INTRODUCTION OF MORTGAGE BACKED SECURITIES IN KENYA CAPITAL MARKET

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DECLARATION

I declare that this project is my original work and has not been submitted to any other university or institution of higher learning for examination.

Signature……Date……

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This project has been submitted for examination with our approval as the University Supervisor

Sign: ---------- Date: ----------

Mr. Luther Otieno

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My sincere appreciation goes to my supervisor, Mr. Luther Otieno for his guidance throughout the entire part of this project.

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DEDICATION

To my God and Father of our Lord Jesus Christ. To him are the Glory, Honor and Praise. With him everything is possible.

To my brother, John. I am glad you had always been on my side.

To my parents, Francis and Betty. You are the best in the world.

To my friends who supported me when I felt frustrated. God bless you all.

ABSTRACT

In Kenya demand for housing units in urban areas averages 150,000 and rural areas 300,000 with annual production of between 20,000 to 30,000 thus creating a shortfall. The main sources of mortgage financing are through commercial banks hence the country suffers from a lack of new foreign participation in its property market. A number of real estate markets have reacted to the challenge through the introduction of securitization, a form of indirect investment in property through the conversion of property assets into trade able paper securities. This study analyzes the feasibility of introducing mortgage backed securities in Kenya capital market.

The study was carried out as an exploratory study and used primary data collection method through use of semi structured questionnaire with both open ended and closed ended questions to obtain first hard information from the commercial banks and mortgage financing companies listed at Nairobi Stock Exchange.

The findings of the study revealed 40% of the financial institutions hold mortgage loans of over Kes 1 billion showing the capability of originating mortgage loans for securitization and 70 % of financial institutions raised additional funds to finance their expansion plans indicating the need for additional funds . It also noted regulatory framework on the asset securitization is adequate however lack of enough credit rating agencies and special purpose vehicles may hinder the implementation of the securitization of mortgage loans.

The study concludes that implementation of mortgage backed securities is necessary in order to improve on capital deepening in the capital market and attract foreign investments in the property market.

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LIST OF ABBREVIATIONS

C.M.O –Commercial Mortgage Obligations.

E.H.F.A-Emergency Home Finance Act

FANNIE MAE-Federal National Mortgage Association

F.L.P- First Loss Position

FREDDIE MAC- Federal Home Loan Mortgage Corporation

G.D.P –Gross Domestic Product

G.N.M.A-Government National Mortgage Association. (GINNIE MAE).

G.S.E- Government Security Enterprise.

I.M.F- International Monetary Fund

M.B.S-Mortgage Backed Security

N.S.E –Nairobi Stock Exchange.

O.F.H.E.O- Office of Federal Housing Enterprise Oversight

R.M.B.S-Residential Mortgage Backed Securities.

S& L-Savings and Loan

S.P.V –Special purpose vehicle

CHAPTER ONE

1.0 INRODUCTION

1.1 Background of study

Mortgage Securities represent an ownership interest in mortgage loans made by financial institutions such as savings and loans, commercial banks, mortgage companies to finance the borrower's purchase of a home or other real estate. When these loans are pooled by issuers for sale to investors, mortgage securities are created. As the underlying mortgage loans are paid off by the homeowners, investors receive payments of interest and principal. The most basic mortgage securities are known as pass through securities which represent a direct ownership interest in a pool of mortgage loans with each security entitled to a pro-rata share of the cash flow from the pool of mortgage loans. (www.egyptse.com).

Mortgage-backed security can broadly be classified in to pass through mortgage backed securities, collateralized mortgage obligation and stripped mortgage backed security.

Pass-through represents a share of an investment pool consisting of multiple mortgages. Prepayment risk is reduced when the investment is subject to increasingly larger numbers of mortgages because each mortgage prepayment would then have a reduced effect on the total pool. Pass-through securities allow investors to reduce their prepayment risk through diversification rather than a single mortgage investment. Pass through can further be classified in to Residential and commercial where residential are pass-through MBS backed by mortgages on residential property while commercial are pass-through MBS backed by mortgages on commercial property.

Collateralized mortgage obligation (CMOs) represent repackaged pass-through mortgage-backed securities, but with the cash-flows directed in a prioritized order based on the structure of the bond. A CMO's objective is to provide some protection against the prepayment risk associated with mortgage investments, above and beyond the protection offered by pass-through, while still offering credit quality and high yields. CMOs take the cash-flows from pass-through and segregate them into different

bond classes known as tranches, to provide the investor some level of payment predictability. Tranches are created in an attempt to provide a time frame, or window, during which repayment is expected. The tranches prioritize the distribution of principal payments among various classes and serve as a series of maturities over the life of the mortgage pool.

Stripped mortgage backed security comprises of two parts interest and principal. In some cases, the security is made up of a certain percentage of both interest and principal. The ideal situation for investors is for the security to either be an interest-only strip or a principal-only strip. In these scenarios, the securities are very sensitive to the change in interest rate, so an investor will choose to purchase one or the other based on the direction he/she believes the interest rates are headed.

The first mortgage-backed securities arose from the secondary mortgage market in 1970. Investors had traded whole loans, or unsecuritized mortgages, for some time before the Government National Mortgage Association (GNMA), also called Ginnie Mae, guaranteed the first mortgage pass-through securities that pass the principal and interest payments on mortgages through to investors. (Ginnie Mae is a government agency that guarantees securities backed by HUD- and Veterans Administration-guaranteed mortgages.) Ginnie Mae was soon followed by Fannie Mae, a private corporation chartered by the federal government along with Freddie Mac to promote homeownership by fostering a secondary market in home mortgages. (Cowan, 2003).

In Kenya, dealing in shares and stocks started in the 1920's in informal market, however in 1954 the Nairobi Stock Exchange (N.S.E) was constituted as a voluntary association of stockbrokers registered under the Societies Act. Since then the market had developed with current structure of Main Investment segment, Alternative Investment segment and Fixed income security investments segment.Fixed income security investment market segment had experienced little security innovation with only characterized by corporate and government bonds trading, however with introduction of more securities through asset backed securities the market segment will be more vibrant.(www.nse.co.ke).

Security innovations are to develop new financial instruments that increase investor's wealth and favor general economic growth. New securities must enable issuers and investors to accomplish what could not be achieved with existing securities, this means a higher return to investors for bearing a given level of risk, greater liquidity and possibility of reducing cost of capital to issuers. To the economy the security innovations bring new ways and more efficient ones to channel savings and investments towards the most economically sound and profitable projects. Significantly security innovations provide a new way of meeting fundamental economic demands of issuers and investors and the case for mortgage backed securities which are meant to serve a specific function in the economic and financial system (Badessich, 1994).

The Capital Market Authority (CMA) in 2007 through a legal notice number 184 – introduced regulation on "Asset backed securities" in order to open up the market and regulates the issuance of asset backed securities. This regulation was meant to create room for security innovation which will result to development of new financial instruments. (w.ww.cma.or.ke).

The NSE has experienced tremendous development in the recent past, with increased listing of new firms in the equity market and other firms offering corporate bonds, however with all these activities taking place the market is slow in securities innovation thus limiting capital formation in some sectors such as mortgage markets.(www.nse.co.ke).

Housing development is a major challenge in Kenya owing to huge capital requirement and limited sources of financing for both residential and commercial mortgages. With creation of mortgage backed securities the burden of raising capital for investment in housing projects could be eased.

Fabbozi and Modiglian(1992),defined the mortgage market as a collection of both the primary and secondary markets in which mortgage trade. In primary market lenders deals directly with the borrower for underwriting and origination of the loan and in secondary market loans and securities backed by mortgage loans are sold to investors

typically through intermediaries for inclusion as part of the investors' portfolio of assets.

In Kenya, mortgage market has been characterized by primary markets leading to bureaucratic procedures in accessing the limited capital available with the mortgagors.

Mutuku, (2006) noted high lending rates in Kenya mortgage financing was due to high cost of funds experienced by the financial institutions.

1.2 Statement of the problem

The estimated current urban housing needs are 150,000 units per year for the urban areas and 300,000 units per year for the rural. The current production of new housing in urban areas is only 20,000-30,000 units annually, giving a shortfall of over 120,000 units per annum. (Wafula, 2004).

In Kenya the main sources of mortgage financing is through commercial banks, with stringent procedures and high interest rates leading to only small percentage of the population that can afford the financing.

Kenya also suffers from a lack of new foreign participation in its property market. In seeking liquidity, therefore, the big investors attempt to recycle their holdings among themselves. But in a market place which lacks transparency and information on valuation approach, operating costs, yields and rentals is not freely exchanged leading to completion of only a limited number of transactions.

A number of real estate markets have reacted to the challenge through the introduction of securitization, a form of indirect investment in property through the conversion of property assets into tradable paper securities. Australia, Belgium, and the United States have been at the forefront of this effort. Such markets usually have the support of investment banks, a variety of lending institutions and stock markets whose listings include property companies.

In Kenya, various studies have been conducted on capital market and mortgages. Mbote(2006) Relationship Between The Type of Mortgages & The Level of Non Performing Loan Portfolio in the Mortgage Companies In Kenya; Mutuku (2006) Factors Influencing the Development of Secondary Mortgage Market in Kenya with Special Emphasis on Mortgage Backed Securities; Chemweno (2009) Survey of Operational Budgetary Process and Challenges in the Mortgage Financing Institutions in Kenya; Mwangi (2007) Factors Influencing Financial Innovation in Kenya's Securities Market. A Study of Firms Listed at the NSE.

From the studies conducted previously none of the study that has dealt with development of mortgage backed securities in Kenya, except a study by Mutuku (2006) who examined factors influencing the development of Secondary Mortgage market in Kenya with Special emphasis on Mortgage backed securities which showed that there is potential market for trading with Mortgage backed bonds. This study therefore will go a long way to examine the implementation phase of Mortgage backed securities in the secondary market in Kenya thus filling that knowledge gap.

1.3 Objective of the Study

To analyze the feasibility of introducing mortgage backed securities in Kenya.

1.4 Importance of the Study

Borrowers-Through pooling of resources by mortgage financiers borrowers who could not afford credit facilities especially in the middle class will be able own houses.

Mortgage Originators-Creation of secondary market for mortgage loans, new securities will provide commercial banks and mortgage loan originators with capital adequacy, more profits, business expansion, new sources of funding and changing risk profiles.

Guaranteeing agents- Better insurance management companies would be willing to accept this role by expecting to charge fees higher than expected losses without

extending loans.

Investment banks – They will benefit though underwriting fees and trading profits and typically create investment trust or special purpose vehicles that serve as intermediaries

Investors – Securitized mortgage loans will sell at price that reflects credit risk and prepayment risks. Through guaranteeing on the mortgage loans investors would only be concerned about the financial standing and probity of the guarantor.

Researchers and Academicians- there is little literature in Kenya market regarding asset securitization. The research will form a base for more insight in the area.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1. Introduction

The section review relevant literature on asset securitization process, impact of Mbs on risk management, private information and capital structure choice. Briefly examine the History of US mortgage market, the Kenya financial regulatory framework system and empirical review of the asset backed securities implementation in some emerging markets.

2.2. Asset securitization process

Asset securitization is a structured finance technique that allows for credit to be provided directly to market processes rather than through financial intermediaries. Securitization describes the process and the result of converting regular and classifiable cash flows from a diversified pool of illiquid existing or future assets of similar type, size and risk category into tradable, debt and equity obligations (Wighton, 2005)

These obligations are issued by either the asset originator or non-recourse, single-asset finance company known as special purpose vehicle (SPV) as subordinated, negotiable contingent claims also known as tranches with varying seniority and maturity, backed by the credit and payment performance of securitized assets. (Wighton, 2005).

Typically a three-tier securitization structure of junior, mezzanine and senior tranches concentrates expected losses in a small equity-like, junior tranche, which bears the majority of the credit exposure first loss position(FLP), and shifts most unexpected risk to larger, more senior tranches, which display distinctly different risk profiles. Both investment return and losses associated with the underlying reference portfolio are allocated among the various tranches through prioritized contractual repartitioning (Telpner, 2003).

Securitization substitutes capital market-based finance for credit finance by

sponsoring financial relationships without the lending and deposit taking capabilities of banks. It allows issuers to raise funds and improve their liquidity position without increasing their on-balance sheet liabilities and capital base in a bid to refinance asset origination or investments. (Zweig, 2002; Fabozzi, 2001; Altrock and Rieso, 1999; Weiss, 1999; Schwarcz, 1997; Bhattacharya and Fabozzi, 1996).

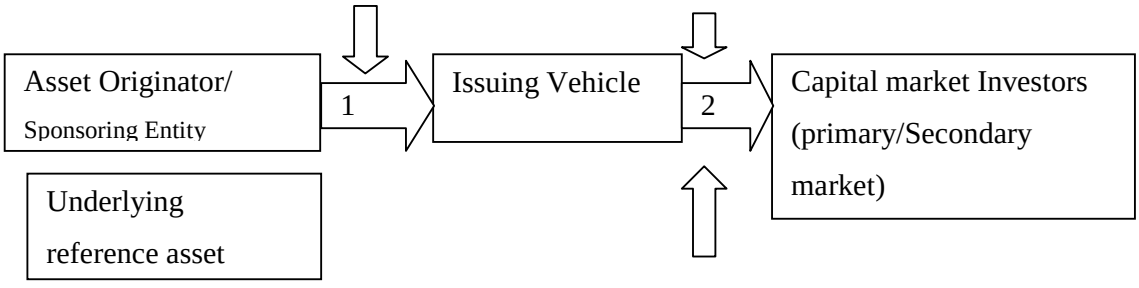
Issuers lower their financing cost from issuing a securities backed by the performance of segregated credit exposures at a cost of capital that might not be possible on account of the issuer's own credit rating. Hence, securitization substantiates more cost efficient terms of external finance without compromising the profit-generating capacity of assets, which continue to be serviced by the originator in most cases. (Skarabot, 2002; Rosenthal and Ocampo, 1988).

Issuers engage in either traditional/true sale or synthetic securitization. In a true sale transaction structure the originator sheds the asset risk associated with a selected pool of on-balance sheet exposures by selling them to a SPV (conduit), which takes legal title to the assets. Such single-purpose securitization conduits are completely remote from the asset originator in terms of economic and legal recourse (Bohringer et al., 2001; Sullivan, 1998).

2.3. Securitization Value Chain

Originators transfer bank SPV issues debt securities assets to a vehicle (SPV)(asset –backed) to investors.

Typically structured in to various classes.



Rated by one or more rating agencies, underwritten by the sponsoring bank and sold to institutional investors**.**

2.3.1 Originators and Servicers

The assets used in securitizations are created or originated in a number of ways. When a lender extends a loan or acquires another revenue producing asset such as a lease, they are creating assets that can be securitized.

Originators often retain a connection to their assets following a securitization by acting as a servicer, the agent collecting regular loan or lease payments and forwarding them to the SPV. Servicers are paid a fee for their work or contract with other organizations to perform the servicing function, or sell the servicing rights. (Cowan, 2003).

2.3.2 Asset Transfer or the True Sale

In the vast majority of securitizations, it is critical that the transfer of assets from the originator to the SPV is legally viewed as a sale, or "true sale." The proceeds of the securities are remitted to the originator as the purchase price for the assets. If the asset transfer is not a "true sale," investors are vulnerable to claims against the originator of the assets. The cash flows backing the securities or the assets themselves could be ruled a part of the originator's estate and used to satisfy creditors' claims if a true sale did not occur. Legally separating the assets also protects the originator.

Investors can turn only to the SPV for payments due on the ABS and MBS, not to the general revenues of the originator. (Cowan, 2003).

2.3.3 Special Purpose Vehicle and the Trust

The SPV can either be a trust, corporation or form of partnership set up specifically to purchase the originator's assets and act as a conduit for the payment flows. Payments advanced by the originators are forwarded to investors according to the terms of the specific securities. In some securitizations, the SPV serves only to collect the assets which are then transferred to another entity usually a trust and repackaged into securities. Individuals are appointed to oversee the issuing SPV or trust and protect the investors' interests. The originator, however, is still considered the sponsor of the pool. (Cowan, 2003).

2.3.4 Underwriters

Underwriters usually are investment banks and they serve as intermediaries between the issuer (the SPV or the trust) and investors. They consult on how to structure the MBS based on the perception of investor demand, for example they may advise the SPV to issue different tranches each with specific characteristics attractive to different segments of the market. Underwriters also help determine whether to use their sales network to offer the securities to the public or to place them privately. Also they assume the risk associated with buying an issue of bonds in its entirety and reselling it to investors. (Cowan, 2003).

2.3.5 Credit Enhancement

Credit enhancement is common in securitization transactions depending on the nature of the transaction and the type of assets, the securitization pool may need such support to attract investors. Enhancement or support can come from the assets themselves or from an external source. Examples of internal enhancements include subordinating one or more tranche, or portion, of the securities issued with an aim of placing the claim of one tranche over another. (Cowan, 2003).

2.3.6 Credit Rating

MBS are rated by independent rating agencies whose analyses is watched closely by investors as a guide to the credit quality of the securities. In almost all cases, rating agencies monitor the performance of the securities on an ongoing basis. (Cowan, 2003).

2.3.7 Dealers

Just as in other bond markets, dealers play an important role once an issue is initially distributed. For most bond investors, liquidity the ability to easily buy or sell a security is an important characteristic. They offer prices at which they will buy or sell bonds to the investment community. (Cowan, 2003).

2.4. Benefits of asset securitization

The economic reasoning of securitization hinges on the ability of issuers as profitable enterprises to maximize shareholder value as the principal goal of economic activity.

Management decisions evaluate the economic impact of competing strategic and operational objectives on shareholder value. Financial activities within business entities have to be geared to support the realization of profitable objectives to what capital markets deem as attainable levels of economic efficiency (Jobst, 2006).

Securitization confers upon issuers mainly financial advantages related to more competitive capital management through efficient asset funding. Further objectives of securitization might also include active balance sheet restructuring, market-oriented risk management of credit risk and diversified liquidity (Bar, 1997, 1998).

Hence, from a capital market perspective, it is imperative to assess how these aspects of securitization affect the shareholder value of the issuer and whether the trade off between envisaged benefits and attendant drawbacks yields positive payoffs to both issuers and investors.

2.5. Risk management, private information and capital structure choice

Risk management is a transmission and control mechanism, which encapsulates different approaches of how firms choose between the risk-return profiles of alternative investment strategies to maximize shareholder value. Asset securitization is one operational means of risk management, which allows issuers to reallocate commodities and transfer different types of risks, for example credit risk, interest rate risk, liquidity risk or pricing risk to capital market investors at a fair market price. (Jobst, 2006).

According to Greenbaum and Thakor (1987), private information about the originated assets would induce financial institutions to prefer the securitization of better quality assets to mitigate their regulatory capital requirement for ‘‘overcharged’’ asset exposures, whilst worse quality assets are retained.

For this selective bias to be economically sustainable, issuers must extract positive payoffs from trading off the benefits from securitizing low-risk reference portfolios against increased bankruptcy risk. Private information might also find an outlet in securitization if issuers aim to achieve greater specialization in sourcing and monitoring as areas of comparative advantage (Berger and Udell, 1993).

Asset securitization might also redress conflicts of interest between creditors and shareholders in the capital structure choice of firms concerning possible agency costs from underinvestment (Myers, 1977, 1984) and asset substitution (Jensen and Meckling, 1976) due to excessive levels of debt or the presence of non-value maximizing investment behaviour respectively.

James (1988) as well as Benveniste and Berger (1987) show that securitization tranches resemble secured debt, whose agency costs may be lower than for unsecured debt (Berkovitch and Kim, 1990; Stulz and Johnson, 1985).

The effects of asset securitization on the capital structure decision as a funding choice under asymmetric information is also an aspect to evaluate. Under the pecking order theory (Myers and Majluf, 1984) issuers with severe information asymmetry problems would prefer to issue secured debt (i.e. asset-backed), which carries lower agency cost, because investors receive their repayment directly from a diversified pool of asset exposures insulated from the issuer (Shyam,Sunder and Myers, 1999).

The trade-off theory would restrict this choice only to those cases where the marginal benefit of debt outweighs the associated amount of agency and financial distress cost. Hence, under the pecking order and trade-off theory asset securitization is the refinancing instrument of choice for cash-strapped issuers, whose high agency costs of asymmetric information debar them from other forms of external finance.

2.6. History of U.S mortgage backed securities

The first mortgage-backed securities arose from the secondary mortgage market in 1970. Investors had traded whole loans, or unsecuritized mortgages, for some time before the Government National Mortgage Association (GNMA), also called Ginnie Mae, guaranteed the first mortgage pass-through securities that pass the principal and interest payments on mortgages through to investors. (Ginnie Mae is a government agency that guarantees securities backed by HUD- and Veterans Administration-guaranteed mortgages.) Ginnie Mae was soon followed by Fannie Mae, a private corporation chartered by the federal government along with Freddie Mac to promote homeownership by fostering a secondary market in home mortgages. (Cowan, 2003).

Fannie Mae was originally chartered in the 1930s for the limited purpose of providing a government-owned secondary market for loans insured by the Federal Housing Administration (Van Order, 2000).

In 1954, Fannie Mae was reorganized to allow private capital to replace federal funds (Lea, 1996). It operated by issuing its debt and purchasing mortgages that it held in its portfolio (Van Order, 2000).

The Housing and Urban Development Act of 1968 partitioned Fannie Mae into a privately-financed secondary market institution, which is Fannie Mae and Government National Mortgage Association (Van Order, 2000).

Freddie Mac was created by the Emergency Home Finance Act of 1970 (EHFA) to form a secondary market for Savings and Loan (S&L) mortgages. Freddie Mac was initially owned by the Federal Home Loan Bank System and its member thrifts; now it is a publicly traded company like Fannie Mae. When it was first created, Freddie Mac purchased mortgages from Savings and loans, Fannie Mae purchased mortgages from mortgage bankers, their purchasing practices have since converged (Van Order, 2000).

While Fannie Mae had created a secondary market for government guaranteed and insured residential mortgage loans prior to 1970, the broad secondary market began in earnest with the passage of the EHFA, which allowed both Government Security Enterprises (GSE) to purchase and securitize conventional mortgages as well as government-insured or guaranteed mortgages.

In the late 1970s, Residential Mortgage Backed Securities (RMBS) securitization took off as traditional lenders could not keep up with the demand for home mortgages. Investment in RMBS exploded again after institutional investors entered the market, indeed the RMBS market has increased by more than 500 percent from 1984 through the early 2000s (Lore and Cowan, 2005).

Fannie and Freddie primarily engage in two activities. They help mortgage originators package their mortgages into residential mortgage-backed securities (RMBS) by providing credit guarantees for those securities. This helps maintain a stable and liquid market for RMBS. Fannie and Freddie are by far the largest of the GSEs. They are also the entities that have had the biggest role in creating and developing the modern secondary market for residential mortgages. Mortgages have always been bought and sold by investors, but until relatively recently; the secondary mortgage market has been an informal arrangement (Van Order, 2000).

The introduction of RMBS in the 1970s changed that; once mortgages are converted into RMBS, they can be easily traded on the secondary market with comparatively few transaction costs, the process adopted is as follows. Borrowers get mortgages from lenders in the primary market (US Senate Committee on Banking, Housing, and Urban Affairs, 2005).

Primary market lenders then sell these mortgages to secondary mortgage market firms and use the proceeds to originate more mortgages in the primary market. The secondary mortgage market firms then sell securities backed by the mortgages that they purchased to investors and use the proceeds of the sale to purchase more mortgages from primary market lenders (Freddie Mac, 2009).

Fannie and Freddie participate in the secondary market in two ways issuing and guaranteeing RMBS for a fee and issuing debt and purchasing, for their own portfolios, mortgages and RMBS with the proceeds. The GSEs' charters restrict the mortgages they may buy (Passmore et al., 2002).

Loans that comply with the restrictions placed on Fannie and Freddie are known as conforming loans. Those that do not comply with either of these restrictions are known as "nonconforming" loans, which may not be purchased by Fannie or Freddie.

The two companies effectively have no competition in the conforming market because of advantages granted to them by the federal government in their charters (Bruskin et al., 2000).

The most significant of these advantages has been the federal government's implied guarantee of Fannie and Freddie's obligations (Bruskin et al.,2000, p. 1033). The government's guarantee allows Fannie and Freddie to borrow funds more cheaply than its fully-private competitors and thereby offer the most attractive pricing in the conforming market.

2.7. Review of Legal and regulatory in Kenya Financial Sector

The existing financial services legislation and regulation in Kenya, whilst intended to ensure financial discipline, impose an unnecessarily strict system, specifying which institutions can provide which types of products to which types of customers. This is based on a limited view of how residential housing construction occurs. (Brown, 2003).

It assumes two primary means of housing construction, developers acquire big tracts of land, build houses, and then sell completed houses to individual buyers or individuals acquire their own plot of land and build complete homes on that land.

Commercial banks are permitted to lend to developers over two to three years to allow them to get through the construction phase. Mortgage companies and building societies are permitted to provide long-term mortgage loans to individuals to purchase units from developers, or less commonly, to build their own complete units. The problem with these regulations is that it has reduced access to financial services, rather than protecting the interests of the public (Brown, 2003).

2.7.1. Capital Market Authority

The authority was established through an act of parliament Chapter 485 of laws of Kenya with a key of mandate of development of all aspects of capital market, creation, maintenance and regulation of the market.

In year 2007, the authority issued 'The Capital Market Authority (Asset backed securities) Regulations, 2007', with aim of opening the market through innovation of asset backed securities. The regulation guides on the issuance of asset backed securities in Kenya.

2.7.2. Central Bank of Kenya

The bank was established through an act of parliament Chapter 491 of laws of Kenya with principal objective of formulation and implementation of monetary policy directed to achieving and maintaining stability in the general level of prices. The aim is to achieve stable prices – that is low inflation - and to sustain the value of the Kenya shilling.

The bank also plays a supervisory role aimed at fostering liquidity, solvency and proper functioning of a stable market-based financial system as stipulated under Section 4 (2) of the Act.

This mandate is aimed at promoting and maintaining the safety, soundness and integrity of the banking system through the implementation of policies and standards that are in line with international best practice for bank supervision and regulation
With the later provisions the bank supervises all financial institutions including the mortgage companies hence the need to participate in formulation of guidelines on creation of mortgage backed securities.

2.7.3. Banking system in Kenya

The banking system in Kenya comprises of forty three commercial banks and two mortgage companies. Out of the forty five institutions, thirty five are locally owned and ten are foreign owned. The locally owned financial institutions comprise three banks with significant shareholding by the Government and State Corporations, thirty commercial banks and two mortgage finance institutions.

Commercial Banks and Mortgage Finance Institutions are licensed and regulated pursuant to the provisions of the Banking Act Chapter 488 laws of Kenya and the Regulations and Prudential Guidelines issued from time to time.

The finance bill 2010 review the banking act to raise the threshold of core capital that banks are allowed to invest in mortgage finance from 25% to 40% and to operate current accounts. These measures will allow greater allocation of resources to property market in Kenya.

2.7.4. Pension Sector in Kenya

The Government of Kenya through the Ministry of Public service amended the pension scheme for government employee which becomes operational from 1st July 2009 to a contributory scheme with requirement to employees to raise their contribution from 2% to 7.5% within a span of three years and Government contribution of 15%.

Indeed this will help in market deepening and feasibility of security innovations in the market due to increased domestic saving.

The retirement benefit Act in 2009 was amended to allow a member to be able to assign up to sixty percent of the accrued benefits to the financial institutions to secure mortgage loan.

This development will improve on the accessibility of financing for home ownership however with majority of the population being classified in the low income bracket and rising costs of real estate development a limited majority will enjoy the new opening.

2.8 Review of previous Studies

Mutuku (2006) Factors Influencing the Development of Secondary Mortgage Market in Kenya with Special Emphasis on Mortgage Backed Securities.

In this study it was found that Kenya secondary market was ready for security innovation and financial institutions were ready accommodate the mortgage securities as an alternative source of financing. The study noted that the high costs of mortgages loans were as result of high cost on sources of fund by the financial institution to finance the loans.

Jobst (2006) noted in his study “Asset Securitization as a risk management and funding tool”, that securitization offer economic benefits irrespective of the configuration of the financial system .The development of viable securitization market for small and medium enterprises related claims in a bank based financial system is likely to require financial sector whose scope and intensities might be enhanced by development agencies. The study shows that other classes of asset backed securities can be a success as a tool of funding the organizations.

Badessich (1991). Mortgage Backed Securities in Argentina. An implementation study. Concluded the development of local public market , international market reach and adoption of Multi country securitizations to be a key success factors in the implementation of the mortgage backed securities in Argentina. I n Kenya the capital market is evolving and with increase in acceptable of bond trading in the market, it is a signal that a well managed regulatory framework on the implementation of asset backed securities will be a success.

2.9 Empirical review of Securitization in Some Emerging Markets

2.9.1 Malaysia

The origin of securitization in Malaysia can be traced to 1986 when the Government set up a mortgage financing body called National Mortgage Corporation (Cagmas Bhd).Cagmas was formed on the model of Fannie Mae and Freddie Mac of USA. Accordingly, Cagmas functions as a Special Purpose Vehicle between the house mortgage lenders and investors of long term funds. Cagmas is by far the most important issuer of securitized instruments in Malaysia. The securities issued by Cagmas have acquired the name "cagmas bonds" in Malaysian market. Apart from mortgages securitized by Cagmas, securitization for other assets has not been very strong in Malaysia, as the size of the Malaysian securitization market is estimated at RM 45.5 billion by the end of 1996.

On 10 April, 2001 the Securities Commission came out with mandatory guidelines on asset securitization. The guidelines permit only companies incorporated in Malaysia to offer asset-backed securities in Malaysia, either on public basis or on private basis. Although, a task force comprising market practitioners joined the Securities Commission’s staff in formulating these guidelines, it did not keep up with the latest

developments in the market such as synthetic securitizations and un-funded credit derivative based transactions.

Furthermore, the guidelines require the originator to effectively transfer all rights and obligations in the assets to the Special Purpose Vehicle and not retain any residual beneficial interest in these assets. As a limited credit enhancement by the originator is almost a rule in securitizations, market practice in Malaysia will perhaps evolve on the style of the US securitizations where the security will be divided into two tranches tier with the first one being without recourse and without any enhancement, while the second to be with required enhancement.

There have been 3 ABS deals sold in Malaysia up to January 2002, that were worth a total of RM 1.23 billion. The issuers of these securities were all financial institutions, namely Arab Malaysian Merchant Bank Bhd, Commerce International Merchant Bankers Bhd, and bad debt management agency Pengurusan Danaharta Nasional. Bhd. (www.egyptse.com).

2.9.2 Singapore

One of the earliest transactions in Singapore was at the end of 1998, which was the securitization of real estate receivables by Neptune Orient Line. This was a sale and leaseback of an office property funded by a ten-year fixed rate mortgage backed bonds. Securitization transactions in Singapore have developed to involve commercial real estate, residential sales progress payment, credit card receivables, bonds and loans. By the end of year 2000, a total of S$ 1.92 billion worth of bonds have been sold in the domestic market via six commercial properties and one residential condominium.

One of the notable deals in Singapore market has been that by DBS Bank. This was an asset backed short-term notes program, in June 2000. In 1999, DBS Land, a property company, securitized three office buildings in three separate deals.

The Monetary Authority of Singapore (MAS) finalized the regulatory guidelines for capital adequacy treatment in case of securitization in 2000. The guidelines state that in case of mortgage loans, the transfer of receivables would also entail the transfer of the underlying mortgage, which would require compulsory registration with the

Registrar of Titles and Deeds. (www.egyptse.com).

2.9.3 South Africa

The history of securitization in South Africa dates back to 1989 when the first securitization issue was a R 250 million mortgage-backed security issued by the Allied Building Society (United Bank of South Africa Limited), in addition to two transactions that were worth R 335 billion, placed on the market in the late 1980s and early 1990s. Nevertheless, securitization is still not widely accepted in South Africa.

Recently securitization has been brought up again locally, and started attracting interest. This is due to recent developments such as the listing of the first securitization company (Sotta Securitization International) on the Johannesburg Stock Exchange in November 1998. It was the largest deal worth R 120 million in March 1999 with Lyons Property Company, mandated to securitize Lyons's lease agreements over five properties.

South African Securitization still faces some major obstacles in the market. The first obstacle is that investors still prefer to invest in listed companies with established track records. Second, there are legislative and accounting problems, because asset backed securities transactions are off-balance sheet, which is considered more risky than mortgages. Furthermore, there is no separate legislation for securitization, and no special entity, other than banks that are allowed to issue debt paper to fund operations. Thus, the securitization process by a Special Purpose Vehicle must be routed through a bank. In addition, debt issued must be denominated at Rand 1 million or more, which does not help promote secondary market liquidity. Finally, banks have sufficient capital in their balance sheets, and want to grow rather than sell off assets. (www.egyptse.com).

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter involve, research design, population of study, data collection, analysis and presentation. Data collection is the process of gathering information while data analysis is a process of inspecting, cleaning, transforming, and modeling data with the goal of highlighting useful information, suggesting conclusions, and supporting decision making. Data presentation involves use of graphics and tables to present the analyzed information.

3.2 Research Design

The study is an exploratory research since no similar research has been conducted in the area in Kenya. A detailed semi-structured questionnaire with both open ended and closed ended questions was used to gather pertinent information on the sampled population to answer the research problem.

3.3 Population of study and Sample size

The populations of the study were 10 financial institutions involved in mortgage financing that are listed in Nairobi Stock Exchange. Since the population is not very large census method of the target population was used to collect data and all elements considered a representative of all other financial institution offering mortgage financing in Kenya.

This population provided information on mortgage loan origination, which is a key factor in the implementation of mortgage backed securities.

3.4 Data collection

The study adopted primary data collection method which was collected through a semi structured questionnaire. The questionnaires were administered through a drop and pick method to either the financial accountants, credit officers or mortgage officers of the sampled institutions.

3.5 Data Validity and Reliability

Joppe (2000) defined data reliability as the extent to which results are consistent over time and an accurate representation of the total population under study and data validity as what determines whether the research truly measures that which it was intended to measure or how truthful the research results are.

The questionnaire was pretested among 5 of the sampled institution before been administered full scale to eliminate likelihood of any problem in order to achieve data validity. Split half technique was used at piloting stage to determine reliability of the questionnaire.

3.6 Data Analysis

Data collected was examined for completeness, edited and coded to ensure data consistency before being analyzed.

Descriptive statistics was used to analyze the data and involved use of grouped frequency, measures of central tendency and variability.

The data analysis was done using SPSS version 17 and presented using percentages, pie charts and tables in order to show the relationship of data and aid in arriving at the conclusions.

CHAPTER FOUR

4.0 DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter will show detailed reports on findings of the study and interpretation of the analyzed data. Data presentation will involve the use of pie charts, percentages and tables.

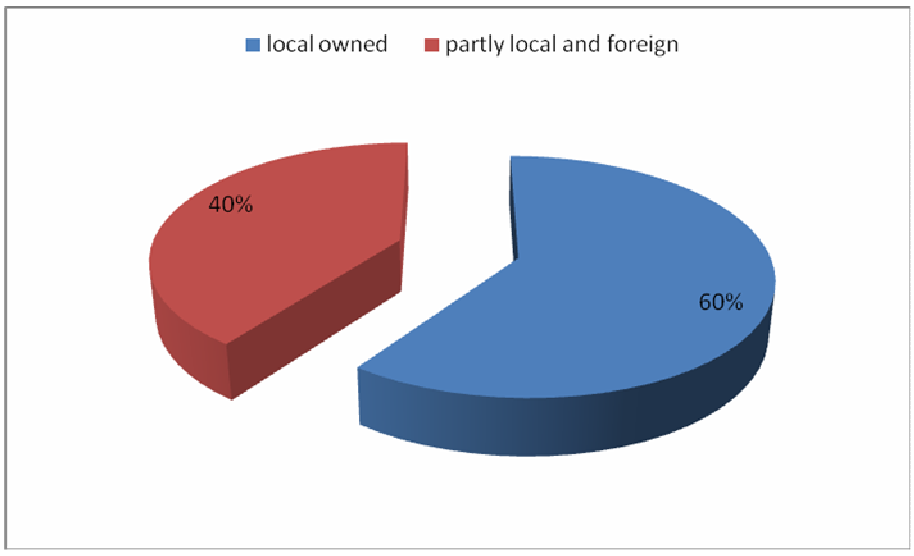
4.2 Response rate

A total of 10 financial institutions listed at Nairobi Stock Exchange responded to the study representing 100 percent response rate.

4. 3 Classification of financial institutions

Out of the 10 financial institutions 60% are locally owned and 40% being partly local and foreign. This means majority of commercial banks and mortgage companies listed at NSE are locally owned.

Figure1: Ownership of Financial institution



4.4 Level of mortgage loan proportion in relation to core capital

Company

It is evident 60% of commercial banks and mortgage companies listed at NSE have 20% to 30% allocation of their core capital to mortgage financing.

This range is below the threshold amended by the finance bill 2010 of 40% mortgage financing in relation to the core capital with an aim to increase property development.

Table 1: Level of mortgage loan proportion in relation to core capital of the company.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10% to 20 %	2	20.0	20.0	20.0
	20% to 30%	6	60.0	60.0	80.0
	30% to 40%	2	20.0	20.0	100.0
	Total	10	100.0	100.0	

4.5 Level of mortgage loans portfolio of banks

40% of commercials banks and mortgage financing companies hold mortgage loans of over Kes1 billion with partly 10 % holding a portfolio of less than Kes 250 millions. This is an indication most of the banks are willing to finance mortgage industry hence securitizations can succeed with this magnitude of loan origination.

Table 2: Level of Mortgage loans portfolio of banks

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below Kes 250millions	1	10.0	11.1	11.1
	Kes 250 million to 500millions	3	30.0	33.3	44.4
	Kes 500 million to 750millions	1	10.0	11.1	55.6
	Kes Over 1 billion	4	40.0	44.4	100.0
	Total	9	90.0	100.0	
Missing	System	1	10.0		
Total		10	100.0		

4.6 Average mortgage Interest lending rates

From the analysis 60% of the commercial banks and mortgage finance companies offer their mortgage rates at between 10% to 15% interest rate with only 20% operating above 15%. This indicates with mortgage loans securitization the lending rates will be lower.

Table 3: Average mortgage Interest Lending rate

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1% to 5%	1	10.0	10.0	10.0
	5% to 10%	1	10.0	10.0	20.0
	10% to 15%	6	60.0	60.0	80.0
	15% to 20%	2	20.0	20.0	100.0
	Total	10	100.0	100.0	

4.7 Average mortgage Loan Default rate

It was noted 50% of the commercial banks and mortgage companies experience a mortgage loan default of between 5% to 10%, followed by 40 % under 5% and 10% of above 10%.

This indicates that with independent credit rating agencies in mortgage loans securitization this rate of default will be much lower.

Table4: Average mortgage loan default rate

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1% to 5%	4	40.0	40.0	40.0
	5% to 10%	5	50.0	50.0	90.0
	10% to 15%	1	10.0	10.0	100.0
	Total	10	100.0	100.0	

4.8 Additional Capital by Banks

It was noted 70% of commercial banks and Mortgage Company listed at NSE sourced additional funds with 30% remained constant. This indicate there is need for funds for expansion and mortgage securitization can be great avenue to release funds from illiquid assets held by the banks inform of mortgage loans.

Table 5: Additional capital by banks in the recent past

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	7	70.0	70.0	70.0
	No	3	30.0	30.0	100.0
	Total	10	100.0	100.0	

4.9 Sources of additional funds by banks

It was evident of the banks that sought additional funds, 40% preferred raising additional funds through stocks, 20 percent through corporate bonds and 10% through loan capital.

Table 6: Source of additional funds for the banks

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stocks	4	40.0	57.1	57.1
	Corporate Bonds	2	20.0	28.6	85.7
	Bank Loans	1	10.0	14.3	100.0
	Total	7	70.0	100.0	
Missing	System	3	30.0		
Total		10	100.0		

4.10 Cost of borrowing by the banks

30% of the banks obtained additional funds through debt instruments with interest rates of between 5% to 10%.This means their ability to lend to mortgage markets with lower interest rate is limited to the cost of their sources of funds.

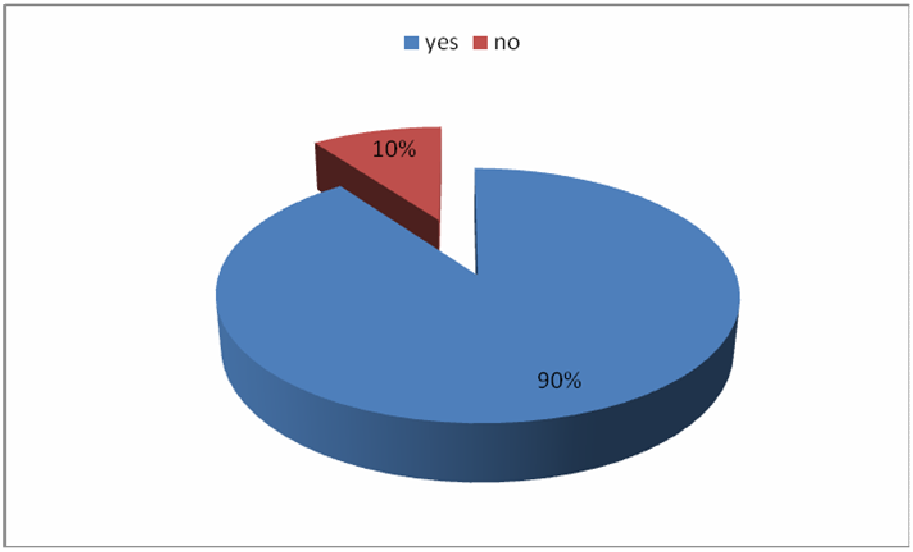
Table7: Cost of borrowing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5% to 10%	3	30.0	100.0	100.0
Missing	System	7	70.0		
Total		10	100.0		

4.11Awareness of asset securitization within banks

Majority 90% of the respondents were aware of asset securitization and only 10% were not aware. This indicates asset securitization in Kenya can thrive if well operationalised.

Figure 2: Distribution of awareness of asset securitization in the banks



4.12 Consideration of asset securitization by banks as a source of finance

Respondents tied meaning about 50% of banks has considered securitization as a source of funding

Table 8: Considerations of securitization as a source of financing in the company.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	4	40.0	50.0	50.0
	no	4	40.0	50.0	100.0
	Total	8	80.0	100.0	
Missing	System	2	20.0		
Total		10	100.0		

4.13 Awareness of Regulatory framework on asset securitization

50% of the respondents indicated they are aware of regulatory framework on asset securitization and the other half 50% were not aware. This means soon there will be implementation of asset securitization.

Table 9: Awareness of regulatory framework on asset securitization in Kenya

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	5	50.0	50.0	50.0
	No	5	50.0	50.0	100.0
	Total	10	100.0	100.0	

4.14 Level of Satisfaction with Regulatory Framework

Majority 70% indicated the regulatory framework set aside by the Capital market Authority offer confidence to mortgage lending institutions to securitize their assets. This means many will support asset backed securities in the market.

Table 10: Level of Satisfaction with regulatory framework

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	7	70.0	70.0	70.0
	No	2	20.0	20.0	90.0
	3.00	1	10.0	10.0	100.0
	Total	10	100.0	100.0	

4.15 Significance factors in creation of mortgage backed securities

It was noted banks having sufficient capital in their balance sheets and need to grow rather than sell off was not a significant factor in creation of mortgage backed securities as indicated by a mean score of 3.0 and standard deviation of 0.24.

This therefore means awareness, weak regulatory framework, absence of special purpose vehicles and credit rating agencies as factors that may affect the creation of mortgage backed securities as indicated by a mean score of less than 2.5.

Table11: Significance factors in creation of mortgage backed securities.

	N	Minimum	Maximum	Mean	Std. Deviation
Lack of awareness on mortgage asset backed securitization.	10	1.00	2.00	1.6000	.51640
Weak regulatory framework	10	1.00	2.00	1.5000	.52705
Absence of special purpose vehicles to acquire the mortgage loans.	10	1.00	3.00	1.4000	.69921
Absence of Credit rating Agencies	10	1.00	3.00	1.4000	.84327
Banks have sufficient capital in their balance sheets and want to grow rather than sell off assets	10	1.00	4.00	3.0000	.24722
Valid N (listwise)	10				

4.16 Preference in Choice of Source of funds to finance mortgage lending

From the analysis all securities were considered better as a means of funding mortgage lending market having a mean score of higher than 2.5 however mortgage backed securities is more favorable as indicated by the standard deviation of 0 .94 with lowest preference being on commercial papers as indicated by a standard deviation of 0.54.

Table 12: Preference in choice of Source of funds to Finance mortgage lending.

	N	Minimum	Maximum	Mean	Std. Deviation
Equity stocks.	10	3.00	5.00	4.2000	.63246
Preferential Stocks	10	2.00	4.00	3.3000	.67495
Corporate Bonds	10	3.00	5.00	3.9000	.73786
Commercial papers	10	2.00	5.00	3.0000	.05409
Mortgage Backed Securities	10	2.00	5.00	4.3000	.94868
Valid N (list wise)	10				

4.17. Ranking of sources of finance on factors considered to influence decision on mode of financing.

It is noted from the analyses of sources of finance with low mean score and low standard deviations are highly affected by the factors.

Corporate bonds and commercial papers are highly affected by the risk return profile factor whereas using the mean criterion ordinary stocks followed by preferential stocks are highly affected by private information.

On the conflict of interest between capital choice by the shareholders and creditors corporate bonds, commercial papers and preferential stocks are considered by highly affected by having a low mean score.

This means on overall, mortgage loan securitization scores lowly on these factors hence considered better avenue of investment.

Table 13: Ranking of sources of finance on factors considered to influence decision on mode of financing

	N	Minimum	Maximum	Mean	Std. Deviation
Effect of equity stock on Risk return profile	10	1.00	3.00	2.5000	.70711
Effect of preferential stock on Risk return profile	10	1.00	3.00	2.0000	.47140
Effect of corporate bonds on Risk return profile	10	1.00	2.00	1.4000	.51640
Effect of commercial papers on Risk return profile	10	1.00	3.00	1.6000	.96609
Effect of mortgage loan securitization on Risk return profile	10	1.00	3.00	2.1000	.87560
Effect of equity stock on private information	10	1.00	3.00	1.4000	.69921
Effect of preferential stock on private information	10	1.00	2.00	1.3000	.48305
Effect of corporate bonds on private information	10	1.00	2.00	1.9000	.78488
Effect of commercial papers on private information	10	1.00	3.00	2.0000	.47140
Effect of mortgage loan securitization on private information	10	1.00	3.00	2.2000	.78881
Effect of equity stock affect on conflict of interest between creditors and shareholders	10	1.00	3.00	2.2000	.91894
Effect of preferential stock on conflict of interest between creditors and shareholders	10	1.00	3.00	1.8000	.91894
Effect of corporate bonds on conflict of interest between creditors and shareholders	10	1.00	2.00	1.5000	.52705
Effect of commercial papers on conflict of interest between creditors and shareholders	10	1.00	3.00	1.8000	.91894
Effect of mortgage loan securitization on conflict of interest between creditors and shareholders	10	1.00	3.00	2.0000	.94281
Valid N (listwise)	10				

CHAPTER FIVE

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusions and recommendations of the findings of this study. This chapter is organized as follows. First, a summary of the findings in chapter four is provided. Then the conclusions of the study based on the objectives of the study follow. The study then makes recommendations and suggests areas for further research.

5.2 Summary and Conclusions

The aim of the study was to establish the feasibility of introduction of mortgage backed securities in the Kenya capital market. Out of the 10 commercial banks and mortgage finance company listed at NSE 60% are locally owned.

The study shown that the commercial banks and mortgage finance companies in Kenya have the potential to originate a sizeable loan portfolio necessary for securitization this is supported by the fact that 40% of mortgage loans portfolio are above Kes 1 billion.

It is also evident the higher lending rate by the mortgage financials is partly attributable to the sources of their finance, on average 30% of commercial banks and mortgage financing companies obtain funds from debt instruments at a rate of between 5% to 10% hence affecting their final mortgage interest rate to the consumers. The average mortgage lending rates by the commercial banks and mortgage finance companies was noted to average between 10% to 15%.

It was also noted 70% of commercial banks and mortgage finance companies raised additional capital in recent past with an aim to expand their businesses and 50% of the respondents were aware of asset securitizations and regulations however none implemented the issuance of such security.

The study also revealed lack of awareness of asset securitization, absence of special

purpose vehicles, absence of credit rating agencies and weak regulatory framework as factors that may hinder creation of mortgage backed securities.

The preference for sources of financing indicate that majority of financial institutions will prefer mortgage backed securities which are also rated to attract low risk return profile , disclosures requirements and low conflict of interest between the creditors and shareholders.

The study concludes that mortgage backed securities adoption in Kenya will improve on capital formation by commercial banks and mortgage financing companies.

5.3 Recommendations

According to the findings of the study, the recommendation is to implement mortgage backed securities in order to increase capital for mortgage financing and investments in other sector.

The financial institutions should allocate more funds in mortgage financing since no bank is near the amended threshold of 40% of the core capital to ensure most the potential homeowners are able to own homes.

Financial institutions should explore the cheapest sources of finance through securitization in order to pass the benefits to the mortgage customers.

Creation of independent credit rating agencies and special purpose vehicles in order to overcome barriers of implementation of MBS.

The economy will gain enormous benefits by trading mortgage backed securities since both foreign and local investors will partner in the investments hence deepening the capital market.

5.4 Limitation of the study

The study included only listed financial institutions and there are number of other financial institutions that offer mortgage financing which are not listed in the NSE.

5.5 Areas for Further Research

A further study should be carried to determine the factors that lead to slow pace in adoption of asset securitization in Kenya.

REFERENCES

Badessich F.A (1991). Mortgage Backed Securities in Argentina. An implementation Study. *Unpublished Msc Research,* Massachusetts Institute of Technology

Berkovitch, E. and Kim, E.H. (1990), Financial contracting and leverage induced over and underinvestment incentives, *Journal of Finance*, 45, 765-794.

Brown, W., Tilock, K., & Anyango, .E (2004).*The enabling environment for housing finance in Kenya*. Cities Alliance, Issue 4, April 2003.

Bruskin, E., Sanders, A.B. and Sykes, D. (2000), *The non agency mortgage market: background and overview*, in Fabozzi, F.J., Ramsey, C. and Marz, M. (Eds), The Handbook of Non agency Mortgage-backed Securities, 2nd ed., Wiley, Hoboken, NJ, pp. 5-7.

(Cowan. C, Personal communication, November 5, 2003).

Fabozzi, F.J. (Ed.) (2001), *Investing in Asset-Backed Securities*, Wiley, Europe.

Forte, J.P. (1996), Capital markets mortgage: a ratable model for Main Street and Wall Street, Real Property, Probate and Trust Journal, 31.

Greenbaum, S.I. and Thakor, J.V. (1987), Bank funding modes: securitization versus deposits, *Journal of Banking and Finance*, 11,379-392.

James, C. (1988), The use of loan sales and standby letters of credit by commercial banks, *Journal of Monetary Economics*,22, 395-422.

Jobst, A. (2006), Asset Securitization as a risk management and funding tool: What small firms need to know, *Journal of Managerial Finance, 32* (9), 731-760.

Joppe, M. (2000). *The Research Process.* Retrieved from http://www.ryerson.ca/~mjoppe/rp.htm

Lang, L.H.P., Poulsen, A. and Stulz, R. (1995), Asset sales, firm performance and the Agency costs of managerial discretion, *Journal of Financial Economics*, *37*,3-38.

Lore, K. and Cowan, C. (2005), Mortgage-backed Securities, Developments and Trends in the Secondary Market, Thomson-West Publications, Eagen, MN.

Mutuku, O.M (2006). Factors influencing the Development of Secondary Mortgage Market in Kenya with special emphasis on Mortgage backed securities. An *Unpublished MBA Thesis*, University of Nairobi.

Myers, S.C. (1984), The capital structure puzzle, *Journal of Finance*, *39*, 575-592. Pass-through. (n.d.). In Fidelity online. Retrieved from http://www.fidelity.com/products/fixed income/pombs/shtml

Rosenthal, J. and Ocampo, J. (1988), *Securitization of Credit*, John Wiley & Sons, New York.

Shyam-Sunder, L. and Myers, S.C. (1999), Testing static trade-off against pecking order models of capital structure, *Journal of Financial Economics*,*51*,219-244.

Skarabot, J. (2002), Securitization and special purpose vehicle structures, working paper, Haas School of Business, University of California at Berkeley, CA, 29 April.

Stanton, T.H. (1991), A State of Risk: Will Government-sponsored Enterprises Be the *Next Financial Crisis*, HarperCollins, New York, NY, p. 86.

Stripped mortgage Backed Securities. (n.d.). In Investorwords online. Retrieved from http://www.investorwords.com/7219/stripped mortgage backed securities/html

Sullivan, D. (1998), Note: Why does tax law restrict short-term trading activity for asset securitization, *Virginia Tax Review, 17*, 610-655.

Telpner, J. (2003), A securitization primer for first time issuers, *Global Securitization and Structured* Finance 2003, Greenberg Traurig.

Van Order, R. (2000), The US mortgage market: a model of dueling charter, *Journal of Housing Research*, 11(2),233-255.

Wafula, N. (2004), Affordable housing in Kenya. *A Case Study of Policy on Informal Settlements* 3rd FIG Regional Conference .Jakarta, Indonesia

Wighton, D. (2005, January 3), Credit protection: Light year set to exploit the CDO market, Financial Times, 10.

Zweig, P.L. (2002), *Asset-backed securities*, in Henderson, D.R. (Ed.), The Concise Encyclopedia of Economics, The Library of Economics and Liberty, Liberty Fund Inc.

Other Websites

www.cbk.go.ke

www.cma.go.ke

www.egyptse.com/pdf/Asset Backed securities.

ww.nse.co.ke

www.publicservice.go.ke

APPENDIX I

Peter M. Karimi
C/o School of Business
University of Nairobi
P.o Box 30197,
Nairobi.

Dear Sir/Madam,

RE: INTRODUCTION OF MORTGAGE BACKED SECURITIES IN KENYA CAPITAL MARKET.

I am a post graduate student at the University of Nairobi undertaking Masters of Business Administration (MBA) degree specializing in Finance. In partial fulfillment of the requirement of the degree, I am conducting a management research on the subject topic.

You Company have been selected for this research and would greatly appreciate if you complete the attached questionnaire. The information gathered will purely be used for academic research and treated with strict confidence.

Thank you in advance.

Yours Faithfully,

Peter M. Karimi
MBA Student

Mr Luther Otieno
Lecturer/ Thesis Supervisor
Department of Finance and Accounting
University of Nairobi.u

APPENDIX II

QUESTIONNAIRE

The purpose of this questionnaire is to gather information on Introduction of Mortgage Backed Securities in Kenya capital market. The information given will be confidential and used for the purpose of this research only.

Name of the Company _____

Kindly indicate your position in the Company._____

Please indicate how you categorize your company in terms of ownership.

Locally owned ( )

Foreign Owned ( )

Partly local and foreign owned ( )

Does your company offer mortgage loan financing?

Yes ( )

No ( )

Kindly indicate by way of a tick (√) your level of mortgage loan proportion in relation to the core capital of your company.

Below 10% ( )

10% to 20 % ( )

20% to 30% ( )

30% to 40% ( )

Kindly categorize by way of a tick (√) where your company falls in level of mortgage loan portfolio.

Below Kes 250millions ( )

Kes 250 million to 500millions ( )

Kes 500 million to 750millions ( )

Kes 750 million to 1Billion ( )

Kes Over 1 billion ( )

Please indicate by way of a tick (√) the applicable rates in your company.

	Factor	1% to 5%	5% to 10%	10% to 15%	15% to 20%	Above 20%
1	Average mortgage Interest Lending rate					
2	Average mortgage loan default rate					

Have your company sought additional funds in the recent past?

Yes ( )

No ( )

If yes in (8) above from which source

Stocks ( )

Corporate Bonds ( )

Commercial papers ( )

Bank Loans ( )

Others (Specify)_____ ( )

If financed from debt instruments in (9), kindly indicate at what category of rate interest rate below.

1% to 5% ( )

5% to 10% ( )

10% to 15% ( )

15% to 20% ( )

Above 20% ( )

Have you ever heard of asset securitization?

Yes ( )

No ( )

If yes in (11) above have your institution considered securitization as a source of financing in your company?

Yes ( )

No ( )

If No in (12), give a brief explanation.

_____

_____

_____

_____

_____

Are you aware of any regulatory framework on asset securitization in Kenya?

Yes ( )

No ( )

Do you feel the regulations set by the Capital Market Authority on "Asset backed Securities" offer confidence to mortgage lending institutions to securitize their assets?

Yes ( )

No ( )

If No in (15), give your suggestions.

_____

_____

_____

_____

_____

Please, indicate by a tick (√) how significant each of the following factors affect the creation of mortgage backed securities in Kenya.

	Factor	Very Significant	Significant	Indifferent	Not Significant	Insignificant
1	Lack of awareness on mortgage asset backed securitization.					
2	Weak regulatory framework					
3	Absence of special purpose vehicles to acquire the mortgage loans.					
4	Absence of Credit rating Agencies					
5	Banks have sufficient capital in their balance sheets and want to grow rather than sell off assets					

Please, indicate by way of a tick (√) to what extent would you recommend your company to source funds for mortgage financing on assumption all below tradable securities are available in Kenya capital market.

	Factor	Very Low Extent	Low Extent	Neutral	High Extent	Very high Extent
1	Equity stocks.					
2	Preferential Stocks					
3	Corporate Bonds					
4	Commercial papers					
5	Mortgage Backed Securities					

Please indicate by ranking using the scores below how the various sources of funds are affected by factors below.

1. High **2**. Moderate **3**.Low

	Factor	Equity Stocks	Preferential Stocks	Corporate Bonds	Commercial Papers	Mortgage Loan Securitization
1	Risk return profile					
2	Private information (Disclosure requirements)					
3	Conflicts of interest between creditors and shareholders in the capital structure choice of firms concerning possible agency costs from underinvestment					

Thanks very much for your participation.

APPENDIX III

LIST OF FINANCIAL INSTITUTIONS INVOLVED IN LENDING LISTED IN NAIROBI STOCK EXCHANGE.

1. Barclays Bank of Kenya Ltd.
2. CFC Stanbic Bank Ltd.
3. Housing Finance Ltd.
4. Kenya Commercial Bank Ltd.
5. National Bank of Kenya Ltd.
6. Diamond Trust Bank of Kenya Ltd.
7. Standard Chartered Bank Ltd.
8. NIC Bank Ltd.
9. Equity Bank Ltd.
10. The Co-operative Bank of Kenya Ltd