

REAL ESTATE LOANS AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

Molson Samwel Onchomba 

School of Business, College of Human Resource Development
Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya
monchomba@daystar.ac.ke

Agnes Njeru

School of Business, College of Human Resource Development
Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya

Florence Memba

School of Business, College of Human Resource Development
Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya

Abstract

The main purpose of the study was to determine the influence of real estate loans on financial performance of commercial banks in Kenya and a corresponding hypothesis was formulated and tested. A census of 42 fully operational commercial banks in Kenya was done for a period of ten years from 2006-2015 because of increased loan portfolio, using across-sectional survey design. A questionnaire was used to collect primary data from one key person in the finance/credit department of each bank. Secondary data was collected from audited financial statements and other relevant financial sources using data analysis sheet. Both descriptive and inferential statistics were used. Statistical package for social sciences (SPSS) and STATA version 14 were used to analyze data. Research findings established that real estate loans influence the financial performance of commercial banks. The study findings are supported by the Utilization of modern portfolio theory.

Keywords: Real Estate Loans, Financial Performance, Commercial Banks, Modern Portfolio Theory, Banking

INTRODUCTION

Real estate financing over the years has been a preserve for mortgage financing companies but with time, commercial banks have started engaging in real estate financing. An efficient housing finance system has significant importance both in meeting the housing needs of individuals and in reinforcing the development of the construction, finance and other related sectors of an economy. International experience suggests that, the widespread availability of residential mortgages has favorable impact on poverty alleviation, quality of housing, infrastructure, and urbanization (Erbas, 2005). Developed countries currently have very advanced housing finance systems in which funds flow from people with fund surpluses to the ones that have deficits and need the funds through the various channels provided by the mortgage markets. The situation in the developing countries is however very different in that real estate has remained largely under developed despite the fact that sector players recognize the economic and social importance of the sector. This has been attributed to the unstable inflation rates experienced and the high level of unemployment (Dolde, 2006). Accordingly, the modern portfolio theory suggests that commercial banks will engage in real estate financing as a way of diversifying their loan portfolio and also due to the fact that real estate financing is more profitable in the long run will influence their financial performance positively. Real estate financing is a secured loan and therefore offers lower risks of loss of the investment unlike the unsecured loans which are very popular with commercial banks today. This theory therefore justifies the reason as to why commercial banks will invest in real estate financing and why this has an influence on the financial performance of the commercial bank (Davis, P. & H. Zhu, 2004). Most of the available literature has findings on effect of mortgage loans on the listed commercial banks hence this study sought to find out the influence real estate loans has on the financial performance of all commercial banks in Kenya.

Real Estate Financing

Real estate financing is the provision of finance or capital for housing purchase or building. Real estate finance also means the capital required for construction of housing or the resources required to acquire or access housing project by household or the credit supplied by housing finance institutions against some collateral (Dymski, 2007). Real estate finance loans are generally structured as long-term loans, the periodic payments for which are similar to an annuity and calculated according to the time value of money formula. The most basic arrangement would require a fixed monthly payment over a period of ten to thirty years depending on the conditions of the agreement. Over this period, the principal component of the

loan would be slowly paid down through amortization. In practice, many variants are possible and common worldwide and within each country (Tse, 2002).

Financial Performance of Commercial Banks

The financial performance of commercial banks is measured through its profitability. There are various profitability measures that are used to measure the performance of organizations such as the current ratio (CR), the Return on Assets (ROA) and the Return on Equity (ROE). The Return on Equity (ROE) is a financial ratio that refers to how much profit a company earned compared to the total amount of shareholder equity invested or found on the balance sheet. ROE is what the shareholders look in return for their investment. A business that has a high return on equity is more likely to be one that is capable of generating cash internally. Thus, the higher the ROE the better the company is in terms of profit generation. It is further explained by Khrawish (2011) that ROE is the ratio of Net Income after Taxes divided by Total Equity Capital. It represents the rate of return earned on the funds invested in the bank by its stockholders. ROE reflects how effectively a bank management is using shareholders' funds. Thus, it can be deduced from the above statement that the better the ROE the more effective the management in utilizing the shareholders capital. The Return on Assets (ROA) is another financial ratio that refers to the profitability of a bank. It is a ratio of Income to its total asset (Khrawish, 2011). It measures the ability of the bank management to generate income by utilizing company assets at their disposal. In other words, it shows how efficiently the resources of the company are used to generate the income. It further indicates the efficiency of the management of a company in generating net income from all the resources of the institution (Khrawish, 2011). Heath, R. (2005) state that a higher ROA shows that the company is more efficient in using its resources. The Current ratio is also used to indicate the liquidity status of an organization.

Commercial Banks in Kenya

A commercial bank is a type of financial institution that accepts deposits, offers checking account services, and makes business, personal and mortgage loans, and offers basic financial products to individuals and business. In Kenya, there exists 42 operational commercial banks all regulated and monitored by the Central Bank of Kenya as per the provisions of the laws of Kenya and the Banking Act cap 488 and Prudential Guidelines thereon issued. The commercial banks have to maintain certain minimum capital levels as well as capital ratios and other ratios as a way to mitigate banking risk exposures: minimum statutory liquidity ratio is 20% and total capital to risk weighted assets minimum statutory ratio is 12% (CBK, 2014). Kenyan commercial bank's risk weighted assets has increased over the years (Waithaka, 2013). Several financial

institutions including commercial banks have also collapsed in Kenya in the past as a result of non-performing loans (Waweru & Kalani, 2009).

The Kenyan banking sector had an asset base of KES 3.6 trillion as at June 2015. This asset base grew by 1.4% to a new base of KES 3.7 trillion in September 2015, which is a 6.9% growth; deposits were at a base of KES 1.6 trillion, which attracted a gross profit of KES 24.7 billion as at 31 March 2014. Deposits from customer accounts were at 14.36 million and the loan accounts were at 2.032 million by the end of March 2014 (CBK, 2014).

Commercial bank assets are dominated by loans since they get a larger share of operation incomes from them. However, loans pose great risks to commercial banks like those of non-performing loans that result from borrowers who default in their payments. Further, loan defaulters influence the financial performance of a bank. Through the provisions made by commercial banks towards non-performing loans, bad debts are written off. This act reduces the bank's profit reserves. Commercial banks attach opportunity costs to the non-performing loans in that, the money given out as a loan could have been utilized in a different investment that could have been more viable. Further, there are other costs incurred in the recovery of the non-performing loans. These costs also affect the commercial banks' financial performance.

The growth momentum in the banking sector of Kenya is largely spurred by the adoption of cost effective channels on the delivery of services and the continued increase of the Kenyan banks in the East African region and in Southern Sudan. Therefore, the CBK expects the sector to be able to sustain this growth experienced by the banks. However, inflation risks and high rates of interest are anticipated to drop (CBK, 2015). In the past 10 years, Themba & Tobias (2011) noted that the banking sector recorded an increase in the financial and overall performance. However, a thorough examination of the sector revealed that not all banks are making the said profits. The enjoyment of a huge financial performance by big firms in the banking sector (Tier 1) as opposed to medium (Tier 2) and small banks (Tier 3) is a possible indicator of remarkable factors that influence commercial banks' financial performance.

Real Estate Loans and Financial Performance

Commercial banks play a crucial role in the economic resource allocation of countries by basically channeling funds from depositors to investors continuously (Ongore & Kusa, 2013). They offer all important services of providing deposit and loan facilities for personal and corporate customers, making credit and liquidity available in adverse market conditions, and providing access to the nation's payments systems (Handley-Schachler et al., 2007). Commercial banks make most of their money from lending to their customers in various forms. The soundness of the banks to a larger extent depends on their financial performance which

indicates the strength and weakness of a particular bank (Makkar & Singh, 2013). Financial performance is evaluated by the profitability. Real estate financing is an important line of business for the banking industry, and real estate financing activities contribute significantly to the Kenyan economy. Most of the commercial banks rely on revenue from this line of business to grow and prosper (Bienert, 2006). History has shown, however, that imprudent risk taking and inadequate risk management, particularly during periods of rapid economic growth, can lead to significant losses and be a major impediment to the performance of commercial banks with risks of failure very high. One of the major ways in which this line of business influences the performance of commercial banks is through the cyclical nature of real estate markets where, as markets peak and decline, banks with large concentrations of real estate loans may suffer considerable losses leading to poor financial performance (Kibirige, 2006).

It is generally observed that commercial banks' lending criteria are pro-cyclical in nature. This means that their lending criteria are not very strict in a real estate boom while during the bust they are very strict. As a result of this, commercial banks are more likely to underestimate the default risk of real estate loans during a real estate boom. Such a situation leads to real estate price inflation and this increases the banks' credit risk exposure to the real estate (Macharia, 2013). When there is a sharp drop in real estate prices, commercial banks that have a high proportion of real estate loans in their portfolios or loans to other financial institutions that specialize in real estate lending suddenly find themselves faced by a high exposure to real estate risk. This therefore affects their financial performance in a significant manner. As a result, the country's financial system becomes risk and exposed (Macit, 2011).

Kenya has a large housing gap which is growing every year and is increasingly prevalent in urban areas due to differences in income levels in the economy. The yearly annual increase in demand for housing in Kenya is of 206 000 units annually of which 82 000 in urban areas. In 2011, the ministry of housing estimated that the formal supply of houses to the market reached 50 000 creating a 156 000 shortfall which added up to the 2 million units existing backlog. In 2012, it is estimated that further 85 000 units were also added to the backlog (Ndungu, 2013). Macharia (2013) indicated that low interest rate schemes in commercial banks made between 2001 to 2004 made a positive impact on the credit growth of mortgage finance loans from loan takeovers from existing lenders. While Kenya's mortgage market is growing, the industry is dominated by the big commercial banks indicating barriers to entry or high risk for medium and smaller banks, however, the growth rates indicate that the small sized banks (Tier 3) have the fastest growth rate of 38% on average, followed by medium banks (Tier 2) which are growing at 25% on average with large banks (Tier 1) closely following at 24% on average (CBK, 2014).

The influence of real estate financing on the economy as well as on the performance of the financial sector in general has not been given a lot of focus by researchers in Kenya. A search for empirical literature on the determinants of financial performance of commercial banks in general and the effect of real estate financing on the financial performance of commercial banks in Kenya revealed the same and in several studies. Macharia (2013) evaluated the effects of global financial crisis on the financial performance of commercial banks offering mortgage finance in Kenya. Ndururu (2012) evaluated the effects of mortgage on the financial performance of commercial banks in Kenya. This study focused on all the commercial banks and therefore it was not possible to measure other determinants such as ownership status and the price of the banks' shares in the financial markets. It is therefore evident that there is lack of adequate studies on the influence of real estate financing on the financial performance of commercial banks in Kenya. There was therefore a gap in literature as far as the study on the influence of real estate loans on the financial performance of commercial banks in Kenya is concerned. This study therefore sought to test the hypothesis that real estate loans has a significant positive influence on the financial performance of commercial banks in Kenya.

METHODOLOGY

The study adopted a descriptive research design. The population of the study was all the 42 operational commercial banks in Kenya in the period of study which also served as the target population of the study, therefore all commercial banks in operation informed the unit of analysis. Both the primary and secondary data were used. The secondary data was sourced from the annual reports that are available from their websites and the Central bank of Kenya website. Data on financial performance and real estate loans were sourced from the financial statements of the commercial banks. Reliability was conducted using test-retest approach and Cronbach's alpha coefficient of 0.7 and above was interpreted to mean satisfactory internal consistency reliability. Content validity was done by testing and retesting the data sheet and construct validity attained through the operationalization of the study variables.

ANALYSIS AND FINDINGS

The study used descriptive statistics and inferential statistics to establish the relationship between the variables and financial performance of commercial banks. Linear regression was carried out to test the influence of the variables on the financial performance of the commercial banks. The model was tested for statistical significance at a level of significance of 95% .The study used the following model $Y = \alpha + \beta_1 X_1 + \varepsilon$ Where Y = Financial performance measured in

terms of ROE, CR and ROA; β_1 = the coefficient of real estate loans (variable) and ε = error term.

Response Rate

Out of 42 questionnaires administered to bank managers 34 were returned presenting a response rate of 80.59%. According to Mugenda and Mugenda above 70% rate of response is the acceptable level for generalization. Also out of the 42 commercial banks 39 commercial banks were however studied. This translated to approximately 92.86% of target population, which is good representation as supported by Gray and Malone, (2013) who posit that 20% of the target population is sufficient sample size for small population with less than 1000 units.

Table 1: Categorical Summary statistics

	Variable	Obs	Mean	Std. dev	Min	Max
Tier 1	Size	60	15.195	0.786	13.534	17.097
	Real Estate Loans	60	0.351	0.125	0.095	0.719
	ROA	60	0.236	0.081	0.108	0.594
	ROE	60	2.425	5.754	0.113	45.011
	CR	60	0.855	0.879	.023	3.945
Tier 2	Size	130	15.938	1.673	11.897	20.012
	Real Estate Loans	130	0.329	0.186	0.018	0.771
	ROA	130	0.254	0.064	0.111	0.51
	ROE	130	3.161	14.448	-24.140	76.149
	CR	130	7.755	12.198	-9.154	39.372
Tier 3	Size	190	16.481	1.490	13.466	19.663
	Real Estate Loans	190	0.318	0.178	0.007	0.712
	ROA	190	0.277	.102	0.106	0.819
	ROE	190	2.309	62.044	0.050	582.059
	CR	190	12.916	53.525	0.095	507.728

Key: ROA=Return on assets; ROE=Return on equity; CR=Current ratio

As shown in Table 1, for all the Tier 1 commercial banks in Kenya, the average ROA during this period was 23.60% with the lowest value of 0.1080, highest value of 59.40 and a standard deviation of 0.0812. This meant that on average banks had a positive ROE even though their majority are to the right of the distribution like the ROA shows. 10.76% was the mean ROA with a standard deviation of 0.15793 and a low and high of -0.54 and 1.64 respectively. This showed that banks were generally profitable to reward the assets investment. Standard deviations

showed the fluctuation of returns of ROE being higher than that of the ROA. As it is displayed in Table 1, the mean value of firms' current ratio is 8.55 percent, and it deviates 8.79 percent. It means that value of liquidity can deviate from mean to both sides by 8.79 percent. Its minimum value is 0.23 percent while the maximum is 3.945 percent. The average real estate loans over the period were 35.10%, minimum of 0.095 and maximum of 0.719.

At Tier 2, the average ROE over the period was 31.61%, with the lowest value being 0.65, highest value of 7.13 with a standard deviation of 1.524. This shows that though on average banks had a huge positive return on equity, the majority of firms ROE are to the right of the distribution just like ROA. The mean ROA was 25.4% with a standard deviation of 0.640 and a low and high of 11.10 and 5.10 respectively. This showed that banks were generally highly profitable towards their investment in assets. Standard deviations showed the fluctuation of returns of ROE being marginally higher than that of the ROA. These results are echoed by Waweru, N. M., & Kalani, V. M. (2009) who concluded that banks at Tier 2 have a higher ROE than ROA with a higher variability in ROE too. The result in Table 1 shows that the mean value of firms' current ratio is 7.755 percent, and it deviates 12.198 percent. It means that value of liquidity can deviate from mean to both sides by 12.198 percent. Its minimum value is -9.154 percent while the maximum is 39.372 percent. The average real estate loans over the period were 32.9%, minimum of 0.018 and maximum of 0.771.

At Tier 3, the average ROE for this period was 23.09%, with the lowest value being 0.65, highest value being 7.13 with a standard deviation of 1.524. This shows that though on average banks had a huge positive return on equity, the majority of firms ROE are to the right of the distribution just like ROA. The mean ROA was 27.5% with a standard deviation of 0.1000 and a low and high of 0.1060 and 0.8190 respectively. This shows that banks were generally highly profitable towards their investment in assets. Standard deviations showed the fluctuation of returns of ROE being marginally higher than that of the ROA. These results are supported by Waweru, N. M., & Kalani, V. M. (2009) who concluded that banks at Tier 2 have a higher ROE than ROA with a higher variability in ROE too. According to the result in Table 1 the mean value of firms' current ratio is 12.916 percent, and it deviates 53.525 percent. It means that value of liquidity can deviate from mean to both sides by 53.525 percent. Its minimum value is 0.095 percent while the maximum is 507.728 percent. The average real estate loans were 32.4% with a minimum of 0.0065 and maximum of 0.9577.

Descriptive Analysis of Real Estate Loans and Financial Performance

In investigating the influence that real estate loans have on financial performance, the study tested the descriptive statistics for the variable through the use of a five-point Likert scale to

measure the respondents' agreement level. The scores 1, 2, 3, 4, and 5 were assigned strongly disagree, disagree, neutral, agree and strongly agree respectively. To establish the index of real estate loans, the means of individual ranking on the items were calculated. The mean obtained were therefore used as an index for real estate loans.

The overall response for the items indicates the mean is 3.8 and Standard Deviation is 0.32. In this study, the descriptive analysis was conducted after the reliability test. Table 2 shows the mean of responses for real estate loans is 3.8 which was above average, this meant that the respondents agreed with real estate loans in their respective banks. The lower the mean score, the less that respondent agreed with the statement and vice versa. The figures for standard deviation (SD) also indicate the degree to which responses varied from each other; the higher the figure for SD, the more variation in the responses. This finding concurred with those of Lipunga, (2014) who found out that commercial Banks that offer Real estate loans hold diversified portfolios of Real estate loans and therefore by spreading their risks performance is positively affected since risk has been minimized. However, Kithinji (2010), differs with the above position and argues that it is the approval process of loans that is not properly done hence leading to loan defaulting and by extension poor financial performance of commercial banks. The scholar suggests need to change policies with an aim of minimizing the experienced negative effects.

Table 2: Descriptive Analysis Real Estate Loans Influence on Financial Performance

	Mean	SD
Tenure of real estate loans influences the return on assets of this bank	4.26	.567
Real estate loans disbursed influences the return on asset of this bank	4.24	.781
Repayment of real estate loans influences the return of assets of this bank	4.18	.716
Default of real estate loans influences the return of assets of this bank	4.09	.866
Tenure of real estate loans influences the return on Equity of this bank	4.12	.913
Real estate loans disbursed influences the return on Equity of this bank	4.06	.814
Repayment of real estate loans influences the return on Equity of this bank	4.21	.880
Default of real estate loans influences the return on Equity of this bank	4.15	.784
Tenure of real estate loans influences the current ratio of this bank	4.15	.892
Real estate loans disbursed influences the current ratio of this bank	3.88	1.008
Repayment of real estate loans influences the current ratio of this bank	4.00	1.044
Default of real estate loans influences the current ratio of this bank	3.85	.989
Average	3.8	

N = 34

Regression Analysis for Real estate loans and financial performance

This study sought to establish the influence of real estate loans on financial performance of commercial banks in Kenya. The results are shown in Table 3.

Table 3: GLS Regression Results of Real estate loans as Independent Variable-Random Effects

	Real Estate Loans	Coefficient	Std. Error	Z	P> z	Model
Model 1a	CR	40.42	10.851	3.73	0.000	Random effect
Model 1b	ROE	54.35	12.519	4.34	0.000	Random effect
Model 1c	ROA	-15.95	1.436	-11.11	0.000	Random effect
Statistics	Model 1a	Model1b	Model1c			
Wald chi2(1)	13.88	18.85	123.48			
Prob > chi2	0.0002	0.0000	0.0000			
R-Squared	0.1977	0.2209	0.2542			
Rho	0.000	0.000	.14585			

As shown in Table 3, results on the influence of real estate loans on ROA show that the coefficient of real estate loans was -15.95 hence real estate loans had a negative influence on ROA. The p value was 0.000 which is less than 5% level of significance. This indicates that real estate loans had a significant negative influence on ROA. With regard to CR, the coefficient of real estate loans was 40.42 hence real estate loans had a positive relationship with CR. The p value was 0.000 which is greater than 5% level of significance implying a significant influence of real estate loans on CR. With regard to ROE, the coefficient of real estate loans was 54.35 hence real estate loans had a positive influence on ROE. The p value was 0.000 which is less than 5% level of significance. This indicates that real estate loans had a significant positive influence on ROE.

In a similar study, Kimeu (2008) showed that real estate financing affected the performance of listed commercial banks in Kenya. According to lipunga (2014), commercial banks that offer real estate loans consider it a strategy for diversifying risk with the aim of lowering their risks of loss through non-performing loans more specifically the unsecured ones. This is expected to improve the performance of the commercial banks. This study infers that commercial banks that offer real estate loans hold diversified portfolios of mortgage loans and therefore spreading risks in a manner that would be impossible if individuals were making real estate loans directly. Since commercial banks are large in size and number they gain in

economies of scale. They are also more experienced in setting up, analyzing credit, loans, and making collections than individuals; hence reducing the processing costs of loans and subsequently increasing the availability of real estate loans. Real estate financing requires borrowers to put in some savings to finance part of the cost of property by making a down payment. This in turn lowers the ratio of the non-performing loans to total loan portfolio of the bank (Kimeu, 2008)

CONCLUSION

Using random effect regression in Stata version 14, this study examined the influence of real estate loans on financial performance of commercial banks. It was conducted through a cross-sectional survey. It adopted both descriptive and inferential statistics to analyze the data. Simple linear regression analysis was used to determine the influence of real estate loans on the financial performance of commercial banks. The findings show that the real estate loans have positive relationship with CR and ROE, and are significant at the 5% level. Also the findings show that real estate loans have an inverse relationship with ROA at 5% level of significance. The study tested and confirmed the hypothesis that real estate loans have a positive and significant influence on the financial performance of commercial banks in Kenya. This finding implies that commercial banks that offer real estate loans expect significant influence and better results on their financial performance with minimal default risk. However the study had a limitation of self-reported data which is a form of bias when collecting information from the same people who reported it. To address this limitation, the researcher attempted, without shutting out details, to control biases by combining different aspects of questions in research tools.

RECOMMENDATIONS

The main insight gained from this study is the degree to which real estate loans influence banks' financial performance. The results show that an increase of real estate loans leads to an increase in a bank's ROE and CR. Policy makers could implement tighter restrictions on banks' ability to make new real estate loans. Tighter restrictions may help reduce the number of banks that fail in terms of low profitability. The study on the influence of real estate loans affecting bank's financial performance has many possible extensions. Breaking real estate loans down by specific categories may reveal insights into the types of real estate loans that are more risky than others. Bank failures can also be used as the dependent variable to reveal or link how the relationship can be with real estate loans.

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