RELATIONSHIP BETWEEN FINANCING SOURCES AND REAL ESTATE GROWTH IN HOMA BAY TOWN, KENYA

BY

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ABSTRACT

The real estate industry contributes 28% to Kenya's GDP. Studies show an average annual growth rate of 16% in the country with that of Homa Bay town being 3% indicating slow growth. Prior studies on real estate indicate a possibility of financing sources influencing real estate growth. However, the relationship between financing sources and real estate growth in Homa Bay town is unknown. Specific studies focusing on the role of mortgage financing, Investment Trust financing and private equity financing on real estate growth in Homa Bay town are missing. The specific objectives of the study were to; evaluate the relationship between Mortgage financing and the growth of real estate in Homa Bay town; determine the relationship between Investment Trusts financing and the growth of real estate in Homa Bay town, and establish the relationship between Private Equity financing and the growth of real estate in Homa Bay town. The research was based on the Simulation and Structural Form Theories. Correlational research design was employed in the study. The population of the study was the 312 real estate developers and agents in the town. Random sampling technique was used to select a sample of 199 real estate developers and agents. Questionnaires were used to collect primary data while content analysis was used to collect secondary data. Test-retest coefficient of 0.81 and CVI of 0.78 were obtained to establish reliability and validity of the questionnaires respectively. Multiple regression analysis was used to analyse data and the results were presented using tables and figures. It was established that real estate financing has a high correlation with the growth of real estate, (r = 0.856, p = 0.043) and financing sources explain 73.3 percent of the growth of real estate (R^2 = .733). Furthermore, mortgage financing positively and significantly influences real estate growth (β = 0.346, p= 0.000); Investment Trust financing has no significant influence on real estate growth (β = 0.194, p= 0.063); and that private equity financing has a positive significant influence on real estate growth (β = 0.272, p= 0.00). Therefore, a unit increase in mortgage and private equity financing results to 34.6% and 27.2% growth in real estate respectively. The study concludes that growth of real estate significantly depends on financing sources. The study recommends that mortgage financing institutions make mortgage financing more accessible; Investment Trust financing be simplified; and that banks private equity finance more accessible. The findings of this study are likely to benefit mortgage institutions when lending to their customers to finance homes and business offices. In addition this research may stimulate academics and encourage further studies in the area of real estate financing.



CHAPTER ONE

INTRODUCTION

The chapter introduces the concepts under study, the research problem, the objectives of the study, the research questions, value of the study and the conceptual framework that were adopted in the research.

1.1 Background to the Study

Finance is the lifeblood of the real estate industry (Goodhart, 2003). According to Ezimuo *et al.* (2014), the major issue in real estate growth and investment is finance. Funding is an important factor in real estate growth and investment (KIM, 2007). The complexity and to a large extent, capital-intensive nature of real estate demands proper and adequate funding to make it realizable (Kamau, 2011). The terms and availability of the needed funds determine the trend of estate operation (Michuki, 2010). Availability and easy accessibility of estate finance in sufficient quantity will therefore definitely accelerate all forms of property growth.

Real estate financing is concerned with the production of finance for building houses and office complexes which are basic necessities in a growing economy like Kenya (Kamau, 2011). A number of studies have been carried out on real estate financing in the world. According to Ge (2010) most of these studies have indicated that there are various sources of financing real estate but the main ones are mortgages and private equity. Traditional sources of loan funds are the financial depository institutions, including savings and loan associations, savings banks, commercial banks, thrift and loans and credit unions. Other non-institutional sources characterized as "non-banks" include mortgage bankers, finance lenders, private individuals and entities, pension funds, mortgage trusts, investment trusts, and hedge funds. Kamau (2011) notes that a new form of real estate financing through the Nairobi Securities Exchange (NSE) known as Real Estate Investment Trusts (REITS) has emerged. It is clear therefore that the main sources of financing real estate are mortgages, Investment Trusts and private equity.

Empirical studies conducted on the role of mortgage financing of real estate growth indicate mixed findings. Ge (2010) conducted a study on the American real estate financing it was established that the financing structure of American commercial real estate is 50% for bank loans, 25% for Commercial Mortgaged-based Securities (CMBS) issuing, 10% of loans from

insurance companies and 15% from other sources. The study which grouped real estate into residential real estate financing and commercial real estate also established that compared to residential real estate financing, American commercial real estate financing was characterised by mainly being composed of institutional investors; the main source of capital comes from the institutional investors like banks, insurance companies, pension funds, and the borrowers are developers, builders and investors. Although study concluded that all sources of finance were important, it did not explicitly indicate the significance of each source of finance on the growth of real estate in America.

Ezimuo et al. (2014) conducted a study on sources of real estate finance and their impact on property growth in Nigeria. Using a case study of 50 mortgage firms in Lagos, and a mixed research design, the research used the proxies of equity capital, loan capital, mortgage funding and use of debentures as the sources of finance for real estate. The study established that the various financing sources have different impacts on property growth in Nigeria with mortgage financing having the greatest positive significant impact and equity capital the least. Atati (2014) carried out an investigation into the factors that influence housing finance in developing countries using Kenya as case study. The aim of the study was to examine the factors that influence housing finance with particular reference to mortgages; its supply and access and its impact to the provision of housing. Using a mixed method, it was established that mortgage financing had a great influence on the growth of real estate in Kenya. Kamau (2011) carried out a study on the factors that influence investment in the real estate industry in Nairobi. The research design employed by the study was descriptive research and targeted all licensed real estate enterprises in located in Nairobi. The study established that mortgage financing was the main source of finance whose availability influenced investment in real estate finance. Wahome (2010) conducted a study to establish the effects of mortgage financing on performance of firms in Nairobi. The study employed a survey research design. The study established that mortgage financing is the most widely used source of financing employed by firms in Nairobi. It was also established that mortgage financing is influenced by market and financial factors which includes increased investment and improved profitability of the firm, improvement of risk management, attraction' of more customers, promotion of innovations market penetration and diversification of investment.

Reviewed studies indicate a possibility of mortgage financing influencing the growth of real estate. For example, while Ezimuo *et al.*, (2014) and Wahome (2010) established that mortgage financing is the main source real estate financing that influences real estate performance significantly. However, the findings by Ezimuo *et al.*, (2014) cannot be generalized to other areas since the sample was limited to mortgage firms and was carried using a mixed research design which has statistical limitations in measurement of qualitative data indicating that their findings were not plausible. Wahome (2010) and Kamau (2011) used a descriptive research design which implies that their findings were not inferentially interpreted. Therefore, no known study has evaluated the role of mortgage financing on the growth of real estate in Homa bay.

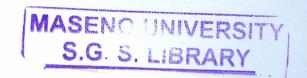
A Real Estate Investment Trust (REIT) is a corporation or trust that uses the pooled capital of many investors to invest or purchase and manage property and receive its income and distribute its earnings to investors (Michuki, 2010). Generally, REITs are traded on the major exchanges. They are highly liquid, so that they can transfer the real estate with low liquid and large capital to securities, which is good for the small and medium real estate investors. Moreover, there is no minimum investment in REITs, which allow common investors to participate in the real estate industry. The non-listed REITs usually provide real estate mortgages and get interests and intermediary fee as income. Equity REITs can directly invest in real estate, usually income-producing properties like hotels, shopping malls and commercial or industrial properties and take the rents income and the appreciation in the properties as profits. The relationship between Investment Trusts and the growth of the real estate industry has empirically been studied.

Michuki (2010) conducted a study on the existence of Investment Trusts needs by institutional investors at the Nairobi Securities Exchange. The study was underpinned on the hypothesis that Investment Trusts are an important vehicle in driving the real estate industry. The study which studied 32 institutional investors in the Nairobi Securities Exchange using a correlational research design concluded that investors would invest in REITs if more were to be introduced at the exchange. Atati (2014) investigated factors that influence housing finance in the developing countries and established that the demand and supply of Investment Trusts was on the rise since it was seen to be the easiest way of financing real estate assets. The research established that Investment Trusts were mainly held by institutional investors but it did not reveal its influence growth of the sector. Peng and Fan (2007) conducted a study on financial market imperfections

in Europe. While the study was focused on sources of housing finance, it was observed that Investment Trusts have many advantages both for the real estate industry and as an investment product. The research which was conducted by empirical review of data established that Investment Trusts provide exposure to a diversified range of real estate assets either through direct ownership of physical real estate or investment in shares of listed real estate companies.

From the reviewed studies on Investment Trusts, it is clear that Investment Trusts have a role to play in the growth of the real estate industry. The studies cannot however be generalised to Homa Bay town. Michuki (2010) survey institutional investors in Nairobi which is at a different level of economic development than Homa Bay. Atati (2014) conducted a general study on Investment Trusts and did not therefore establish the cause-effect relationship between Investment Trusts and real estate growth. Peng and Fan (2007) conduct their study in a developed economy and their findings cannot therefore be generalised. It is therefore clear that no known study attempts to focus on the relationship between Investment Trust financing and the growth of real estates in Homa Bay town.

Several empirical studies have been conducted on private equity financing and its role in the growth of the real estate industry. Kubuta (2014) in a study on competitive advantage and performance of real estate firms in Nairobi using the survey design with a sample of 38 real estate firms operating in Nairobi established that equity financing was used as a source of competitive advantage. The study however did not establish the relationship between equity financing and real estate growth. Mikhed (2009) investigated whether rapidly decreasing United States of America (USA) house prices have been justified by fundamental factors such as personal income, population, house rent, stock market wealth, building costs, and mortgage rate. The study which was conducted using the standard unit root and cointegration tests with aggregate data established that the use of private equity was on the decline in the USA as a method of financing housing units. Mbula (2013) investigated the effect of private equity financing on the performance of the real estate industry in Kenya. The study which used a survey design established that private equity was still a preferred method of financing real estate investment. It was also established that equity financing has a significant relationship with real estate growth. Odhiambo (2015) in a study on the effects of real estate finance on the financial performance of listed commercial banks in Kenya established that most individuals prefer private



equity financing when financing smaller housing projects. The study which sought to investigate the effect of real estate finance on the financial performance of listed commercial banks in Kenya using nine listed commercial banks was collected for the period 2009 to 2013 showed that real estate finance using equity did not have a significant effect on the financial performance of listed commercial banks.

Empirical evidence on equity financing indicates that the role of equity on the growth of the real estate is not generally agreed. However, a possibility of equity financing influencing real estate growth is demonstrated. Kubuta only studies firms in Nairobi. Mikhed conducts a study in the USA which is an emerged economy and therefore the results cannot be generalised. Mbula (2013) and Odhiambo (2015) use descriptive research designs implying that the cause-effect relationship cannot be inferred from their studies. However, Kubuta (2013) and Mbula (2013) find that equity financing is an important source of real estate financing. It is therefore apparent that the relationship between private equity and the growth of real estate for Homa Bay town is unknown.

According to Kimmons, (2010), real estate is property consisting of land and the buildings on it, along with its natural resources such as crops, minerals, or water; immovable property of this nature; an interest vested in this, an item of real property; buildings or housing in general. The principal divisions of the real estate business are investment, service, construction and growth. These differ from one another according to the aims of the persons engaging in them and the methods by which those persons expect to make their gains. For example, service real estate firms generate income from providing management services to owners of real estates; construction real estate from construction; growth from buying vacant land and putting up new units for sale; and investment buying real estate property as income generating investments.

The real estate industry contributes about 28% to the Gross Domestic Product (GDP) of Kenya (UNDP, 2014). The Kenya Institute of Management (KIM) estimated that over 80% of Kenyan population will have migrated from rural areas by 2030, meaning that that shelter is one of their basic needs (KIM, 2007). Presently, slum dwellers make a third of the urban dwellers population whereby Kenya's Kibera slum is one of the largest dwelling in Africa yet only approximately three million people are urban dwellers (Atati, 2014). Hence as more rural urban migration occurs more well-constructed houses must be built to combat slum uprising problem. Affordable

housing is however a major problem in Kenya (UNDP, 2014). Informal settlements and slums have continued to grow and a large percentage of the urban population lives here. The slums are characterized by congested tin roofed and mud houses. There is also poor infrastructure with regards to sewerage system, electricity, clean water and access roads. Some of the challenges of real estate in Kenya include; government incentives on housing introduced have not been sufficient enough to make housing affordable to the lower income group where the demand is high and the supply is critical; increased fraudulent cases on property; high competition in the industry and; the rising cost of construction materials (KIM, 2007).

In the study by Atati (2014) on factors that influence housing finance growth in the developing countries it was reported that Kenya's mortgage market has been growing rapidly and becoming increasingly competitive due to the rapid growth of the real estate market which is projected at 16% between 2012 and 2014. Out of the 44 commercial banks in the country, 30 offer mortgage loans to customers. According to the Central Bank Economic Report (2012), 71% of mortgage lending in Kenya is done by five institutions with Kenya Commercial Bank (KCB) being the market leader with 30% of the market share followed by Standard Chartered Bank, CFC Stanbic Ltd and the Cooperative Bank of Kenya take on the remaining share.

The net immigration trend into Homa Bay town stands at 12.2% (UNDP, 2014). The urban population living within the town is estimated to be rising at a growth rate of 11.5% per annum against a real estate growth rate of 3%. This has resulted into a strain on existing facilities within the town such as schools, housing for commercial and residential purposes and the location of shopping centres. Real estate developers in Homa Bay have stepped up investments in commercial buildings as banks, learning institutions and the retail sector drive demand for space. Several banks, retail superstores, colleges and universities have taken up commercial space in the town and across the town in the last three years, exciting the local real estate market. However, there is still an existing market since demand for housing has resulted in rising rents.

The slow growth in the real estate industry has led to lack of sufficient housing and the persistent rise in rental values in Homa Bay town which has resulted in the growth of slums in the town in places like Sofia, Shauri Yako and Makongeni (UNDP, 2014). This is despite the fact that research has shown that land in Homa Bay town is not congested and land prices are relatively lower as compared to other nearby towns. Despite this the rent per square foot of a commercial

building in the town is on average KES. 120 as compared to the neighbouring town of Kisii where the rate is on average KES. 80. The present study therefore hypothesizes that this disparity between the high occupancy rates of land and the low setting up of real estate assets in Homa Bay is a result of mismatch of financing sources and the real estate developers. It is therefore pertinent that a research be carried out to determine the role of financing sources in the growth of real estate in the town.

1.2 Statement of the Problem

Reviewed literature indicates that financing is one of the determinants of growth of real estate. Prior studies show that the three main sources of financing real estate are through mortgages, Investment trusts and by using private equity. Reviewed literature shows a possibility of mortgage financing influencing the growth of real estate. However, no known study has considered the role of mortgage financing on the growth of real estate in Homa bay. Similarly, reviewed studies on Investment Trusts have only focused on the development of Investment Trusts with none attempting to focus on the relationship between Investment Trust financing and the growth of real estates for Homa Bay town. Studies on private equity financing indicate that equity has an influence on the growth of the real estate. However, specific literature focusing on the relationship between private equity and the growth of real estate for Homa Bay town is missing. This necessitated carrying out this research. The purpose of this research was therefore to determine the role of financing sources on the growth of real estate in Homa bay town.

1.3 Research Objectives

The general objective of the study was to analyse the relationship between financing sources and the growth of the real estate in Homa Bay town.

The specific objectives were to:

- (i) Evaluate the role of Mortgage financing on the growth of real estate in Homa Bay town,
- (ii) Determine the relationship between Investment Trusts (REITS) financing and the growth of real estate in Homa Bay town,
- (iii) Establish the relationship between Private Equity financing and the growth of real estate in Homa Bay town.

1.4 Research Hypothesis

This research was guided by the following research hypotheses:

H₀₁: Mortgage financing has no role on the growth of real estate in Homa Bay town.

 H_{02} : There is no relationship between Investment Trusts (REITS) financing and growth of real estate in Homa Bay town.

H₀₃: There is no relationship between Private Equity financing and growth of real estate in Homa Bay town.

1.5 Scope of the Study

The research covered financing sources and their effect on the growth of real estate finance. The topic covered is from the broad field of finance and the sub-field of real estate finance. The data that was collected is for the period 2010 to 2014 since this is the period that has experienced some growth in real estate in Homa Bay town according to a UNDP (2014) report.

1.6 Justification of the Study

The findings of this study are envisaged to be of benefit to the mortgage Institutions especially when they are lending to their customers to finance homes as they will be able to know in advance the preferences of real estate developers in Homa Bay town. The study findings are also likely to be of importance to real estate developers. They would be more aware on the implication of various sources of financing their investments. In addition this research will stimulate academics and encourage further studies in the area of real estate financing.

1.7 Conceptual Framework

The independent variable in the present study is the financing sources. Previous studies on real estate finance have identified three main sources of real estate finance; Loan financing, Real Estate Investment Trusts and Private Equity. Since the present study hypothesizes that the disparity between the high occupancy rates of land and the low setting up of real estate assets in Homa Bay is a result of mismatch of financing sources and the real estate developers, the availability of these financing sources will be expected to influence the growth of real estate, which will be the dependent variable.

The relationship between the independent variable and the dependent is envisaged to be intervened by the real estate developers' attitude towards risk, government regulation and demand for the real estate assets. The relationship between these variables is shown in the figure 1.1 below.

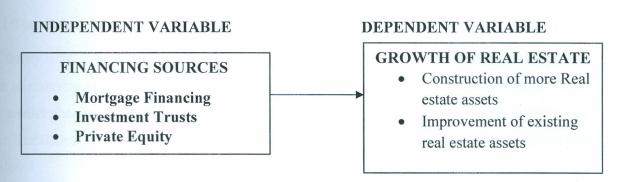


Figure 1: Relationship between financing sources and real estate growth Source: Own Conceptualization, 2015

CHAPTER TWO

LITERATURE REVIEW

This chapter discusses theories relevant to the study. Literature related to the study is also reviewed with the aim of identifying literature gaps.

2.1 Theoretical Review

A theory is an interrelated set of constructs formed into a prepositions or hypotheses that specify the relationship among variables in terms of magnitude and direction, and which helps to explain or predict phenomena that occurs in the world (Creswell and Plano, 2007). For the present study, the Simulation and Structural Form theories will be used. These are explained sub-sections below.

2.1.1 Simulation Theory

The theory was proposed by Laibson (1998) and examines the extent to which markets enable the provision of housing finance across a wide range of countries. Housing is a major purchase requiring long-term financing, and the factors that are associated with well-functioning housing finance systems are those that enable the provision of long term finance. The theory further states that countries with stronger legal rights for borrowers and lenders (through collateral and bankruptcy laws), deeper credit information systems, and a more stable macroeconomic environment have deeper housing finance systems. This theory is relevant in the study since these same factors also help explain the variation in housing finance across emerging market economies such as Kenya. Across developed countries, which tend to have low macroeconomic volatility and relatively extensive credit information systems, variation in the strength of legal rights helps explain the extent of housing finance.

According to Laibson (1998), a statistical comparison of the loan-to-value and loan-to-income ratios can provide a good indication of the risks that owner-occupiers run in financing their own homes. At the same time, this kind of comparison ignores the causes of the risks, namely the volatility or uncertainty of future interest rates, house prices and changes in income. It also disregards the main mortgage characteristics, the cost of taking out a mortgage, and the direct and indirect subsidies, including interest deductibility, factors that have a big influence on the real costs and risks for homeowners.

2.1.2 Structural Form Theory

This theory was formulated by Pottow (2007). It documents the evolution of mortgage finance, equity financing and Investment Trust financing in Sub-Saharan Africa countries like Kenya to determine what steps need to be taken to extend it to the middle-class, to enable them to address their housing needs to the extent of their affordability. Pottow (2007) revealed that there have been a number of problems when it came to the delivery of formal housing finance amongst most, if not all the countries. These problems are a record of macroeconomic instability, an adverse institutional, legal and regulatory environment which has resulted in inefficient, collateralization of housing assets, a poor record of public sector housing banks, building societies and other specialist housing lenders in that most have been destroyed due to poor management and a lack of funds and limited availability of long-term funding sources to carry out intermediation that would spread the cost of a house over a relatively long period of time.

Pottow (2007) asserts that arising out of this dismal history is a move to revive and introduce mortgage lending and Investment Trust financing into a number of countries. Moreover, as part of the move to straighten out financial markets, a number of consultants have been sent into South Saharan countries to begin documenting the specific problems of each country as well as to make recommendations on how to address them. Growth agents, in particular, are also putting forth recommendations on what is required to ensure financial market growth and capital market investment necessary to entice the private sector into the delivery of housing finance. Since the theory specifically deals with real estate financing in South Saharan countries, it will be relevant to the study.

2.2 Empirical Review

According to Otiati (2014), housing is a major purchase requiring long-term financing, and the factors that are associated with well-functioning housing finance systems are those that enable the provision of long-term finance. From a study carried by Warnock (2008) on factors that influence housing finance in developing countries, it was observed that countries with stronger legal rights for borrowers and lenders through collateral and bankruptcy laws, credit information systems that are well informed, and a stable macroeconomic environment have more developed housing finance systems. These factors also help explain the variation in housing finance across emerging market economies. Several studies have been carried out on real estate finance. These

studies are reviewed in the subsections below. The intention of the review is to identify that gap that there is no study that has been carried out to establish the relationship between financing sources and the growth of real estate in Homa Bay town.

2.2.1 Mortgages and Real Estate Growth

One of the studies carried out to investigate bank loans as a method of financing real estate was by Ezimuo *et al.* (2014). They studied sources of real estate finance and their impact on property growth in Nigeria using a case study of 50 mortgage firms in Lagos, and a mixed research design. The research established that mortgage institutions have generally impacted positively on real estate growth and that the availability of mortgage loans to would-be beneficiaries is a function of certain key variables, namely, availability of sufficient funds, stable interest rates and ability of beneficiaries to pay back. It was further established that developers are still willing to obtain loans under the mortgage finance scheme, despite the low income levels in the country, since housing is a basic necessity. The study recommended that an effective monitoring system of mortgage institutions' activities by the Federal Mortgage Bank of Nigeria should be encouraged as it would go a long way in doing away with the bottlenecks and improve housing growth. Also, the problems of default would be minimized. It is apparent that the research fell short of showing the effect of each source of real estate finance on the growth of the real estate industry.

Atati (2014) carried out an investigation into the factors that influence housing finance in the developing countries with the aim of examining the factors that influence housing finance; its supply and access and its impact to the provision of housing. The factors investigated in the study included; socio-economic factors, financial factors and government factors. The study also sought to identify direct and indirect sources of housing finance and the avenues that can avail funds for the low income earner. The methodology adopted in the study was the mixed method which was a combination of the qualitative and quantitative methods of research. And the research's target population was made up of housing finance institutions, banks, private lenders, private investors and developers including contractors and individuals who wished to own a home. The research established that socio-economic factors, financial factors and government factors greatly influence the availability of mortgage to real estate developers. Further, it was established that the extent to which mortgage financing influenced on the growth of real estate in

Kenya was small but insignificant. The study revealed that financial factors mainly apply to lending institutions and their supply of funds including bank loans. The study did not reveal the extent to which loans influence growth of the sector.

Wahome (2010) conducted a study to establish the effects of mortgage financing on performance of the firms. The study which used a survey research design concluded that mortgage financing is influenced by market and financial factors which includes increase investment and improve profitability of the firm, improvement of risk management, attraction' of more customers, promotion of innovations, market penetration, diversification of investment and encountering competitions in the market lowering of interest on treasury bond, Kenya financial laws require bank to have less cash in reserve and High interest from Mortgage, creating of wealth and Improving savings. The study did not bring out the effect of mortgage financing on the growth of the real estate industry.

Kubuta (2014) in her study on competitive advantage and performance of real estate firms in Nairobi established that the industry still faces a myriad of challenges. The study which was guided by the objectives of determining competitive advantages enjoyed by real estate firms in Nairobi and establishing whether competitive advantages enjoyed influence performance of a real estate firm adopted the survey design with a sample of 38 real estate firms operating in Nairobi established that the real estate firms had adopted various sources of competitive advantages which included obtaining cheap sources of funding from equity hence lowering costs. The study established that equity financing was used as a source of competitive advantage.

Kamau (2011) carried out a study on the factors that influence investment in the real estate industry in Nairobi. The research design employed by the study was descriptive research and targeted all licensed real estate enterprises in located in Nairobi. The researcher used questionnaires to collect data and analyzed data using SPSS. The study established that the main factors influencing investments in real estate were availability of finances and the attitude of the investors. The study findings indicated that all the real estate investment firms in Nairobi work towards reducing the housing deficit in the city of Nairobi which stood at 410 house units a day at the time. The study also concluded that financial institutions should make cheaper finances available to the real estate investors for the industry to grow since the mortgage plans that were present were influencing the real estate industry negatively.

From the literature reviewed above, it can be noted that although studies have been carried out on the role of mortgage financing on the real estate industry. While Ezimuo *et al.*, (2014) and Wahome (2010) find no relationship between mortgage financing and real estate growth, Atati (2014) and Kubuta (2014) find a small but insignificant relationship between the two variables. Kamau (2011) found a negative relationship between loan financing and the real estate growth in Kenya. Reviewed studies indicate a possibility of mortgage financing influencing the growth of real estate. For example, while Ezimuo *et al.*, (2014) and Wahome (2010) established that mortgage financing is the main source real estate financing that influences real estate performance greatly. The findings by Ezimuo *et al.*, (2014) cannot however be generalized to other areas since the sample was limited to mortgage firms. Wahome (2010) and Kamau (2011) used a descriptive research design which implies that the findings were not inferential. It is therefore clear that no known study has considered the role of mortgage financing on the growth of real estate in Homa bay.

2.2.2 Real Estate Investment Trusts (REITs) and Real Estate Growth

According to Atati (2014), a REITs is a corporation or trust that uses the pooled capital of many investors to invest or purchase and manage property and receive its income and distribute its earnings to investors. Generally, REITs are traded on the major exchanges. They are highly liquid, so that they can transfer the real estate with low liquid and large capital to securities, which is good for the small and medium real estate investors. Moreover, there is no minimum investment in REITs, which allow common investors to participate in the real estate industry. The non-listed REITs usually provide real estate mortgages and get interests and intermediary fee as income. Equity REITs can directly invest in real estate, usually income-producing properties like hotels, shopping malls and commercial or industrial properties and take the rents income and the appreciation in the properties as profits.

Peng and Fan, (2007) carried out a study on financial market imperfections in Europe. While the study was focused on sources of housing finance, it observes that REITs have many advantages both for the real estate industry and as an investment product. The research which was conducted by empirical review of data established that firstly, REITs provide exposure to a diversified range of real estate assets either through direct ownership of physical real estate or investment in shares of listed real estate companies. It not only decrease investment risk of real estate investors

but also decreases risk of real estate industry. REITs can provide stable and comparatively higher investment income; currently the investment income is from 4% to 5%, some are even 8%, which are higher than other financial product. Moreover, it is good for the stability of financial system, especially when the real estate industry is in bad times, the banks will not bear all the risk of real estate industry.

There are many problems for the REITs growth in Kenya (Kamau 2012). In his study on the factors that influence investment in the real estate industry in Nairobi using descriptive research and targeting all licensed real estate enterprises in located in Nairobi, it was established that the main factors influencing investments in real estate were availability of finances and the attitude of the investors. The study findings indicated that all the real estate investment firms in Nairobi work towards reducing the housing deficit in the city of Nairobi which stood at 410 house units a day at the time. The study also concluded that financial institutions should make finances available to the real estate investors for the industry to grow. However, the study did not clearly indicate which sources of finance influence investment in real estate most.

Michuki (2010) did a study on the existence of Real Estate Investment Trusts (REITS) needs by institutional investors at the Nairobi Securities Exchange. The study was underpinned on the hypothesis that REITs are an important vehicle in driving the real estate industry. The study which studied 32 institutional investors in the Nairobi Securities Exchange using a correlational research design concluded that investors would invest in REITs if they were to be introduced at the exchange and therefore confirming that REITs needs do exist among institutional investors at the NSE. The study recommended that more mortgage firms introduce REITs in the securities markets in order to make the real estate industry to grow. This study only focused on one source of finance and therefore ignored the other sources of finance for the real estate. Furthermore, the study focused on real estate institutional investors which means that the role of REITs held by individual investors on the growth of real estate was not brought out.

In the study by Atati (2014) on an investigation into the factors that influence housing finance in the developing countries it was established that the demand and supply of Investment Trusts was on the rise since it was seen to be the easiest way of financing real estate assets. The research established that Investment Trusts were mainly held by institutional investors but it did not reveal the extent to which it influences growth of the sector.

From the reviewed studies on Investment Trusts, it is clear that Investment Trusts have a role to play in the growth of the real estate industry. The studies cannot however be generalised to Homa Bay town. Michuki (2010) survey institutional investors in Nairobi which is at a different level of economic development than Homa Bay. Atati (2014) conducted a general study on Investment Trusts and did not therefore establish the cause-effect relationship between Investment Trusts and real estate growth. Peng and Fan (2007) conduct their study in a developed economy and their findings cannot therefore be generalised. It is therefore clear that no known study attempts to focus on the relationship between Investment Trust financing and the growth of real estates in Homa Bay town.

2.2.3 Private Equity and Real Estate Growth

Private Equity (PE) financing is collecting money from several independent individuals or institutions privately and sign equity investment agreement and equity subscription contracts with the capital supplier (Chen and Jin, 2011).

Mikhed (2009) investigated whether rapidly decreasing United States of America (USA) house prices have been justified by fundamental factors such as personal income, population, house rent, stock market wealth, building costs, and mortgage rate. They first conducted the standard unit root and cointegration tests with aggregate data. Nationwide analysis potentially suffers from problems of the low power of stationarity tests and the ignorance of dependence among regional house markets. Therefore, they also employed panel data stationarity tests which are robust to cross-sectional dependence. Contrary to previous panel studies of the USA housing market, they considered several, not just one, fundamental factors. The study however established that the use of private equity was on the decline in the USA as a method of financing housing units.

Lieser & Groh (2011), examined the determinants of commercial real estate investments using a unique set of panel data series for 47 countries from 2007 to 2009. The explored how different Socio- economic, demographic and institutional characteristics affect commercial real estate investment activity through both cross- sectional and time series analysis, running augmented random effect panel regressions. Their results showed that economic growth, rapid urbanization, and compelling demographics attract real estate investments and also confirmed that lack of transparency in the legal framework, administrative burdens of doing real estate business, socio-

cultural challenges and political instabilities of countries reduce real estate allocations. The results of the study indicated that commercial real estate investment by private developers was still low.

Mbula, (2013) investigated the effect of private equity financing on the performance of the real estate industry in Kenya. Specifically, the study was intended to examine the effect of interest rate, loan terms, mortgage risks, and inflation on performance of Real estate industry in Kenya. The population of interest in this study comprised of 182 real estate firms in Nairobi licensed and registered in accordance with the Estate agents Act. The study used both primary and secondary sources of data from published and audited annual reports of investments for the population of interest and property price index from property consultants. The study established that private equity financing had positive influence on financial performance of Real estate. The study further revealed that interest rate affected the Real estate performance to a great extent as mortgage prices are principally determined by real interest rates. From the findings on the extent to which inflation influences investment decisions, the study established that inflation negatively affected investment decisions to large extent. The study thus recommended that private developers should form investment groups to improve performance by spreading risks.

Odhiambo (2015) in a study on the effects of real estate finance on the financial performance of listed commercial banks in Kenya established that most individuals prefer private equity financing when financing smaller housing projects. The study which sought to investigate the effect of real estate finance on the financial performance of listed commercial banks in Kenya. Data for nine listed commercial banks was collected for the period 2009 to 2013 from the annual reports of the respective banks. Panel regression analysis was employed on the collected data. The results showed that real estate finance did not have a significant effect on the financial performance of listed commercial banks. Foreign ownership, market structure, cost of bank operations, and the size of the bank significantly influenced bank performance. The study concludes that real estate finance does not influence the financial performance of listed commercial banks. It is recommended that the Central Bank of Kenya (CBK) and stakeholders in the housing sector strategize to improve uptake of affordable mortgage loans in order to improve the overall performance of banks.

Empirical evidence on equity financing indicate that the role of equity on the growth of the real estate is not generally agreed. However, a possibility of equity financing influencing real estate growth is demonstrated. Kubuta only studies firms in Nairobi. Mikhed conducts a study in the USA which is an emerged economy and therefore the results cannot be generalised. Mbula (2013) and Odhiambo (2015) use descriptive research designs implying that the cause-effect relationship cannot be inferred from their studies. However, Kubuta (2013) and Mbula (2013) find that equity financing is an important source of real estate financing. It is therefore apparent that the relationship between private equity and the growth of real estate for Homa Bay town is unknown.

2.3 Summary of Literature Gaps

Based on the literature reviewed, it is evident that financing is a major contributor to the growth of the real estate industry. The reviewed literature on financing sources generally use convenience sampling methods and exploratory or case study designs. Most of them are carried out in institutional investors in the Nairobi Securities Exchange. Furthermore, the studies employ primary data based on cross-sectional study units but fail to study the relationship between financing sources and the growth of the real estate in Homa bay town. This is the gap that the present study sought to fill.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter describes methodology which was adopted by the study. It includes the research design, study area, validity and reliability of data collection instruments, data sources and data collection methods, sampling procedures, ethical procedures, data processing, analysis and presentation.

3.1 Research Design

This study employed a correlational research design. Kruger and Wellman (2003) views correlation design as a tool that perpetuates measurement of two or more variables at more or less the same time and gives a suitable ground for analysis of relationship between the variables. In this study, it helped in describing in quantitative terms the degree to which the variables are related.

3.2 Study Area

The research was conducted in Homa Bay town, which is situated along the shores of Lake Victoria and lies in the western part of Kenya on 0^o 05' S, 37^o, 20' E. The town has a population of 963,794 (2009 census) and an area of 154.7 km². According to statistics available in the Housing Ministry of Homa Bay County Government, there are about 312 real estate developers and agents in Homa bay town with interests in commercial and residential buildings (Homa Bay County, 2015).

3.3 Target Population

The target population in this study was the 312 real estate developers and agents. This is because this is the population that has the information on the sources of their finance for the construction of the real estate (Homa Bay County, 2015).

3.4 Sampling Frame and Size

According to Gay (1992), a sampling frame is a listing of all elements in the population from which the sample is drawn. For the present study therefore, a sampling frame was constructed from the 312 real estate developers and agents. The sample size was calculated by using a formula by Chava and Nachmias (1996) which was considered appropriate.

$$n = Z^2 pqN / e (N-1) + Z^2 pq$$

Where:

n- represents the sample size

N- Represents the population

e -Acceptable error (e=0.05)

q- Sample population estimated to have characteristics being measured, assume a 95% confidence level of the target population

$$q=1-p$$

Z- The standard normal deviate at the required confidence level i.e. 1.962

Therefore:

$$_{\rm n} = \frac{1.962 \times 0.95 \times (1 - 0.95) \times 312}{0.05 \times (312 - 1) + 1.962 \times 0.95 \times (1 - 0.95)} = _{199}$$

The sample size was therefore 199 respondents.

3.5 Data Collection

3.5.1 Sources of Data

The researcher used self-administered questionnaires as research tools to collect data from the respondents. This approach was considered to be the most appropriate for this research because it enabled the researcher to collect as much data as possible (Fisher, 2004). The following scale was used in the questionnaire.

| Scale | Interpretation |
|-------|----------------|
| 5 | Very high |
| 4 | High |
| 3 | Moderate |
| 2 | Low |
| 1 | Very low |

In addition to questionnaires, document analysis was used to collect secondary data from some documents which were available from the real estate developers and agents' documents and those from their financiers such as banks.

3.5.2 Data Collection Procedure

The main method of data collection was administering the self-administered questionnaire. Document analysis was also be employed. The researcher first acquired an introduction letter from the Dean of the School of Business before going to the area of study where permission was sought and then appointments made for the day of data collection according to the convenience of the respondents. Content analysis was used to collect secondary data

3.5.3 Instrument for Data Collection

One type of questionnaire was used to collect primary data from the respondents. The questionnaire consisted of both structured and non-structured questions. The structured questions were on a five-point Likert scale for ease of analysis. Secondary data was also collected using content analysis

3.6 Reliability and Validity of Data Collection Instrument

According to Mugenda and Mugenda (2003), reliability ensures the degree of consistency or stability is high and hence it involved examining the research instrument several times for reliability in relevance, clarity and ambiguity of items. In achieving this, test-retest coefficient was used to establish the reliability of the instrument. This was done by pretesting questionnaires on ten respondents selected from real estate developers and agents from the neighbouring Kendu Bay town which has the same real estate growth challenges. A test-retest coefficient of 0.81 was obtained against a threshold of 1.00. This showed that the questionnaire was reliable.

The researcher used the Content Valid Index (CVI) which is a scale developed by computing or rating the relevant items in the instrument or questionnaire by checking their clarity, their meaningfulness in line with all objectives stated dividing by the total number of items. The validity was described as follows:

$CVI - \frac{Relevant Items}{Total Number of Items}$

The threshold of the CVI was to be 0.7 against a threshold of 1.00 (Fisher, 2004), below which the instrument was invalid. The CVI for the research instrument was found to be 0.78 and therefore, the research instrument was considered valid.

3.7 Data Analysis and Presentation

After data collection, the data was cleaned and coded. While the data were analysed descriptively, multiple regression analysis was used to establish the relationship between the dependent variable of Real Estate Growth and the independent variable of Financing Sources. This study was based on the regression model below to establish the relationship between variables:

$$REGWT_i = a_0 + a_1 LOFI_i + a_2 REIT_i + a_3 PRIEQ_i + \varepsilon ...$$
(3.1)

Where: Real Estate Growth (REGWT) was measured in terms of completion of more real estate units.

 a_0 is the constant term

 a_{I_1} , a_2 and a_3 are the coefficient for the independent variables of Loans Financing (LOFI), Investments Trust Financing (REIT) and Private Equity Financing (PRIEQ).

 ϵ is the error term which was assumed to be normally distributed.

The research findings were presented using tables and figures.

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter reports study findings by presenting a comprehensive analysis of the data collected from the field. It also presents a discussion on the findings by comparing those findings with those of prior studies on financial planning practices and performance of projects.

4.1 Presentation of Findings

4.1.1 Response Rate

A total of 199 questionnaires were given to the respondents according to the designed research frame. The responded were allowed one week to fill the questionnaires after which they were picked. Out of this, 121 questionnaires were returned. This represented 60.8% of the sample. The relatively low response rate was due to the number of registered real estate developers and agents who were registered but were not operating. After the questionnaires were received, they were cleaned and coded for clarity. Those questionnaires which were not completely filled were excluded from the final analysis. This process brought the questionnaires that were used for analysis to 94. Out this, 59 (63%) were received from construction real estate practitioners while 35 (37%) were received from property management practitioners.

The research further established that most of the real estate firms were relatively new in the town. This is because 40 (42.5%) and 24 (25.5%) of the respondents indicated that they had operated in the town for a period of less than two and between two and five years respectively. This represented a total of 68% of the total real estate operators in the town. Twenty (21.3%) and 10 (10.7%) were real estate businesses that had operated in the town for a period of between six and 10 years, and for more than 10 years respectively.

The findings above support those of Atati (2014) who noted that the rate of growth of real estate businesses has generally grown rapidly in Kenya since 2012 largely due to the influence of devolution. The information is presented in the table 4.1.

Table 4.1: Period of Operation in Homa Bay

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------|-----------|---------|------------------|-----------------------|
| Less than 2 years | 40 | 42.5 | 42.5 | 42.5 |
| Between 2 and 5 | 24 | 25.5 | 25.5 | 68.0 |
| Between 6-10 | 20 | 21.3 | 21.3 | 89.3 |
| More than 10 year | s 10 | 10.7 | 10.7 | 100.0 |
| Total | 94 | 100.0 | 100.0 | ş. |

Source: Analysed Research Data, 2015

4.1.2 Success of Completion of Real Estate

To establish the rate of completion of real estate property, the respondents whose main business was construction were asked to indicate the rate of completion of projects that they had taken up. The information is presented in table 4.2.

Table 4.2 Units Completed in the last five years

| | Frequency | Percent | Valid | Cumulative | |
|------------------|-----------|---------|---------|------------|--|
| | | | Percent | Percent | |
| Below 5 | 54 | 91.5 | 91.5 | 91.5 | |
| Between 5 and 10 | 5 | 8.5 | 8.5 | 100 | |
| More than 10 | 0 | 0 | 0 | 100 | |
| Total | 59 | 100.0 | 100.0 | | |

Source: Analysed Research Data, 2015

Table 4.2 above indicates that the number of units completed in the last five years is highest (91.5%) with no registered business having completed more than 10 units. This is an indication that the rate of completion of housing units in Homa Bay is low despite the high number of developers available. Further, this is a likely indication that there are challenges in the completion of the units.



4.1.3 Challenges to Real Estate Growth

In an attempt to establish the challenges that may be faced by the real estate businesses in general, the respondents were asked to indicate their level of satisfaction on the rate of development of the real estate industry in Homa Bay town. Table 4.3 summarizes the results.

Table 4.3 Level of Real Estate Growth

| Level of Satisfaction | Frequency | Percentage |
|------------------------------------|-----------|--------------|
| Level of Satisfaction | Frequency | 1 er centage |
| Highly Dissatisfied | 63 | 67.0 |
| Dissatisfied | 13 | 13.8 |
| Neither dissatisfied nor satisfied | 6 | 6.4 |
| Satisfied | 12 | 12.8 |
| Highly satisfied | 0 | 0 |
| Total | 94 | 100 |

Source: Analysed Research Data, 2015

Results in Table 4.3 indicate that most (67%) of the respondents are highly dissatisfied with the rate of development of the real estate industry in Homa Bay town. Those who were dissatisfied represented 13.8%, with the percentage of respondents who were satisfied being 12.8%. This finding implies that most of the real estate practitioners are facing challenges in the businesses which are preventing them from participating effectively in the business. Kubuta (2014) in her study on competitive advantage and performance of real estate firms in Nairobi also established that the industry still faces a myriad of challenges.

4.1.4 Main Challenges Facing Real Estate

The study also set out to establish the main challenges facing the growth of real estate in Homa Bay town. The research grouped the challenges as being either low demand for the housing and office units, lack of adequate finance, lack of land for development or the lack of technical knowledge in the town. The findings are summarized in Table 4.4.

Table 4.4: Challenges facing Growth of Real Estate

| Main Challenge | Frequency | Percentag | |
|------------------------------|-----------|-----------|--|
| Low demand for housing units | 22 | 23.4 | |
| Finance | 60 | 63.8 | |
| Lack of Land | 8 | 8.5 | |
| Low Technological Know-how | 4 | 4.3 | |
| Total | 94 | 100 | |

Source: Analysed Research Data, 2015

Table 4.4 clearly indicates that the main challenge facing real estate growth in Homa Bay town is finance (63.8%). Low demand for housing units was also cited as a challenge at 23.4%. Other challenges were lack of land (8.5%) and low technological know-how at 4.3%. This finding confirms studies by Atati (2014), Michuki (2010) and Kamau (2012) who established that finance was a major challenge to the growth of real estate in Kenya.

4.2 Role of Financing Sources on Real Estate Growth

The specific objectives of the study were to evaluate the relationship between Mortgage (loan) financing and the growth of real estate in Homa Bay town; determine the relationship between Investment Trusts financing and the growth of real estate in Homa Bay town, and establish the relationship between Private Equity financing and the growth of real estate in Homa Bay town. To establish this, a correlation analysis was done to establish the influence of the financing sources on each other and on the dependent variable. The findings are discussed in the subsections below.

4.2.1 Correlation between Real Estate Financing and Growth of Real Estate

Correlation analysis was used to show the direction and strength among the variables of the study (Sekaran & Bougie, 2010). A positive correlation indicates that as one variable increases, the other variables will also increase. On the other hand, a negative correlation indicates that as one variable increases the other variable decreases (Sekaran, 2003).

Results of the correlation are shown in Table 4.5.

Table 4.5: Correlation between Real Estate Financing and Growth of Real Estate

| REGWT | LOFI | REITFI | PRIEQ |
|----------|---|---|---|
| 1 | | | * |
| .346*** | 1 | | |
| p = .003 | | | |
| .194 | .136 | 1 | |
| p = .061 | p=.075 | | |
| .272*** | .124 | .056 | 1 |
| p= .023 | p=.0512 | p=.058 | |
| | 1 .346*** p = .003 .194 p = .061 .272*** p= .023 | 1 .346*** 1 $p = .003$.194 .136 $p = .061$ $p = .075$.272*** .124 $p = .023$ $p = .0512$ | 1 .346*** 1 $p = .003$.194 .136 1 $p = .061$ $p = .075$.272*** .124 .056 $p = .023$ $p = .0512$ $p = .058$ |

Note: * p < 0.10, ** p < 0.05, *** p < 0.01

Where REGWT is Real estate growth, *LOFI* is Loans Financing, *REIT* is Investments Trust Financing, and *PRIEQ* Private Equity Financing.

Source: Analysed Research Data, 2015

From the results in Table 4.5, first, all correlation coefficients are less than 0.80 in general and therefore there is no issue of multicollinearity between the independent variables (Gujarati and Porter, 2009). Second, it has been indicated that loan financing is positively and significantly correlated with growth of real estate in Homa Bay town (r=.346, p=0.00). The inference here is that as loan financing increases by one unit, there is likely to be an increase in the growth of real estate in the town by 34.6%. This results are in contradiction with those of Ezimuo *et al.*, (2014) and Wahome (2010) who found no correlation between mortgage financing and real estate growth. Thirdly, the correlation results indicate that Investment Trusts have no correlation with the growth of real estate in Homa Bay. Fourthly, the relationship between private equity and growth of real estate was found to be positive and significant (r=.272, p=0.00). This implies that as private equity increases, there is likely to be an increase in the growth of real estate in Homa Bay town by 27.2%. Lastly, the results indicate that the financing sources are positively correlated to each other but the correlation is insignificant. This

implies that the financing sources are independent of each other.

4.2.2 Relationship between Real Estate financing and Growth of Real Estate

In order to answer the research objectives, a regression analysis was carried out to determine the relationship between loan financing and growth of real estate in Homa Bay town; Investment Trusts financing and the growth of real estate in Homa Bay town, and establish the relationship between Private Equity financing and the growth of real estate in Homa Bay town. Results are discussed below. The research model that was used in the study was:

$$REGWT_i = a_0 + a_1LOFI_i + a_2REIT_i + a_3PRIEQ_i + \varepsilon (3.1)$$

Where: Real Estate Growth (REGWT) was measured in terms of completion of more real estate units.

 a_0 is the constant term

 a_1 , a_2 and a_3 are the coefficient for the independent variables of Loans Financing (*LOFI*), Investments Trust Financing (*REIT*) and Private Equity Financing (*PRIEQ*).

 ϵ is the error term which was assumed to be normally distributed.

The results of the regression are discussed below.

Table 4.6: Relationship between Real Estate financing and Growth of Real Estate

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Sig |
|-------|-------------------|----------|----------------------|----------------------------|------|
| 1 | .856 ^a | .732 | .728 | - | .043 |
| | | | | | |

Source: Analysed Research Data, 2015

The model summary table above indicates that the general correlation between financing sources and growth of the real estate industry in Homa Bay is positive and high (R= .856, p= .043). The suitability of the model in predicting real estate growth was revealed by R square value of 0.728. This implies that the 72.8% of real estate growth can be predicted by using financing sources, or that financing sources contribute to real estate growth up to 72.8% with other factors not in the model predicting the 27.2%.

Model

| | Sum of Squares | df | Mean Square | \mathbf{F} | Sig. | |
|--------------|----------------|----|-------------|--------------|-------------------|--|
| 1 Regression | 60.25 | 3 | 28.808 | 118.270 | .000 ^a | |
| Residual | 6.773 | 91 | .174 | | | |
| Total | 67.198 | 94 | | | | |

a. Predictors: (Constant), LOFI, REIT, PRIEQ

b. Dependent Variable: REGWT

Source: Analysed Research Data, 2015

The model regression relationship in the table above, it can be inferred that the general relationship between the variables is strong. The present study was carried out on the hypothesis that there is no relationship between financing sources and the growth of real estate finance. The p-value of 0.00 (p<0.05) in the model implies that the null hypothesis is rejected and therefore the alternative hypothesis is accepted. It therefore implies that there is a significant relationship between financing sources and the growth of real estate in Homa Bay.

The first specific objective was to establish the role of mortgage financing on the growth of real estate, the null hypothesis was set that there is no relationship between mortgage financing and the growth of real estate. The value and the beta coefficient (0.371, p-value = 0.000) leads us to reject the null hypothesis of there being no significant relationship between mortgage financing and real estate growth. It therefore implies that with a unit increase in mortgage financing, there would be a significant positive change in real estate growth by 37.1%. As noted earlier, these results are in contradiction with those of Ezimuo *et al.*, (2014) and Wahome (2010) who found no relationship between mortgage financing and real estate growth. Atati (2014) and Kubuta (2014) on the other hand found a small but insignificant relationship between the two variables while Kamau (2011) found a negative relationship between loan financing and the real estate growth in Kenya.

The second objective was to determine the relationship between Investment Trusts and the growth of real estate in Homa Bay town. The regression beta coefficient for REITs' influence on the growth of real estate growth was found to be positive and insignificant, (β = .194, p=

0.063). Since the null hypothesis was set at there being no relationship between REIT financing and the growth of real estate, we fail to reject it and conclude that there is no significant relationship between REIT financing and the growth of real estate. This is a likely indication that REITs have not been embraced in the Homa Bay town despite other previous studies acknowledging the fact that REITs are an important source of finance. For example, Atati (2014), Michuki (2010) and Kamau (2012) acknowledged that REITs have not been fully embraced by real estate developers.

The third objective was to establish the relationship between private equity financing and growth of real estate financing. The regression coefficient for private equity was also found to be positive and significant ($\beta = 0.272$, p= 0.000) which means that we reject the null hypothesis and accept the substantive hypothesis of there being a significant relationship between private equity financing and real estate growth. This relationship is positive which means that a unit increase in private equity causes a 27.2% increase in real estate growth. Of the three variables, there is an implication that mortgage financing influences real estate growth most.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents a summary of findings and conclusion of the study findings. It also presents a discussion on the recommendations, limitations of the study and gives suggestions for further research.

5.1 Summary of Findings

This study was aimed at finding out the role of financing sources on real estate growth in Homa Bay town. The specific objectives of the study were to; evaluate the relationship between Mortgage financing and the growth of real estate in Homa Bay town; determine the relationship between Investment Trusts financing and the growth of real estate in Homa Bay town, and establish the relationship between Private Equity financing and the growth of real estate in Homa Bay town. The following is a summary of findings.

The first objective was to evaluate the relationship between Mortgage financing and the growth of real estate in Homa Bay town. Results indicated that loan financing is significantly and positively correlated with growth of real estate in Homa Bay town. The inference here is that as loan financing increases, there is likely to be an increase in the growth of real estate in the town. The null hypothesis of there being no significant relationship between mortgage financing and real estate growth was rejected. It therefore implies that there is a significant positive relationship between mortgage financing and real estate financing. Mortgage financing was also found to have the greatest positive and significant influence on the growth of the real estate.

The second objective to determine the relationship between Investment Trusts financing and the growth of real estate in Homa Bay town. Study findings revealed that there is a no significant relationship between REIT financing and the growth of real estate.

The third objective was establish the relationship between Private Equity financing and the growth of real estate in Homa Bay town. Private equity was found to have a positive significant relationship with real estate growth. This relationship is positive which means that as private equity increases, real estate growth accelerates.

5.2 Conclusions

Based on the summary of findings for the first objective that loan financing is significantly and positively correlated with growth of real estate in Homa Bay town the study concludes that real estate financing by use of mortgages is an important factor in ensuring that the rate of growth in the real estate industry in Homa Bay town increases. The implication is that if mortgage financing is made accessible to many real estate developers, they will readily take it up and use it to construct more housing units. Since the method of financing was found to have the greatest positive influence on the growth of real estate, it can be inferred that most real estate developers prefer it to the other forms of financing.

The study's finding that REIT financing does not significantly affect real estate development in Homa Bay implies that the more Investment Trusts finance real estate, the lesser the growth. This is a likely indication that real estate developers in Homa Bay have not really taken up Investment Trust financing to finance real estate constructions. This may be because of the complexities that are associated with REITs.

Based on findings of the third objective which revealed that private equity financing significantly and positively influences real estate growth, it can be concluded that private equity financing does influence real estate financing. This implies that real developers who have more disposable private equity are likely to contribute to the growth of the industry. This is because the disposable equity is likely to be invested in real estate. It further implies that when real estate business owners have private equity are likely to invest it in real estate.

5.3 Recommendations

In line with the conclusions for the first objective, it is recommended that mortgage financing institutions in Homa Bay make mortgage financing more accessible to real estate developers. This is because mortgage financing is the source of financing that is most preferred by real estate developers in Homa Bay town.

It is recommended that Investment Trust financing be simplified so that real estate developers understand it more. This is because previous research has established that REIT financing of real estate is important while the present research established that it negatively influences the growth

of real estate. The implication is that REITs have not been embraced by real estate developers in areas away from Nairobi.

Based on the conclusion from the finding from the research for objective three, it is recommended that banks and other financing institutions make accessibility to finance products for real estate development easy. This is because it has been shown that private equity financing positively and significantly influences the growth of real estate.

5.4 Limitations of the Study

Findings, conclusions and recommendations from the present study may not be generalised to other areas because of several limitations. First, the real estate financing sources were limited to only mortgage financing, REIT financing and private equity financing implying that some other financing sources were left out. Second, the research was based on a limited sample composed of only one geographical location of a town. Third, the use of a descriptive research design may have hindered the depth of the study. Sekaran (2003) posits that a descriptive research design has the weakness of focusing on description of situations. Lastly, the sample that was used was relatively small.

5.5 Suggestions for Further Research

The research puts forward the following suggestions for further research:

- A study on the influence of REIT financing on the performance of financing institutions.
- A study on the role of mortgage financing on the growth of real estate using a bigger sample.
- A study on the role of the factors hindering the development of REIT financing in financing real estate in Kenya.

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