Relationship between Volume of Mortgage Lending and Financial Performance of Commercial Banks Quoted in Nairobi Securities Exchange

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ABSTRACT*: Mortgage loans have become an important aspect of loan portfolio among commercial banks in Kenya. It is observed that commercial banks' lending criteria are pro-cyclical. As a result, they are likely to underestimate the default risk of the loans during periods of high demand, leading to price inflation which increases the banks' credit risk exposure to mortgage product. With a sharp drop in demand for mortgage finance, commercial banks with high proportion of mortgage loans in their portfolios suddenly find themselves faced by a high exposure. This affects their financial performance significantly. However, from reviewed literature little has been covered on the relationship between mortgage financing and performance of commercial banks. The purpose of this study was to determine the relationship between mortgage financing and financial performance of commercial banks quoted in NSE. Mortgage Value Model theory guided the study. Secondary data was reviewed from CBK and NSE reports, between January 2006 and December 2014, giving 99 data points. Data obtained from audited reports were deemed reliable and valid. This study adopted correlation design. the inferential analysis indicated a significant negative correlation at 95% interval level between the financial performance variables (ROE, ROA and NIM) and the main independent variable (Mortgage volume), that is -0.326, -0.2591 and -0.208 respectively. This helped to show that there are no any serial correlations. This implied that there was a weak negative relationship between ROE, ROA and NIM and Mortgage volume. The study may help in formulation of policies related to mortgage financing and financial performance of commercial banks. Further by advancing a model that relates mortgagefinancing and financial performance*

Keywords*: Commercial Banks, mortgage, performance, financial*

I. INTRODUCTION

Mortgage refers to the charging of real (or personal) property by a debtor to a creditor as a security for a debt on the condition that it shall be returned on payment of the debt within a certain period (William and Fisher 2011). According to Bienert and Brunauer (2006) mortgage financing refers to a loan secured by collateral of some specified real estate property that the borrower is obliged to pay back with predetermined set of installments. The loan is usually for the purchase or construction of housing estates by individuals or companies.

Mortgage finance plays a significant role in the development of the economy and in enabling people to be homeowners through provision of mortgages. The changing home mortgage market and unique financing requirements brought about by widespread home ownership have caused a continuing evolution in the mortgage lending practice.

Against this background, it is important to note that, a growing body of research has shown that correctly structured finance systems can deliver improved housing for larger population segments, which has caused housing finance to rise to the top of urban policy and research agendas (Datta and Jones, 2000). The aim of a formal housing finance system is to create institutional arrangements which can efficiently mobilize and channel funds from savers to borrowers to finance a housing investment Chiquier and Lea, (2009).

II. Literature Review

The last two decades have witnessed a revolution in mortgage finance. As recently as 1990, lenders offered relatively few mortgage products. The products that were offered had relatively uniform interest rates and served borrowers meeting stringent credit standards, loan-to-value and debt-to-income ratios. Not so today, as risk-based pricing has changed underwriting standards and origination volumes have soared, diverse mortgage products have flourished in both the traditional prime and growing non-prime markets and a broker-dominated mortgage delivery system has emerged. Mortgage financing in this study will be based on the following theories.

2-1   MORTGAGE VALUE MODEL
In the Mortgage Value Model the bank's primary objective is the maximization of expected profits under the constraints of liquidity, soundness, standing and lawfulness. To this end the implementation and use of an integrated system of risk-return management focused on adding and creating shareholder value is essential. Consequently a process of integrated risk and return management has the following objectives: Management of a portfolio from an overall integrated view; optimization of risk/ reward relations of the bank portfolio; identification of risk/ reward efficient portfolio strategies; setting of risk/ reward efficient management targets; implementation in ongoing business; consistent and efficient risk/ reward management of business lines; and accurate determination of value versus loan amount and pricing in accordance (Glenn and Wayne, 2007).
The Mortgage Value Model, the banks projects the economic value of new retail mortgage business and enables the business to make strategic and tactical decisions based on future profitability. The model will allow mortgage loans to: Drive the value from new business lending by understanding expected economic profit returns at a strategic cohort level, for example with specific customer types, products, distribution channels, loan-to-value (LTV) buckets and regional segments; design new or adjust existing product propositions to enhance profitability and support banks growth; design lending strategies by assessing future value by risk level, e.g. using scorecard accept/ decline cut-offs to mitigate loss making segments of new business; price for risk therefore becomes market competitive whilst ensuring the business is value adding; and provide a platform that will enable controlled challenge to seek new business opportunities to increase sales (Glenn and Wayne, 2007).

2-2   TITLE THEORY AND LIEN THEORY OF MORTGAGES
Some banks retain and treat the mortgage as a title theory. Since the mortgage is said to hold a title interest, she has the right to possession under this theory. Some banks apply a lien theory. This theory only gives the mortgagee a lien interest in the property. In a title theory bank, the mortgage is treated as having transferred title to the mortgage, subject to the mortgagee's duty to recovery if payment is made. The title is said to remain in the mortgagee until the mortgage has been satisfied and foreclosed. Although the mortgagee has the right of possession to the property, there is generally an express agreement giving the right of possession to the mortgagor. The mortgagee is said to hold the title for security purposes only. The mortgagor is given the right of possession (Buckley and Kalarickal, 2004).

In a lien theory bank, the mortgagor retains legal and equitable title to the property, but conveys an interest that the mortgagee can only foreclose upon to satisfy the obligation of the mortgagor. This is equivalent to a future interest in the property which allows the mortgagee to use the process of foreclosure. The interest is a security interest or mortgage, which forms a lien on the property. In this theory the right to possession arises upon a default. The mortgagor has a right to sue the mortgagee for any interference with his right of possession (Buckley and Kalarickal, 2004).

For practical applications there is usually very little difference between a lien theory and a title theory. The principle difference arising in the title theory bank is that the mortgagee is given the right to possession before the foreclosure is complete. The language of the mortgage provides for possession rights being in the mortgagor up to the time of the foreclosure.

In these theories, there is evidence that the property that is mortgaged result into additional loan by the bank to the mortgagor. This also results into increase in loan volume and with this increase the interest arising from the loan increases the profitability hence good performance for the banks.

Datta and Jones (2000) however argue that for housing finance to be effective; those seeking to be home owners have to be motivated to invest in homeownership. For example, Zandi and Deritis (2011) in a study on future of mortgage finance system in the U.S found that the aggressive pursuit of homeownership since 1930s was largely due to subsidies provided via mortgage interest and gains treatment, and the lower mortgage rates and affordable housing mandates of Fannie Mae and Freddie Mac, among other channels. According to Rogers (2000), banks and mortgage companies are principal lenders and mortgages are sold to investors in the secondary markets as mortgaged backed-securities (MBS) and this constitute the major funding. Both variable and fixed rate mortgages are issued and the role of government is to regulate securities.

Williams (2002) indicated that access to shelter produced by public agencies continue to elude the urban poor who simply cannot muster the financial resources required to procure these housing units. Jaiyeoba and Amole (2002) examined the appropriateness and socio- economic implications of income housing delivery as supportive rather than a provider approach. They stated that what is required is the determination of the extent to which the income groups require support. Olusola, Aina and Ata (2002) identified lack of commercial bank short term mortgage as one of the major obstacles against rural and urban housing production in emerging economies like Kenya.

The assessment of the trend of mortgage financing on the economy as well as on the performance on the financial sector has not been given a lot of focus by researchers in Kenya. A study by Olusola, Aina and Ata

(2002) identified lack of commercial bank short term mortgage as one of the major obstacles against rural and urban housing production in emerging economies like Kenya.

While Kenya's mortgage market is growing, the industry is dominated by the bigger commercial banks indicating barriers to entry or high risks for medium and smaller banks Ndungu (2010). However the growth rates indicates that the small sized banks have the fastest growth rates of 38% on average, followed by medium banks which are growing at 25% on average with large banks closely following at 24% on average Ndungu (2010). Mutero (2007) did a study on access to housing finance in Africa, exploring the issues, he found that Kenya has a well-developed and regulated financial system and, in recent years, the mortgage finance sector has become competitive and innovative, this sector serves only those households at the top of the income pyramid. Mutero (2007) recommends that there is need to assess the effects of mortgage financing on financial performance in commercial banks in Kenya

Macharia (2013) evaluated the effects of global financial crisis on the financial performance of commercial banks offering mortgage finance in Kenya. This study concluded that there is a negative relationship between inflation as a result of global financial crisis and financial performance of commercial banks offering mortgage finance in Kenya.

III. METHODOLOGY

This study adopted a correlation research design for they portrayed an accurate profile of situations (Cooper, 1999). A correlational research design is a design that is used when a researcher wants to describe the relationship of two or more variables. The study targeted all the listed commercial banks in Nairobi Securities Exchange, Kenya. According to the Central Bank of Kenya (2011) report, there are 44 established Banks in Kenya, out of which 11 commercial banks are listed in the Nairobi Securities Exchange. The study used a census technique where all the 11 commercial banks quoted in Nairobi Securities Exchange, Kenya were surveyed.

3-1 DATA COLLECTION

For the purposes of this study, secondary data was used. The secondary data was sourced from the annual reports obtained from each bank, the Nairobi Securities Exchange and the Central bank of Kenya. Yearly data was collected from January 2006 to December 2014.The data was collected using data collection sheet were edited, coded and cleaned. Data was sourced from records of Nairobi Securities Exchange, Kenya and the Central Bank of Kenya.

3-2 PARAMETER DEFINITION

In this study used the following parameters

$ROE_{it}=$ Return of equity of bank i at time t

$ROA_{it}=$Return of asset of bank i at time t

$NIM_{it}=$ Net Interest Margin of bank i at time t

$\alpha_0=$ Intercept

$VOL_{it}=$ Volume of mortgage lending of bank i at time t

$INT=$ Average Mortgage lending rate at time t

$CA_{it}=$ Capital adequacy of bank i at time t

$ME_{it}=$ Management efficiency of i at bank t

$LM_{it}=$ Liquidity Management of bank i at time t

$GDP=$ Gross domestic product at time t

$INF=$ Average inflation rate at time t

$\mu_{it}=$ Error term where i is cross sectional and t time identifier

A correlation analysis was carried out to test the effect of mortgage financing on financial performance of quoted commercial banks in Nairobi Securities Exchange. A correlation matrix showed the interrelationships within the variables under study

IV. RESULTS AND DISCUSSIONS

I. RELATIONSHIP BETWEEN VOLUME OF MORTGAGE LENDING AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS QUOTED IN NAIROBI SECURITIES EXCHANGE

Table 4.3: Correlation Analysis

	ROE	ROA	NIM	VOL	INT	CA	ME	LM	GDP	INFL
ROE	1									
ROA	0.947***	1								
NIM	0.183	0.2175*	1							
VOL	-0.326***	-0.2591*	-0.208**	1						

INT	0.0194	0.0396	-0.0083	-0.045	1					
CA	-0.048	0.2223**	0.1136	0.1947*	0.0425	1				
ME	-0.414***	-0.384***	0.08	0.4727***	-0.218*	-0.0327	1			
LM	-0.228**	-0.1453	0.0904	0.1851	0.1133	0.2358**	0.2671**	1		
GDP	0.1787*	0.1734*	-0.039	-0.004	0.0566	-0.0552	-0.0329	0.1218	1	
INFL	-0.097	-0.1206	-0.032	0.0004	0.3887***	0.0004	-0.0438	-0.077	-0.766***	1

Source: Research Data 2015
Note: The figures in parentheses are p-Statistics
* Statistically significant at the 1% level
** Statistically significant at the 5% level
*** Statistically significant at the 10% level

The study sought to determine the relationship between volume of mortgage lending and financial performance of commercial banks quoted in Nairobi securities exchange. The results showed that there is a significant negative correlation at 95% interval level between the financial performance variables (ROE, ROA and NIM) and the main independent variable (Mortgage volume), that is -0.326, -0.2591 and -0.208 respectively. This helped to show that there are no any serial correlations. This implied that there was a weak negative relationship between ROE, ROA and NIM and Mortgage volume.

V. Summary And Conclusion

The study sought to determine the relationship between volume of mortgage lending and financial performance of commercial banks quoted in Nairobi securities exchange. It was established that there is a significant negative correlation between financial performance and volume of mortgage lending within the commercial banks quoted in Nairobi Securities Exchange. Based on the findings, the study concludes that there existed a weak negative relationship between volume of mortgage lending and financial performance.

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