for the Federal Ministry of Finance to purchase FMBN debts up to a certain upper limit.

This legal aspect will form the bedrock of strategies suggested in chapter five if Nigeria is to develop a virile housing finance market.

f) Finally, an active secondary market enhances the marketability of securities, reducing the risk of investment and ultimately, the mortgage rates. Not only will improved marketability

lower the relative costs of mortgage securities, it can also be a catalyst for the development of the overall bond market.

6.2 PREREQUISITES FOR LEGAL AND REGULATORY FRAMEWORK

In fact, this is the most critical aspect towards the development of a successful mortgage market in Nigeria.

Key legal and regulatory frameworks for mortgage finance include:

- a) Tax and accounting framework: The accounting and tax treatment of mortgage securities for both issuers and investors must be clear, coherent and complete. Adequate disclosure of information on the collateral and the issuer is necessary to assess risk.
- b) 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. In fact, stamp duty capital transfer tax waiver to some extent will help to reduce documentation costs.
- c) Ability to enforce liens: Because investors can be the 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.
- d) Ability to transfer (assign) security interest: In the case of securitization, there is a transfer of the lender's beneficial interest to the investor. The legal system must recognize and record the transfer based on modest cost. This is important and should be well documented in the event of bankruptcy of the issuer.
- e) Monetary policy support to facilitate delivery of affordable mortgage loans to low and medium income earners. The index for measuring this key requirement is to relate mortgage loans to banks' total loan portfolio and gross domestic product.
- f) Incomes policy (or minimum wage) should be such that the average salary person can afford monthly mortgage payments. This is necessary in order to mitigate credit risks.
- g) Protection of investors against bankruptcy: It is of essence to have credible legal provisions assuring debt holders that the collateral backing of their assets would stay out of the reach of other creditors in case of insolvency proceedings. For securitization purposes, the concept of a SPV or other conduit that isolates the collateral pool from the issuer/servicer is essential to obtain off-balance sheet accounting and capital treatment for the issuer. According to Lea/Chiquier (1998), the concept of a bankruptcy remote vehicle is critical for the development of securitization and is often lacking in developing countries' law. The current global credit crunch that metamorphosed from the collapse of mortgage market in the USA and subsequently had spill over effects to other parts of the world

suggests that continuous government regulatory and enabling role are very key to mitigate bankruptcy, market collapse and hence restoring investors' confidence.

- h) Availability of a reliable national housing database by the Ministry of Housing and Urban Development is currently not in place but can be developed to boost liquidity of information for both individual and corporate investment decisions and reporting.
- i) Availability of affordable mortgage insurance without full recourse is very important but may be difficult to achieve on the short run if there is high propensity of credit risk. However, if lenders can sell the mortgages outright, without recourse, they can achieve capital relief and will no longer require capital to support the loans have been sold, which are no longer on their balance sheets.

Mortgage securitization will also be facilitated by putting in place a legal framework:

- For speedy foreclosures devoid of protracted litigations.
- For efficient property title registration which makes the Governor's consent for mortgage transaction to cease from being a major hindrance to robust mortgage operations.

More research should be carried out in the nearest future on how to have a harmonised land information system for Nigeria. Lagos State and Abuja Federal Capital territory are the only leading institutions with an average land information system in place out of the 36 states in Nigeria. A good land titling is very important part of legal framework towards the development of an efficient and attractive mortgage market.

According to Lea/Chiquier (1998), secondary market institutions are not appropriate vehicles for subsidizing mortgage credit. Their primary mission should be to mobilize private capital, broaden the financial markets and improve risk allocation. Subsidizing mortgage borrowers by taxing savers or private investors will not supply sufficient capital to meet demand. As a result, the institutions will have to resort to non-price rationing of mortgage credit during periods of rising demand. Their lending activities will crowd other intermediaries out the market and distort efficient capital allocation. Expanding access to mortgage credit can be better addressed through mortgage design and direct income or down payment support for target group borrowers.

As demonstrated in Malaysia and other developed economies examined in this thesis, Nigerian government can be influential in the development of a secondary market. Its major role should be to develop an appropriate legal and regulatory environment. In the early stages, some involvement of government in a secondary market institution can improve the chances for success by reducing the default risk perceptions of investors. However, in order to avoid creating an inefficient or risky monopoly, government should have a plan to phase out its involvement and the privileges it offered to create the market and support it initially.

Peterside (2005) stated that "the emergence of pension funds with huge investable assets is also a very timely development. In the post-consolidation era, banks will be deluged with assets and hard-pressed to find sufficient viable investment projects, MBS and REITS are some of the lucrative options where long-term capital could be deployed. If well packaged, real estate

investment is tangible, has a stable cash flow/income stream and offers a predictable capital appreciation," he recommended.

In this regard, "A sustained housing market will only thrive in a standardized mortgage lending environment, where lenders can cost-efficiently originate and service loans of longer duration and then "Securitize" the receivables in the capital market", he opined.

On the other side, secondary markets are not universal remedies. They cannot solve the basic problems of poverty in which households have too little income to afford decent shelter. Nor can they overcome the lack of a basic legal framework that respects and protects private property rights. They cannot exist without relatively strong primary markets. A secondary market should be thought of as an adjunct to the primary mortgage market, allowing lenders to expand the volume of lending in a safe and sound manner.

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