THE EFFECT OF SAVINGS AND CREDIT COOPERATIVE SOCIETIES DEVELOPMENT LOANS ON THE GROWTH OF REAL ESTATE INDUSTRY IN KENYA

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DECLARATION

| The research project is my original work and has a | not been submitted for examination to |
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DEDICATION

This work is dedicated to my loving mother Mrs Violet Yego and my dad James Kiprop for the love and Support.

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LIST OF ABBREVIATIONS

CBK - Central Bank of Kenya

CIC - Cooperative Insurance Company

FSD - Financial Sector Deepening

GDP - Gross Domestic Product

KIE - Kenya Industrial Estates

PIRI - Prime International Residential Index.

REIT - Real Estate Investment Trust

SAACOs - Savings and Credit Co-operative Societies

SASRA - SACCO Societies Regulatory Authority

SEFCO - Small Enterprises Finance Company

UN - United Nation

WOCCU - World Council of Credit Unions

ABSTRACT

According to Central Banks of Kenya (CBK) 2010, The Kenyan real estate finance has grown rapidly over recent years in both value of loans and number of loans. The study is set out with the objective of establishing the relationship between the effects of SACCO development loans on growth of real estate industry in Kenya. To achieve the objectives of the study, a regression model was developed using the Growth of Real Estate Industry in Kenya as measured by Capital Property Prices Indices (CPPI), as the dependent variable and the Development loans granted by SACCOs as measured by Logarithm as the independent variable as well as interest rates as the controlling variable. A descriptive research design was adopted for this study, the study intended to collect detailed information through descriptions that would be useful establish the effects of SACCO development loan on development of real estate in Kenya. The secondary data was collected from published reports by the Central Bank of Kenya (CBK) reports and Real Estate Finance in Kenya: A Survey Analysis for a period of five years between 2006 and 2010. The researcher adopted a survey research design on a target population of all 96 SACCO registered under the Sacco Societies Regulatory Authority (SASRA) in Kenya (SASRA, 2014). The data collected was analyzed using multiple linear regression analysis conducted at 95% confidence level. The study used the regression analysis to establish the relationship between the effects of SACCO Development loans on growth of real estate industry in Kenya. Results also indicate that the goodness of fit was adequate as it reported an r squared of 0.459 which means that 45.9% of the variations in real estate development units was explained by variables that such as Economic Health Situation, Interest rate, and Population growth rate which were substantial to explain the effect of SACCOs development loans on growth of real estate industry in Kenya. It was also possible to conclude that interest rates contributed the largest percentage factor in sourcing finance for firms in the real estate industry. The study recommends that in view of the findings, SACCOs should reduce lending interest rates; have product diversity; customize loans; SACCO Societies Regulatory Authority (SASRA) to form guiding policies; increase repayment period to be extended; educate customers on products and market loan products. Furthermore, Sacco's should understand and relate to customers care services and levels of customer satisfaction. This would enable the Sacco's to adjust and understand better how their member's prefers products.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Savings and Credit Co-operative Societies are currently the most and widely adopted form of external financing for individual investors and private developers as well as small and micro enterprises due to SACCOs rapidly increasing role towards developing these enterprises. In Kenya, SACCOs contributes over 45% of GDP, and it is estimated that at least one out of every two Kenyans directly or indirectly derives his /her livelihood from these kinds of cooperative movements. Rapid urbanization is the most substantial and dynamic growth trend in the developing world in today's century. Rural urban migration and the inherent growth of the cities and expansion of the larger cities are driven by socio-economic factors, a trend that has resulted to continuous need for infrastructure facilities. There are many structures newly built in the form of shopping mall, complexes and super structure for trade, business and development. (UN-Habitat, 2014).

In Kenya, financial sector is dominated by Commercial banks, Insurance companies, Pension funds and Mortgages which have roots to the colonial period and were historically oriented towards meeting the financial needs of external trade and large scale commerce. These financial institutions do not therefore have a track record of lending to households and start-up Small Enterprises. When the Kenya Government recognized this shortfall, it embarked on initiatives such as savings and credit cooperatives (Saccos), Small Enterprises Finance Company (SEFCO), Kenya Industrial Estates (KIE) and other alternatives to fill in the financing gap that was there (Kimuyu, 1998).

This lead to creation and rise of Sacco industry in Kenya, the largest in Africa with over 3.5 million members and a \$2 billion loan portfolio. Kenya has a long history of cooperative development that has been characterized by strong growth, thus making a significant contribution to the overall economy and easy realization of its blue print vision 2030. With the total population of Kenya at approximately 40 million, it is estimated that 63% of Kenya's population participate directly or indirectly in cooperative based enterprises (CIC Kenya).

The co-operative movement is a massive tool that the government and members can use towards an effort to economic and social pillars of the Vision 2030. This is due to the ability of SACCOs to mobilize savings which will increase the national savings level. These resources if well channelled towards developmental expenditure as opposed to consumption expenditure may lift the country out of poverty. The government also intends to use public private partnership in achieving its goals in the Vision 2030.

1.1.1 Sacco's Development Loans

Development loans are borrowed funds to buy real estate, prepare it for construction, and erect buildings. It is a facility that offers members the opportunity to borrow and acquire property or assets. The loan is granted in double or multiple times a member's savings depending with the policies of a Sacco group. It has maximum recovery period and a stipulated interest rate. The cooperative movements provides basic functions towards achievement of development needs which empowers members to pool resources to acquire and develop land and housing, have access to funds from pooling and also from donor funds. Sacco's are meeting the real estate and housing needs of its members through development loans. (Delaney, 2007).

In Kenya Sacco's have national membership of 3.5 million and a share capital of US\$ 30 million. The largest categories of loans in Kenya taken as development loans and in large proportion is used for housing related investments which includes land purchase, deposit for house purchase and use for incremental building. In Kenya savings and credit movements have great potential to finance housing related developments through its development loans and shorter term loans which suits the needs of low income groups a situation which is common in Kenya given the larger portion of low income earners (UN-Habitat, 2012).

Property development finance lies at the core of every successful property development project. With effective finance in place, energies can be devote to smooth running of the construction project, secured in the understanding of a firm financial foundation to build on. Provision of housing is a basic need and worth investment, many credit and savings societies in Kenya have facilitated the purchasing plots of land for its members. By offering friendly payment terms, the SACCOs have made it possible for ordinary members to own parcels of land for the construction of residential homes. Real estate by its very nature is a capital intensive venture which if financed through personal financial resources will require slow and tedious accumulation of savings. Sacco development loans has made it easy through long-term credit financing which is a more logical option as it spreads the repayment burden. This is made possible through Sacco development loans since it avails long-term funding (Ofei, 2001).

Sacco development loans works for the sustainable development of the overall economy with saving spirits as a pooling factor of little and small amounts of funds for their own strong investment bargain, argument and use the co-operation spirit which is a joint or collective action of people directed towards some specific goal in which there is common interest or hope of getting some reward (Misra, 2008). The development loan is the major member empowerment means by Saccos through mobilization of savings and disbursement of credit. In Kenya the mobilizing objective has been able to mobilize over Kshs.300 billion in savings in the last five years (Co-operative Bank of Kenya, 2014).

1.1.2 Growth of Real Estate Industry

The real estate sector in Kenya has seen a boom that begun somewhere in the mid to late 2000's because the property market is responding to increased demand. In Nairobi, the capital and largest city of Kenya, is one of the largest expatriate communities habitat in the continent due to the significant number of multinationals who have chosen Nairobi as either their African hub or East and Central African hub. The rebirth of property development in Nairobi has attracted global attention. In its 2012 Wealth Report, real estate management company, Knight Frank, ranked Nairobi as the fastest-growing real estate market in the world, outpacing cities like Miami and Monaco. Real estate prices in Nairobi rose 25 percent. In 2012, Nairobi and Mombasa were the only cities in the southern hemisphere to have reported double digit property price increases, out of 71 cities surveyed in the Prime International Residential Index (PIRI, 2012)

Demand for real estate and different types of real estate is increasing in Kenya with young and employed population driving this demand. In Kenya there is continued urbanisation, an expansion of current cities and the rise of new cities. Population increases in Kenya's capital city Nairobi is pushing for an increase in the number of satellite cities, though at a slower rate to that in Developed markets where major cities have already felt the effects of rapid urbanisation. Kenya real estate is headed towards significant ultra-modern satellite city development such as Konza City which comprises of both residential and commercial premises. An increased demand from retailers entering Kenya markets for high-grade space also drives the creation and expansion of shopping centre developments. Current retail foreign forces that are in Kenya are ulfutiam supermarket group and game supermarket which is subsidiary of walmat supermarket. The situation is characterized by lack of premises and ultra-modern shopping space. Significant construction activities in respect of shopping malls are recent trend in Nairobi Kenya with over ten malls expected in the year 2015 (PWC, 2015)

Kenya continues to experience some of the most decentralised growth of the retail market as marketers move outside Nairobi and go to other urban centres in Kenya such as Mombasa, Kisumu, Eldoret and Nakuru and most industrial companies in Kenya tend to avoid renting or leasing space and over the recent years there has been significant development especially along Mombasa Rd. Rent and take up is low so the sector might need a couple more years to mature. Also residential market has actually been one of the key drivers of the property market. There has been significant number of development projects coming up both within the Greater Nairobi Area and other urban areas such as Mombasa, Naivasha and Kisumu, Nakuru and Eldoret (Lazard asset Management, 2014).

1.1.3 Effect of Sacco Development loans on Growth of Real Estate Industry

Kenyans are turning to Savings and Credit Co-operative society (SACCOs) to fulfil their dream of home-ownership, shunning mortgages which are beyond the reach of many middle and low-income earners. SACCOs are now using pooled members' funds to buy land and build houses for their members, making it easier for many Kenyans to own homes. In a country with an expanding middle class and an increasingly educated population seeking affordable investment opportunities, a growing number of Kenyans are opting for SACCOs in a bid to exploit economies of scale while building a nest egg for their retirement years (Emerging trends in real estate, 2015).

Many of these institutions which emerged from farmers' co-operative unions in the 1970s and 80s have evolved overtime, now offering individuals an alternative investment channel through which they can pool funds to invest in land, shares, and buildings. An example of such is Mhasibu Sacco Society Limited is one of the institutions that have benefited members. It mobilise funds from interested members and then obtain land at very competitive rates thus significantly reducing the purchase price for each individual. Between 2012 and 2014 the Mhasibu had acquired 70 acres of land near Runda for Sh350 million and two tracts of land of 120 and 102 acres near Ruiru for Sh228 million and Sh215 million respectively for its members. (CIC Kenya).

Mahadeva (1995) in his study, on functioning of housing co-operatives, in the state of Karnataka found that the co-operative movement in Karnataka has contributed to the growth of housing and real estate. United Nations (2005) in its study on housing finance systems for countries in transition offered the evidence from the European Union. The

study reveals that the introduction of functioning housing finance markets provides large external benefits including a surge in employment in the construction industry and related sectors, more efficient property development and continuous progress in real estate development.

Martin et al (2001) examined the customer demand for loans from banks and credit Unions and the findings were positive and high for the credit unions. The study also revealed that the majority of loans from credit and cooperative unions were used for housing and real estate related developments.

1.1.4 Real Estate Industry in Kenya

It is evident that there is still a wall of capital targeting real estate in many markets and that it is performing strongly against other asset classes. It is clear too, though, that investors must strike a fine balance between the need to deploy capital and the ability to achieve adequate returns when there is such a wide variance in underlying fundamentals and economic conditions across the globe. A new trend is an increase in the volume of private capital originating from Asian markets. This has been led by a group of large Chinese that invest mainly in residential projects both regionally and globally, and whose products are aimed largely at buyers which include households and majorly the government being the biggest buyer of Asian real estate and infrastructural services. Investors and developers are increasingly targeting African real estate as one of the key emerging markets, drawn by the prospect of 20 percent-plus returns across many territories (Emerging trends in real estate, 2015).

In almost all of Africa's markets, demand for housing, high-quality retail, office and industrial accommodation outstrips supply as international and local occupiers respond to the improving economic outlook. Demographic shifts and changes in consumer behaviour have been the underlying drivers of demand here, encouraging investors from overseas to enter the various markets. Major infrastructure investment programmes in Nigeria and South Africa have been followed by significant projects in countries such as Ghana, Kenya, Mozambique and Tanzania. However, a huge shortfall in government funding creates opportunities for private investors to support this development need through direct investment and public private partnership agreements, further prohibitive bank loan rates is a pushing factor that has seen faster growth and development of housing societies as a cushion and as a convenient means to property acquisition (PWC, 2014).

Co-operative model of providing financial and technical service, housing-inspired associations are fast becoming the latest craze in the Kenyan property scene. About 10 years ago, many middle and low income earners were not able build or buy houses in Nairobi and the situation is turning to worst each and every day with dynamic increase in property and land prices in Kenya the last being KShs 140,000,000 for half acre in upper hill area recoding the highest price in Africa. But, though employed many savings cannot afford the kind to own land and house, a situation that has given rise to idea of pooling their resources together in order to buy land and then build an investment venture as a team and the idea is gradually turning into great businesses with an aim of helping others get decent and affordable housing and property at places of their choice. This has marked the birth of many housing co-operative society concept. With an aim of enabling members acquire quality, affordable houses which otherwise would have remained a dream to many.

Through the concept, members buy land and build houses at minimal cost, riding on the fact that owning one does not have to come with the exorbitant profit margins charged by local developers. In this case the middleman's margin as well as the inflated cost of materials, which is normally pushed to the consumer, is shelved. The concept has great advantage in that the member can build at below cost in a prime area and can assume business model, where after the units are complete, it can sold at market rates, making an impressive margin. Unlike mortgages, it offers a flexible payment model, especially for those who cannot qualify for bank loans.

1.2 Research Problem

According to Maslow theory 1908; housing is one of the three basic needs of mankind. Due to influx of rural population to cities in search of employment and better quality of life, the increasing population density in urban areas has created enormous burden on cities in terms of housing. Africa currently has a population of 200 million aged between 15 and 24 years and this is expected to double by 2045 (UN, 2012) As at 2014, 40% of Africans were urbanized and by 2030 this will increase to 47%, and by 2050, 56% will be urbanized. This will be the result of 400 million people in Africa migrating from rural areas to cities (World Urbanization Prospects, 2014).

As Planner (1964) aptly observes, housing does framework public services, transportation, schools, recreations essentials of urban life. The problem of housing has become an everyday discussion in all quarters of the public and private services of the developing countries of Africa. It has become increasingly glaring that most of the urban population live in dehumanizing housing environment while those that have access to

average housing do so at abnormal cost. According to Onibokun (1986), rent in major cities of Africa is about 60% of an average workers disposable income. This is far higher than the 20-30% recommended by United Nations.

As successful cities attract more and more people, the cost of prime urban real estate per square meter will continue to rise. Affordability will fall, leading to greater urban density and smaller apartments. Responding to the rise of technology globally, Kenyans are pondering what to do and how to acquire property at and within technology centres such as Konza Technology City, a US\$10 billion real estate project marketed by the Kenyan government's ICT board, and directly modelled on California's Silicon Valley and is designed to include a technology park, university campus, science park and central business district (Nubi, 1991)

Housing has been a big problem all over the world, some researchers have come up with empirical studies relating to the problems confronting accessibility to housing and the major and main factor is finance and accessibility to finance. In Nigeria similar outcomes have been revealed and the problem revolves all over the world. Anayochukwu (2011) came under similar findings while examining the problems and prospects of financing urban housing in the South Eastern States of Nigeria. The result also shows that income and lending requirements have accounted for only 11% of homeowners who accessed mortgage loans for the development of their houses.

Whereas in the South Western States, the study of Ojo and Ighalo (2008) found that households are impaired mainly by lending. Kabir and Ikem (2013) provided a dual approach in their investigation into the availability of funds for private real estate

developers in Abuja, Nigeria. Findings provided evidence that high cost of funds, construction and difficulties in obtaining financing funds impedes property acquisition. In Kenya accessibility to loan from banks has been a big blow especially to household and small medium enterprises. The credit worthiness and collateral has been cited as a great challenge and a big factor affecting accessibility of loans. Another major problem is the interest rates that comes with loans from banks that has continued to increase to 27% pushing for other financial arrangements to meet the need (Tomlinson, 2007).

While the above research findings provide valuable insights into this particular topic of real estate finance, interest rates, population growth and economic health situation, none of them establishes the relationship between effects of Saccos development loans on growth of real estate industry in Kenya. Therefore, a gap exists for further research in this area. It is against this setting that the researcher attempted to determine the effects of Saccos development loans on growth of real estate industry. The research reflects this focus by addressing the following question; what are the effects of Saccos development loans on growth of real estate industry in Kenya?

1.3 Objective of the Study

To establish the effects of Saccos development loans on growth of real estate industry in Kenya

1.4 Value of the Study

The study should form a basis for future researchers and academicians who may be conducting research on real estate finance and stock performance of banks. It should also be helpful for prospective investors to make informed decisions regarding investment in

Sacco Development Loans with regard to its real estate financing. The study will help furnish the future researcher with relevant information regarding savings and credit cooperative societies and development of real estate and related information. The findings will stimulate other researchers to venture and focus much into savings and benefits of cooperatives in economic development. This will be of great importance since it will contribute to the general body of knowledge and form a basis for further research.

The findings of the study will also be useful to Sacco members and management since it will provide much insight into the various approaches and Knowledge of contemporary real estate issues and effective Sacco's management and decision to enhance success. The findings will also assist the Government in policy formulation regarding taxation and other regulatory requirements of SACCOs in the country since it will form a basis into which policies such as taxes incentive can be formulated regarding role of Sacco on development of Real Estate Industry.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of the related literature on the subject under study presented by various researchers, scholars, analysts and authors. The researcher derived materials from several sources which are closely related to the theme and the objectives of the study. It highlights the trends in this study relating to the research topic. It includes research areas, theoretical approaches and summary of literature review. It shows sources of where the information is coming from such as countries or other areas. The review also outlines some of the gaps identified; it deals with the historic and current state of research in the field.

2.2 Theoretical Review

This section discusses and articulates the relevant theories and concepts on how savings and credit cooperative society's development loans affect development of real estate industry growth in Kenya. It builds a case to justify the study. Under this approach prediction models are constructed based on some theoretic arguments. These theories include classical, liquidity reference and loanable funds theories. Each of these theories makes assumptions regarding the behavioural aspects of the economy and focuses on the real estate industry and how it is affected by savings and credit cooperative organizations development loans.

2.2.1 Social Capital Theory

The social capital theory by Stein 1960 postulates that when people act or function in a group such as a cooperative society or self-help group, it leads to the economic and social development of the group, individuals in the group and the immediate community where such group operates from (Anderson, Locker, & Nugent, 2002; World Bank, 1998). Social development is the improvement in relationship between people while the economic development is divisible into two parts as improvement in financial condition and physical progress such as material acquisition which include real estate development. This is significant since economic development does not take place without increase in physical material acquisition and financial resources (Jainaba, Dana, & Muhammadou, 2005; Oluyombo, 2013).

The economic development in social capital theory includes improvement in economic condition of the people which may be physical and financial. Assets acquisition is physical economic development while enterprise profit, saving and income are financial economic development. Cooperative societies as economic and social networks can influence members' behaviour towards assets building through the provision of loans. However, borrowing is voluntary and the loans have minimal interest.

2.2.2 Loanable Funds Theory

Loanable funds theory advanced by Roberto (1934) assumes that interest rates are determined by supply of loans and related funds and demand for credit. Loanable funds is the sum total of all the money people and entities in an economy has decided to save and lend out to borrowers as an investment rather than use for personal consumption.. In loanable funds theory the demand of loanable funds originates from domestic business, consumers,

governments and foreign borrowers. With these factors, determining interest rates are decided by financial and monetary conditions in the economy. The many factors considered in loanable funds theory mean that equilibrium will be reached only when each of the factors is in equilibrium. Mortgage rate is one of the key components of housing affordability index, and the rise in mortgage rate decreases the index and vice versa (Nourzad, 2004).

Households are very sensitive to changes in interest rates, in the countries with variable mortgage rates like Sweden, because of their greater indebtedness in the past two decades (Debelle, 2004). Specifically, banks may be insensitive to changes in monetary stance owing to risk aversion. There are strong policy implications; it is argued, for instance, that in East Asia raising interest rates exacerbated economic decline and, rather than contributing to exchange-rate stability, may have induced capital flight as default risk increased, lowering risk-adjusted expected returns. Interest rates, income and expected prices are determinants of house price and property price attachment (Boelhouwer, 2005).

The theory assumes that low interest rates should increase property investment and owner which supports the savings and credit co-operative societies low interest loans argument. This argument and Sacco lending philosophy is thus the biggest factor behind real estate development. This has been evidenced in Kenya through the high number of property owners such as land being held by Saccos to its owners before they are sold to the individual members, a situation that enables low income earners to acquire secured properties and a low possible value and lower interest rates (Ojijo, 2013).

2.2.3 Neoclassical Theory

The neoclassical theory advanced by Marshall (1842-1924) argues that the way individuals respond to changes in incentives can be predicted. It suggests that individuals behave rationally when deciding on asset accumulation. Some economic models of the neoclassical theory postulate perfect knowledge and access to perfect market by individuals (Beverlyetal, 2008). But this is not possible in for most of the low income earner and small business owners. The early models of the theory identify income and age as the predominant factors for asset building, but Sen (1999) reveals that assets can be accumulated through sources other than income.

Recent models, as seen in Adjei, Arun and Hossain (2009), Grinstein-Weiss et al. (2007) and Oluyombo (2013), have shifted to the use of savings and credit cooperative societies which works based on the philosophy of low interest loans for members either for individual, jointly or separately in asset accumulation for members who came together to pool up the resources together for their own benefit. The theory assumes that individuals and group members through savings and credit cooperative societies have been able to take a big achievement in economic development and property and asset acquisition which has been greatly been attributed to growth of real estate.

2.3 Determinants of Growth in the Real Estate Industry in Kenya

Real estate presents a significant portion of most people's wealth, and this is especially true for many homeowners in the developing countries. The size and scale of the real estate industry make it an attractive and lucrative sector for many investors. This study will look at some of the main factors that affect and determine the growth of real estate industry.

2.3.1 Interest Rates

Interest rates have a major impact on the real estate markets. Changes in interest rates can greatly influence a person's ability to purchase a residential property. That is because as the interest rates rise, the cost to obtain a loan to buy a home and acquire property increases, which creates a lower demand for real estate by pushing prices up. Conversely, as interest rates falls, the cost to obtain a loan decreases, thus increasing demand and prices of real estate (Nguyen, 2011).

The interest rates are expected to reduce as pressure is put on the Central Bank and other banks here in Kenya, investors, developers, bank customers and other stakeholders. There is a lot of competition that banks are facing from SME financiers and money-lending is becoming a popular business outlet at lower interest rates than the mainstream banks have been offering. Co-operative Saccos are giving banks a run for their money and Chama Accounts are opening everywhere in the country as they are able to advance loans at interest rates lower than those charged by other financial providers and with this kind of healthy competition, interest rates cannot remain high much longer and this will motivate investment in various properties including real estate (Ojijo, 2013).

Commercial real estate assets are typically traded based on their investment yield, better known as the capitalization rate. Investors tend to take a simplistic view that if interest rates rise, valuations must decrease in order for the property to maintain a similarly competitive yield. Factors such as future cash flows, earnings growth, and economic health have proven to be more relevant predictors of property values. In fact, higher rates are usually the result of an improving economy (Lazard asset Management, 2014).

2.3.2 The Population Size

One of the methods used by these professional real estate investors is a thorough analysis of current and future population trends. Tracking the trends in population growth and population movement can provide an accurate prediction of which neighbourhoods are likely to succeed and which ones are doomed to at least short term failure. Over the past several years it has been those markets with the strongest and fastest population growth that have been the hottest markets in the country. This trend has held true both in residential and in commercial real estate and those investors who took advantage of this fact were able to realize excellent profits through the buying and selling of residential and commercial properties. It is easy to see how population movement and population growth impact the housing market, since a higher population density increases the demand for local real estate. In turn companies looking to open new facilities or new branches often look to areas with high population growth, causing a spike in commercial real estate prices as well.

Demographics are the data that describes the composition of a population, such as age, race, gender, income, migration patterns and population growth. These statistics are an often overlooked but significant factor that affects how real estate is priced and what types of properties are in demand. Major shifts in the demographics of a nation can have a large impact on real estate trends for several decades. For example, the baby boomers who were born between 1945 and 1964 are an example of a demographic trend with the potential to significantly influence the real estate market. The transition of these baby boomers to retirement is one of the more interesting generational trends in the last century, and the retirement of these baby boomers, which began back in 2010, is bound to be noticed in the market for decades to come (Nguyen, 2011).

Demographic factors are responsible for driving the real estate and housing price in the local market. Price level affects local housing and property affordability by income groups. Idrus and Ho (2008) demonstrated that demographic factors are important variables for housing price determination in the long term. Affordability remains a major concern due to high prices of existing properties and the lack of supply of affordable and well located properties within urban centre a situation which is common in Nairobi Kenya.

2.3.3 Economic Health Situation

The key factor that affects the value of real estate is the overall health of the economy. This is generally measured by economic indicators such as the Gross Domestic Production, employment data, manufacturing activity, the prices of goods, etc. Broadly speaking, when the economy is sluggish, so is real estate. However, the cyclicality of the economy can have varying effects on different types of real estate. For example, of a Real Estate Investment Trust (REIT) has a larger percentage of its investments in hotels, they would typically be more affected by an economic downturn than an REIT that had invested in office buildings. Hotels are a form of property that is very sensitive to economic activity due to the type of lease structure inherent in the business.

On the other hand, office tenants generally have longer-term leases that can't be changed in the middle of an economic downturn. Thus, although you should be aware of the part of the cycle the economy is in, you should also be cognizant of the real estate property's sensitivity to the economic cycle. Inflation also affects the interest rates, for instance, when inflation increases, interest rates increase and vice versa. Recent reports indicate that the rate of inflation has also started to reduce. (Nguyen, 2011)

According to the Finance Minister Uhuru Kenyatta, in year 2012, Kenya planned to cut inflation to five percent by 2014/15 through austerity measures to reduce its budget deficit, accompanied by a tight monetary stance. Statistics show that year-on-year inflation rose for 13 straight months to peak at 19.72 percent last November, before easing to 18.93 percent in December after the central bank raised rates aggressively and rainfall pointed to an improvement in harvests. The shilling fell against the dollar for most of year 2012 mainly due to a widening trade gap, amplified by global increases in fuel prices and a drought that ravaged the Horn of Africa, feeding through to higher inflation rates in the region. The government aims to lower its budget deficit to 5.1 percent by 2014/15 from this fiscal year's 6.1 percent. The decrease in cost of fuel should see the cost of inflation also come down considerably (Ojijo, 2013).

Real estate investments are related to the general economic activity and prosperity of a country. Wheaton's model 1992 argues that productive economy positively affects demand for real estate assets. Chin et al 2006 from their survey concluded that the sound economic structure and expected strong stable economy are perceived to be the most significant factors in the country's ability to attract foreign real estate investment. Chen and Hobbs 2003 found out that the size of a countries economy positively affects investment activity since large economies are usually more capable of withstanding external economic turbulence and are thus more stable than smaller economies.

2.4 Empirical Review

Empirical research of the last decade has demonstrated that demand for savings services exists, even among the poorest. If formal means of savings are unavailable, entrepreneurs tend to use livestock, crop or other informal arrangements that typically have a low or

negative interest rate. (Wanyama, 2008).Co-operation among Kenyans, led to the spirit of Harambee, with no expectation of financial gain. This was hailed as one of the pillars of social, economic and political achievements of Kenya. Formal co-operatives started taking shape much later. This was when European settlers formed the Lumbwa Co-operative Society in 1908. For about two decades, the society was restricted to the settler population. Africans were only allowed to establish cooperatives after 1930s.

2.4.1 International Evidence

Johnson (2005) in his study, support of theoretical assertion and equally adduce that the basic theory of interest groups comes from the economic approach in which activities of a group are viewed as processes through which wealth or utility is redistributed between individuals and groups. In Nigeria's there is an increasing involvement of interest groups housing processes, Ibem and Chuba (2014) in their studies, demonstrated how workers in south-east Nigerian city of Enugu deployed cooperative synergy in the acquisition of land for housing projects and found out that indeed group schemes and interests group contribute highly to real estate development. (Lafourcade, 2005) concluded that microfinance in Africa including SACCOs are rapidly growing in number and members, and their activities are increasing in most African countries.

In Malawi, Savings schemes contributed highly to solution of housing problem, a situation which lead to women and men who saved whatever money they can each day to own land and houses (international institute for environment and development, 2011). This interest group envisioned a world where everyone has a decent place to live and it also believes that housing provides a critical foundation for breaking the cycle of poverty

(Habitat for Humanity International, 2014). The Savings and Credit Co-operative Societies have gradually led to closing the increasing knowledge gap on SACCOs as a co-operative institution.

Dung-Gwom and Mallo (2015) appraises the challenges confronting access to credit facilities for home acquisition in Plateau State of Nigeria with emphasis on the low income earners. The study test for eligibility of households for credit facilities and examined other lending requirements. The outcome indicates income levels and lending requirements possess the most challenge to households' access to credits. Ganka (2010) and Bee (2007) also are for the concept that, SACCOS have a role in rural financial marketing and outreach in Tanzania where their findings demonstrated that these institutions have become useful in increasing financial services specifically credits accessibility. In Uganda, Tache (2007) studied contributions of SACCOS to the rural peasants and the report showed that SACCOS has been playing creditable role in empowering peasants by giving them opportunity to make savings.

2.4.2 Local Evidence

Currently, Savings and Credit Co-operative Societies in Kenya are a leading source of the co-operative credit for socio-economic development. They have grown very rapidly in the last two decades in Kenya. This is as a result of provision of credit for a wide range of purposes and the relatively very easy and friendly loaning terms. The Savings and Credit Co-operative Societies have indeed suited different categories of savers such as women who are a representation of the disadvantaged group. Wanyama (2008) determines that cooperative financial institutions have spectacular importance in employment which is

important in improving living standards among low income earners and poor people in Kenya. Indeed most of these works focused on microfinance as a whole and much focus on SACCOs as an element within the study. Scholars globally continue to find out the consensus on the theory that saving through SACCOs has contributed greatly to property ownership and poverty reduction in Africa.

Ngumo (2012) in her study sought to determine the effect of interest rates on financial performance of SACCOs offering development loans in Kenya. The study established positive relationships between financial performance and the amount of development loans advanced. The study concluded that the amount of development loans advanced by SACCOs would lead to a growth in the real estate industry. The research identified these factors; value of property, government regulation, income level and interest rates do affect the availability and supply of real estate financing.

In his research about the supply of real estate finance, Muthungu (2012) found that there were revelations about the situation in the supply of real estate finance in Kenya. In lending, SACCOs give out development loans in consideration of interest to be charged on the loans and the riskiness of the loan. The study identified that the ability of SACCOs to lend for growth in the real estate industry determines the quantity of development loans that could be supplied for house acquisitions.

2.5 Summary of the Literature Review

The empirical studies clearly depicts that shortage of housing in urban centres, need for better housing and inability to access funds for real estate related developments are the major factors pushing the need for the alternative financing, Land and finance are major constrains to real estate development. The financing gap has therefore necessitated the

formation of society groups that members can contributed little by little for their own good a situation which is now spread globally different being the names of the very society groups. This study will further narrow its research undertakings to the gaps with an aim of gathering data that would help to come up with effective recommendations on Saccos development loans and growth of real estate.

The theories described are related and guides the argument of this study and also have shortcomings in some aspect. These theories are based on various assumptions which are necessary to understand on the diverse aspects of savings and credit cooperative society's development loans on real estate development. The most inclusive of these theories are social capital theory, loanable funds theory and neoclassical theory. The loanable funds theory includes many of the various factors that influence our real estate industry. Because of the variety of influences included in the theory, any failure can be attributed to imbalances in the equilibrium of savings and investment, money supply and demand, the supply of loanable funds, or net foreign demand and exports, social capital theory covers the importance of coming together of various groups with related interests to pool resources and invest through financial loan activity from the former social organization.

These theories summaries the individual groups aspiration and future expectations to asset ownership, how groups influence each other towards asset ownership and how these aspirations and influences translate to savings and later investment and property acquisition. The ideology of the movements present the images of a desirable society based on specified values and the ways to achieve them. There is also the action that is responsible for the mobilization and participation of the membership base. These hence providing the researcher an opportunity to cover the effects of Sacco's development loans on the growth of real estate industry in Kenya and address this existing gap.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research design and methodology that was used to carry out the research. It presents the research design, the population, sample size and sampling procedure, data collection and data analysis.

3.2 Research Design

Kothari (2004) defines research design as the arrangement of conditions for collection and analysis of data; in a manner that aims to combine relevance to the research purpose with economy in procedure. It is the conceptual structure in which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data. This study adopted descriptive research design which was concerned with determining the frequency with which something occurs or the relationship between variables (Bryman & Bell, 2003). The approach was appropriate for this study, since the study intended to collect detailed information through descriptions that would be useful establish the effects of SACCO development loan on development of real estate in Kenya.

3.3 Population of the Study

Schindlers (2003), described the target population as the complete set of individual's area of objects with some common characteristics to which the researcher wants to generalize the result of the study. This study population consisted of all 96 SACCO registered under the Sacco Societies Regulatory Authority (SASRA) in Kenya (SASRA, 2014). There was

no need for sampling since the number of Sacco was manageable. The list of the SACCOs was obtained from the SASRA regulation Authority.

3.4 Data Collection

Data collection is the process of gathering relevant information on the study problem (Kothari, 2003). The study used secondary data. Secondary data was collected from past data that had been previously collected and tabulated through use graphs, charts and reports and financial statements of Sacco's books to collect information on SACCO Development Loans granted.

Data on the real estate growth was obtained from publications by the CBK and World Bank, with particular reference to Real Estate Finance in Kenya: A Survey Analysis. This data reading included the annual real estate industry growth in Kenya at the beginning and the end of every year within the 5 year period between 2006 and 2010. This period was selected because it is when the data is available from CBK and World Bank.

3.5 Data Analysis

The data collected was checked for completeness and analyzed using the Statistical Package for Social Sciences (SPSS version 22) package and Microsoft Office Excel computer packages to generate quantitative reports, which were presented in the form of tabulations, mean and standard deviation.

3.5.1 Analytical Model

Multiple linear regression model was used in measuring each variable and this model helped in bringing out the effect of Sacco development loans on real estate development in Kenya. The regression model was of the form:

 $Y = \alpha + \beta 1X1 + \beta 2X2 + \beta 3X3 + \varepsilon$ Where,

Y= Growth of Real Estate Industry in Kenya as measured by Capital Property

Prices Indices (CPPI)

 α = Constant Term

 βi = Regression coefficients

 X_1 = Development loans granted by SACCOs as measured by Logarithm

 X_2 = Interest rate as measured by annual interest rate percentage

 X_3 = Population growth rate as measured by annual growth rate percentage

 $\varepsilon = \text{Random error term}$

3.5.2 Test of Significance

The study used Regression Analysis to establish the effects of SACCO development loans as the independent variable on the growth of real estate industry in Kenya as the dependent variable. The researcher used Analysis of Variance (ANOVA) as control variable. Furthermore, these SACCOs are considered as fast emerging financiers by the World Bank, because their asset sizes are over \$2 billion loan portfolio over the survey period. It should be noted that the equation is a population regression function, since the researcher carried out a census survey.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND INTERPRETATION

4.1 Introduction

This chapter presents the data analysis, interpretation, and discussion of the research findings. The study used the correlation analysis, data regression analysis and the Analysis of Variance (ANOVA) for inferential analysis.

4.2 Descriptive Statistics

This section presents the descriptive results where the measures of central tendency and trend analysis are presented.

4.2.1 Measures of Central Tendency

Results in table 4.1 indicate that the lowest number of real estate units developed by the firms was 6 while the maximum was 29. The average number of units developed throughout the years was 16.66. The analysis also show that the lowest percentage amount of Economic Health Situation experienced by the real estate firms was 0.30 and the highest percentage of Economic Health Situation effects on financing was 0.82. On average the percentage of Economic Health Situation effects on real estate firms through years; 2006 to 2010 was 0.63.

Interest rate incorporated for financing of real estate's indicated a minimum percentage of 0.05 and a maximum of 0.42. The average percentage amount of interest rate used for financing was at 0.186. Results indicate that 0.4 was the minimum percentage amount of Population growth rate in financing real estates and 0.53 was the maximum Population growth rate. The average presented a 0.123 for Population growth rate.

Table 4.1: Descriptive Statistics for Real Estate Financing

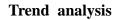
| Financing type | Minimum | Maximum | Mean | Std. Deviation |
|----------------------------------|---------|---------|---------|----------------|
| Real Estate development units | 6.00 | 29.00 | 16.6600 | 5.4360 |
| Economic Health Situation | 0.30 | 0.82 | 0.6380 | 0.0946 |
| Interest rate | 0.05 | 0.42 | 0.1867 | 0.0683 |
| Population growth rate | 0.40 | 0.53 | 0.1238 | 0.0793 |

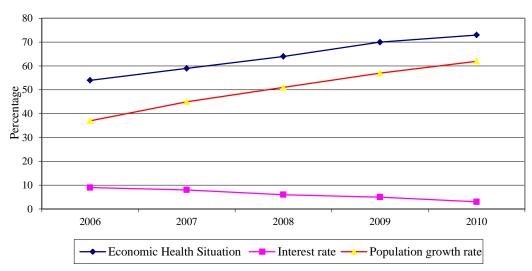
Source: Research Findings

4.2.2 Annual Trends of the Determinants of Growth in Real Estate

Figure 4.1 indicates that Economic Health Situation established that Saccos development loans granted for growth of real estate industry in Kenya have gradually increased from year 2006 to 2010. The increase may be explained by low interest rates charged and fair terms and conditions on borrowing. Results also indicate that trend in interest rate on Saccos development loans for growth of real estate industry in Kenya decreased during the period 2006-2010. Trend in Population growth rate as an effect on growth of real estate industry in Kenya revealed a gradual increase from year 2006 to 2010. This can be explained by the increase in number of residential units and growth of real estate industry.

Figure 4.1: Trend Analysis



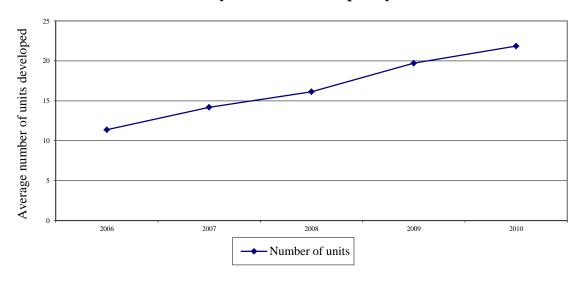


Source: Research Findings

The trend in units developed by real estate firms indicated an increase throughout the years; 2006 to 2010. This increase was as a result of rise in demand for housing which is triggered by changes in income level, consumer and investors preference.

Figure 4.2: Trend Analysis in Units Developed by Real Estate Firms

Trend analysis in units developed by real estate firms



Source: Research Findings

4.3 Inferential Statistics

The researcher used inferential statistics to infer from the sample data what the population represents. We used inferential statistics to make judgments of the probability that an observed difference is a dependable one or one that might have happened by chance in this study.

4.3.1 Regression Analysis

Regression analysis is a statistical tool for the investigation of relationships between variables. It seeks to ascertain the causal effect of one variable upon another and to further explore such issues and estimate the quantitative effect (AO Sykes, 2013).

It includes many techniques for modelling and analysing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables, in this study regression model was applied to determine the effect of Sacco development loans on real estate development in Kenya.

4.3.2 Correlation Analysis

The correlation coefficient which originated as imagination work of Sir Francis Galton is a measure of linear association between two variables. It is a measure of linear association between two variables. Values of the correlation coefficient are always between -1 and +1(Stanton, 2001).

A correlation coefficient of +1 indicates that two variables are perfectly related in a positive linear sense. A correlation coefficient of -1 indicates that two variables are perfectly related in a negative linear sense, and a correlation coefficient of 0 indicates that there is no linear relationship between the two variables.

4.3.3 Analysis of Variance (ANOVA)

Developed by Ronald Fisher in 1918, Analysis of Variance (ANOVA) is a statistical method used to test differences between two or more means. It is used to test general rather than specific differences among means. ANOVA assess the importance of one or more factors by comparing the response variable means at the different factor levels. ANOVAs assess the importance of one or more factors (Wright, 2006).

The null hypothesis states that all population means are equal while the alternative hypothesis states that at least one is different. The procedure works by comparing the variance between group means versus the variance within groups as a way of determining whether the groups are all part of one larger population or separate populations with different characteristics (Wilcox, 2005).

4.3.3 Model Results

A multiple linear regression model was applied to determine the effect of Sacco development loans on growth of real estate industry in Kenya. The regression model was as follows:

$$Y = \alpha + \beta 1X1 + \beta 2X2 + \beta 3X3 + \varepsilon$$

Where,

Y= Growth of Real Estate Industry in Kenya as measured by Capital Property

Prices Indices (CPPI)

 α = Constant Term

 $\beta i = Regression coefficients$

 X_1 = Development loans granted by SACCOs as measured by Logarithm

 X_2 = Interest rate as measured by percentage

 X_3 = Population growth rate as measured by percentage

$\varepsilon = \text{Random error term}$

This section presented the model results. Result in table 4.2 indicates that the goodness of fit of the model was adequate. This was reported by an r squared of 0.459 which means that 45.9% of the variation in real estate development was explained by Economic Health Situation, Interest rate and Population growth rate and were substantial to explain effects of Saccos development loans on growth of real estate industry in Kenya. This further implies that 54.1% of the variation in real estate development units is explained by other factors not captured in the model.

Table 4.2: Model Fitness

| Indicator | Coefficient |
|----------------------------|-------------|
| R | 0.610 |
| R Square | 0.459 |
| Adjusted R Square | 0.376 |
| Std. Error of the Estimate | 4.462 |

Source: Research Findings

An Analysis of Variance (ANOVA) results in table 4.3 indicates that the overall model was significant. This was supported by a p value of 0.000. The ANOVA results demonstrated that factors affecting the sources of financing that is Economic Health Situation, Interest rate and Population growth rate are good predictors of real estate units' development.

Table 4.3: Analysis of Variance (ANOVA)

| Indicator | Sum of | df | Mean | F | Sig |
|------------|---------|-----|--------|-------|------|
| | Squares | | Square | | |
| Regression | 1159.45 | 40 | 30.46 | 18.32 | 0.00 |
| Residual | 1915.21 | 100 | 19.21 | | 0.45 |
| Total | 3074.66 | | | | 4.46 |

Source: Research Findings P=0.000

Table 4.4 presents regression of coefficient results which indicates there was a positive relationship between SACCOs development loans financing and real estate units' development. The results also indicate the relationship was significant since the reported p value 0.009 was less that the critical value of 0.05. Results further indicate that all the other sources of finance had an insignificant effect on real estate development.

Table 4.4: Regression Coefficients

| Variable | Beta | Std. Error | t | Sig |
|---------------------------------|--------|---------------|-------|-------|
| Constant | 27.456 | 21.41 | 23.41 | 0.214 |
| Economic Health Situation | 55.98 | 21.108 | 26.54 | 0.009 |
| Interest rate | 21.195 | 22.311 | 9.50 | 0.344 |
| Population growth rate | 26.321 | 22.456 | 11.81 | 0.461 |

 $Y = 27.456 + 55.98X1 + 21.195X2 + 26.321X3 + \epsilon$ P=0.000

Source: Research Findings

4.4 Interpretation of the Findings

The minimum number of units that were developed by the real estate firms were 6 while the maximum number of units developed were 29. The overall mean number of real estate units' development was 16.66. The results also showed that there was a positive trend in the number of units presented. This was as a result of increase in urbanization which results to the rise in demand of housing and commercial buildings. The rise in

demand of residential and commercial housing supports structural form theory developed by Pottow (2007) which explains the steps to be taken by firms to address housing needs to the extent of their affordability. Rise in urbanization results to building of more residential and commercial facilities by real estate firms to take advantage of the increasing markets. Therefore real estate companies take in account the source of financing that will yield more units development throughout the years.

Results indicated that the real estate development has a minimum of 0.30 and a maximum of 0.82 effect by Economic Health Situation. On average, the mean number of Economic Health Situation effect real estate firms was 0.6. Economic Health Situation had an effect on Saccos development loans hence growth of real estate industry in Kenya. Real estate investments are related to the general economic activity and prosperity of a country. Wheaton's model 1992 argues that productive economy positively affects demand for real estate assets. Chin et al., (2006) from their survey concluded that the sound economic structure and expected strong stable economy are perceived to be the most significant factors in the country's ability to attract foreign real estate investment. Chen and Hobbs (2003) found out that the size of a countries economy positively affects investment activity since large economies are usually more capable of withstanding external economic turbulence and are thus more stable than smaller economies.

Interest rate as a factor of financing was represented by a maximum percentage of 0.42 and a mean percentage of 0.18. There was decrease in interest rates between the years 2006-2010. Interest rates have a major impact on the real estate markets. Changes in interest rates can greatly influence a person's ability to purchase a residential property. That is because as the interest rates rise, the cost to obtain a loan to buy a home and

acquire property increases, which creates a lower demand for real estate by pushing prices up. Conversely, as interest rates falls, the cost to obtain a loan decreases, thus increasing demand and prices of real estate. The findings are in line with Lazard Asset Management, (2014) who contend that commercial real estate assets are typically traded based on their investment yield, better known as the capitalization rate. Investors tend to take a simplistic view that if interest rates rise, valuations must decrease in order for the property to maintain a similarly competitive yield. Factors such as future cash flows, earnings growth, and economic health have proven to be more relevant predictors of property values. In fact, higher rates are usually the result of an improving economy.

The minimum percentage of Population growth rate was 0.40 while the maximum was 0.53 with an overall mean of 0.1238 and an average risk (standard deviation of 0.04). This means that the effect of Population growth rate on real estate industry in Kenya does not deviate much from the average. From the trends it is also evident that Population growth rate as a determinant of growth in the real estate industry in Kenya gradually increases throughout the years. This was because tracking the trends in population growth and population movement can provide an accurate prediction of which neighbourhoods are likely to increase and which ones are doomed to at decrease. Demographic factors are responsible for driving the real estate and housing price in the local market. Price level affects local housing and property affordability by income groups. Idrus and Ho (2008) demonstrated that demographic factors are important variables for housing price determination in the long term. Affordability remains a major concern due to high prices of existing properties and the lack of supply of affordable and well located properties within urban centre, a situation which is common in Kenya.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

This study aimed to at determining the effects of Saccos development loans on growth of real estate industry in Kenya. The researcher reviewed previous studies with a view to establish academic gaps which the present study sought to bridge. This was done through library research. The procedure included: reading, evaluating the methodology employed in terms of design choice, target population, data collection instruments (that is suitability, validity and reliability), data collection procedures, data analysis, findings and recommendations. The researcher benefited so much from the literature review for it guided the present study by pointing to areas that needed to be investigated.

This study employed quantitative research as the main approach to guide the study. This study population consisted of all 96 SACCO registered under the Sacco Societies Regulatory Authority (SASRA) in Kenya (SASRA, 2014). The study employed the use of secondary data which was collected from past data that had been previously collected and tabulated through use graphs, charts and reports and financial statements of Sacco Societies Regulatory Authority (SASRA) in Kenya (SASRA, 2014). Data on the real estate growth was obtained from publications by the CBK and World Bank, with particular reference to Real Estate Finance in Kenya: A Survey Analysis. This data reading included the annual real estate industry growth in Kenya at the beginning and the end of every year within the 5 year period between 2006 and 2010. This period was selected because it is when the data is available from CBK and World Bank.

The data collected was checked for completeness and analysed using the Statistical Package for Social Sciences (SPSS version 22) package and Microsoft Office Excel computer packages to generate quantitative reports, which were presented in the form of tabulations, mean and standard deviation.

Regression analysis was carried out to determine the relationship between the different determinants of real estate growth in Kenya. Results indicated that there is a positive relationship between Economic Health Situation and real estate units' development. The relationship was also significant as Economic Health Situation was significant in explaining real estate development in Kenya as the reported p value of 0.009 is lower than the critical value of 0.05.

Results also indicate that the goodness of fit was adequate as it reported an r squared of 0.459 which means that 45.9% of the variations in real estate development units was explained by variables that such as Economic Health Situation, Interest rate, and Population growth rate which were substantial to explain the effect of SACCOs development loans on growth of real estate industry in Kenya. An Analysis of Variance (ANOVA) indicated that the overall model was significant. This was supported by a p value of 0.000. The ANOVA results demonstrated that the determinants of real estate growth in Kenya that is Economic Health Situation, Interest rate and Population growth rate are good predictors of real estate units' development.

5.2 Conclusions

Based on the findings of the study, the following main conclusions were made with inference to effects of Saccos development loans on growth of real estate industry in Kenya. The study concluded that Economic Health Situation in the years 2006 to 2010 gradually increased. Real estate investments are related to the general economic activity and prosperity of a country. Wheaton's model (1992) argues that productive economy positively affects demand for real estate assets. Chin et al (2006) from their survey concluded that the sound economic structure and expected strong stable economy are perceived to be the most significant factors in the country's ability to attract foreign real estate investment. Chen and Hobbs (2003) found out that the size of a countries economy positively affects investment activity since large economies are usually more capable of withstanding external economic turbulence and are thus more stable than smaller economies. From the various advantages listed on Economic Health Situation, it was then prudent to conclude from the study that Economic Health Situation was a very important factor on Growth in the Real Estate Industry in Kenya.

It was also possible to conclude that interest rates contributed the largest percentage factor in sourcing SACCOs development loans. The advantage of using SACCOs development loans with lower interest rates had a major impact on the real estate markets. Changes in interest rates greatly influenced a person's ability to purchase a residential property. That was because as the interest rates rose, the cost of obtaining a loan to buy a home and acquire property increases, which creates a lower demand for real estate by pushing prices up. Conversely, as interest rates falls, the cost to obtain a loan decreases, thus increasing demand and prices of real estate (Nguyen, 2011).

Population growth rate as a determinant of growth in the real estate industry in Kenya gradually increases throughout the years. This was because tracking the trends in population growth and population movement can provide an accurate prediction of which neighbourhoods are likely to increase and which ones are doomed to at decrease. Demographic factors are responsible for driving the real estate and housing price in the local market. Price level affects local housing and property affordability by income groups. Idrus and Ho (2008) demonstrated that demographic factors are important variables for housing price determination in the long term. Affordability remains a major concern due to high prices of existing properties and the lack of supply of affordable and well located properties within urban centre, a situation which is common in Kenya.

5.3 Recommendations for Policy and Practice

On the basis of the above, conclusions, the following recommendations were made regarding effects of Saccos development loans on growth of real estate industry in Kenya. The Saccos should have reduce interest rates; variety of products; customize loans; have product diversity; SACCO Societies Regulatory Authority (SASRA) to intervene; increase repayment period; educate customers on products and market loan products. The government should introduce government subsidies through SACCO Societies Regulatory Authority (SASRA).

The study recommends SACCOs to be the best alternative source of growth of real estate in Kenya, the Sacco's should consider; increasing loan repayment period; increasing the amount borrowed; reducing the interest rate to below 10%; improving on the loan products; eliminating need for guarantors; marketing the products offered to create awareness; managing the Saccos' better; embracing electronic transactions and modern

technology; open membership; reduction in waiting period; use of other securities; diversifying the products offered; and increasing the repayment period.

The study further recommends that it is very important for a Sacco's to understand and relate to customers care services and levels of customer satisfaction. This would enable the Sacco's to adjust and understand better how their member's rank them in order of various products offered. Again it will help the SACCOs understand customer's degree or various levels of satisfaction shown to different products and services that the Sacco industry provides.

5.4 Limitation of the Study

The researcher encountered various limitations that may have affected the findings of this study. For instance, the study relied on secondary data sources. Secondary data can, however, be unreliable as they are intended for other purposes. This could include convincing external stakeholders that the business performs well when it does not. To curb this, the study sought audited financial results of the banks to collect data on SACCO development loans and used it as a controlling variable.

The study took a census of very many real estate firms and saccos groups which took a very long time to gather all information. Taking in consideration the large number of firms in question, the researcher faced a huge financial problem. Further, other factors affected the free sharing of real estate development and growth such as firm's internal constitution, the real estate investments like regulation and political environment.

Due to limited dataset, a cross sectional data analysis was done giving a generalized view of the relation. In addition, not all SACCOs were examined as intended due to non-availability of relevant information, for instance Airports Sacco Society Limited and Mentor Group Limited who did not participate continuously in all the years of the study period. For example Siraji Sacco Society Limited, this was registered with SACCO Societies Regulatory Authority (SASRA) after the study period.

5.5 Suggestions for Further Research

This study sought to establish the effects of Saccos development loans on growth of real estate industry in Kenya attempting to bridge the gap in knowledge that existed. Although the study attained these, it mainly focused on one source of financing for real estate only. Therefore, there is need to conduct a similar study which will attempt to find out the other sources of financing real estate firms in Kenya. Further studies should also include the effects of sources of financing in unsuitable economic conditions, political instability and a global economic crisis. This study will establish decisions on the best methods to source finances during such times. Studies can also be done on corporate bonds to assess whether it is a reliable source of financing for real estate's or other companies in Kenya.

This study applied in the period between 2006 and 2010 because it is within this period that the SACCOs development loans size data of the commercial banks was available. CBK in the near future release the data to include subsequent years up to 2013 and it would be interesting to do another research to cover eight years. This will help in determining whether the findings would still remain the same or would change.

REFERENCES

- Anayochukwu, O. B. (2011). Urban Housing Financing in the South- Eastern States of Nigeria: Problems and Prospects. *Journal Sustainable Development in Africa*, 258-282.
- Anderson, C. L., Locker, L. & Nugent, R. (2002). Microcredit, social capital and common pool resources. *Journal World Development Research Observer*, 101-119.
- Adeyemi, B. (2011). Bank Failure in Nigeria: A Consequence of Capital Inadequacy, Lack of Transparency and Non-Performing Loans. Banks and Bank System, 6 (1), 99-109.
- Adebayo, S. T., Chinedum, O. H., Dabo, C. S. P. and Pascal, H. (2010). Cooperative Association as a Tool for Rural Development and Poverty Reduction in Rwanda: A Study of Abahuzamugambibakawa in Maraba Sector. *Educational Research*, 1 (11), 600-608.
- Adedayo, A. and Yusuf, O. R. (2004). *Cooperatives and Poverty Alleviation in Rural Settlements of Kwara State*, Nigeria. *Savanna*, 4(2), 120-130.
- Beverly, S., Sherraden, M., Zhan, M., Shanks, T. R. W, Nam, Y., & Cramer, R. (2008). Determinants of asset building: Poor finances. *Assets and Low-Income Households*, 7(3), 83-89.
- Cooper, R. D. & Schindler, P. (2003). *Business Research Methods*. (3rd Ed.) New York: McGraw- Hill, 18-24
- Dung-Gwom, J.Y. and Mallo, D.M. (2015). An Appraisal of the challenges of accessing credit for home acquisition by Low income earners in Nigeria, 41-57.
- Evans A. C. (2001). Strengthening Credit Unions in Sri Lanka. WI, USA: Madison.
- Gijselinckx, C. & Develtere, P. (2007). *The co-operative trilemma. Cooperatives between market, state and the civil society*, Leuven, Belgium. Research Paper, Catholis University, 121-147.

- Huppi, M. & Feder, G. (1990). The Role of Groups and Credit Cooperatives in Rural Lending. *The World Bank Research Observer* 5(2), 180-204.
- Idrus, N. & Ho C. S. (2008). Affordable and Quality Housing Through The Low cost Housing Provision in Malaysia. Johor: Department of Town & Regional Planning, Faculty of Built Environment, Universiti Teknologi Malaysia.
- Jainaba, M. L., Dana, L. & Muhammadou, M. O. (2005). Microcredit, social capital and politics. *Journal of Microfinance*, 120-150
- Kabir, I. & Ikem, M. (2013). Availability of Housing Financing Funds for private Estate developers in Abuja, Nigeria. A paper presented at the Sustainable Building Conference 2013 organized by Coventry University, Coventry, UK.
- Kothari, C.R. (2003). Research methodology: *Methods & techniques*. (1st Ed.) New Delhi, *New Age International Publishers*, 4 (2), 57-64
- Lombe, M., & Sherraden, M. (2007). Effects of participating in an asset-building intervention on social inclusion. Boston, USA. *Centre for Social Development Working Paper*, 7(3), 123-131
- Larocque, P., Kalala, J. & Gaboury, A. (2002). *The Impact of Savings and Credit Cooperatives in Burkina Faso*. Ottawa: Development International Desjardins 2 (3), 13-31.
- Martin, L., Menold M. M. & Donnelly S. L. (2001). Analysis of customer disequilibrium preferences. Ravan SA. *Effects of promoting longer-term financing*, 9 (6), 43-48.
- Misra. S. K. Puri V. K. (2008). *Indian Economy*. (26th Ed.). New Delhi: Himalya Publishing House.
- Munyiri, C. (2006). Study visit on the role of women in development of microfinance in Africa. Unpublished MBA project. Nairobi: University of Nairobi.
- Ojo. O. and Ighalo, J. I. (2008). Factors Affecting Borrowers Choice of Housing Loan Package in South western Nigeria. *Housing Finance International*, 4, (5), 85-103.

- Ofei, K.A. (2001). Retooling credit unions: The case of credit union association of Ghana. IFLIP research Paper. Legon: International Labour Organization, University of Ghana.
- Oke, J. T. O., Adeyemo, R. and Agbonlahor, M. (2007). An Empirical Analysis of Microcredit Repayment in South Western Nigeria. *Humanity and Social Sciences Journal*, 2(1), 60-74.
- Robertson, D. H. (1934). Industrial Fluctuation and the Natural Rate of Interest. *The Economic Journal*, 44-61
- Sizya, M. J. (2001). *The Role Cooperatives Play in Poverty Reduction in Tanzania*. Paper Presented at the United Nations International Day for the Eradication of Poverty
- Tache, G. M. (2007). Farmers empowering themselves saving together. United States Agency for International Development.
- Temu, S.S., & Ishengoma, E. K. (2010). Financial linkages and performance of rural microfinance cooperatives: Tanzanian case. *Indian Journal of Economics and Business*, 26-39
- Randhawa, G. (2012). Foreign aids in economic development. International Journal for *Computing & Business Research*, 17-24.
- Wanyama, F. O., Develtere, P. and Pollet, I. (2008). Encountering Evidence: Cooperatives and Poverty Reduction in Africa. WP-SCE 08-02, Working Papers on Social and Co-operative Entrepreneurship, 5 (2), 160-185.
- World Bank (1998). The initiative on defining, monitoring and measuring social capital:

 Overview and program description. *Social Capital Initiative Working Paper*, 152-179.

Appendix I: List of Savings and Credit Cooperative Societies Involved in the Real Estate Industry in Kenya as at 2014

- 1. Afya Sacco Society Limited
- 2. Airports Sacco Society Limited
- 3. Asili Sacco Society Limited
- 4. Bandari Sacco Society Limited
- 5. Baraka Sacco Society Limited
- 6. Baringo Farmers Sacco Society Limited
- 7. Baringo Teachers Sacco Society Limited
- 8. Biashara Sacco Society Limited
- 9. Bingwa Sacco Society Limited
- 10. Borabu Sacco Society Limited
- 11. Bungoma Teachers Sacco Society Limited
- 12. Bureti Sacco Society Limited
- 13. Chai Sacco Society Limited
- 14. Chemelil Sacco Society Limited
- 15. Chepsol Sacco Society Limited
- 16. Chuna Sacco Society Limited
- 17. Comoco Sacco Society Limited
- 18. Daima Sacco Society Limited
- 19. Diocese Of Meru Sacco Society Limited
- 20. Embu Teachers Sacco Society Limited
- 21. Fariji Sacco Society Limited
- 22. Githunguri Dairy & Community Sacco Society Limited
- 23. Gusii Mwalimu Sacco Society Limited
- 24. Harambee Sacco Society Limited
- 25. Irianyi Tea Sacco Society Limited
- 26. Jamii Sacco Society Limited
- 27. Kakamega Teachers Sacco Society Limited
- 28. Keiyo Teachers Sacco Society Limited
- 29. Kenpipe Sacco Society Limited
- 30. Kenya Canners Sacco Society Limited
- 31. Kenya Highlands Sacco Society Limited
- 32. Kenya Police Staff Sacco Society Limited
- 33. Kiambaa Dairy Rural Sacco Society Limited
- 34. Kilifi Teachers Sacco Society Limited
- 35. Kingdom Sacco Society Limited
- 36. Kipsigis Teachers Sacco Society Limited
- 37. Kite Sacco Society Limited

- 38. Kitui Teachers Sacco Society Limited
- 39. Kmfri Sacco Society Limited
- 40. Konoin Sacco Society Limited
- 41. K-Unity Sacco Society Limited
- 42. Kuria Teachers Sacco Society Limited
- 43. Magadi Sacco Society Limited
- 44. Mathira Farmers Sacco Society Limited
- 45. Maua Methodist Hospital Sacco Limited
- 46. Meru Mwalimu Sacco Society Limited
- 47. Meru North Farmers Sacco Society Limited
- 48. Meru South Farmers Sacco Society Limited
- 49. Metropolitan Teachers Sacco Society Limited
- 50. Mombasa Port Sacco Society Limited
- 51. Mombasa Teachers Sacco Society Limited
- 52. Muhigia Sacco Society Limited
- 53. Mumias Outgrowers Sacco Society Limited
- 54. Muramati Sacco Society Limited
- 55. Murang'a Teachers Society Limited
- 56. Murata Sacco Society Limited
- 57. Mwalimu National Sacco Society Limited
- 58. Mwito Sacco Society Limited
- 59. Nacico Sacco Society Limited
- 60. Naku Sacco Society Limited
- 61. Nakuru Teachers Sacco Society Limited
- 62. Nandi Hekima Sacco Society Limited
- 63. Narok Teachers Sacco Society Limited
- 64. Nation Staff Sacco Society Limited
- 65. Ndege Chai Sacco Society Limited
- 66. Ndosha Sacco Society Limited
- 67. Nithi Tea Growers Sacco Society Limited
- 68. Nyambene Arimi Sacco Society Limited
- 69. Nyamira Tea Farmers Sacco Society Limited
- 70. Nyandarua Teachers Sacco Society Limited
- 71. Nyeri Teachers Sacco Society Limited
- 72. Orthodox Development Sacco Society Limited
- 73. Safaricom Sacco Society Limited
- 74. Sheria Sacco Society Limited
- 75. Siaya Teachers Sacco Society Limited
- 76. Simba Chai Sacco Society Limited
- 77. Siraji Sacco Society Limited

- 78. Sot Tea Growers Sacco Society Limited
- 79. South Imenti Tea Growers Sacco Society Limited
- 80. Stima Sacco Society Limited
- 81. Tai Sacco Society Limited
- 82. Taifa Sacco Society Limited
- 83. Tenhos Sacco Society Limited
- 84. Tharaka Nithi Teachers Sacco Society Limited
- 85. Thika District Teachers Sacco Society Limited.
- 86. Trans-Nzoia Teachers Sacco Society Limited
- 87. U.N. Sacco Society Limited
- 88. Ukulima Sacco Society Limited
- 89. Universal Traders Sacco Society Limited
- 90. Wakenya Pamoja Sacco Society Limited
- 91. Wakulima Dairy Sacco Society Limited
- 92. Wana-Anga Sacco Society Limited
- 93. Wananchi Sacco Society Limited
- 94. Wanandege Sacco Society Limited
- 95. Wareng Teachers Sacco Society Limited
- 96. Waumini Sacco Society Limited

Source: Sacco Societies Regulatory Authority Financial and Economic Report (SASRA, 2014).

Appendix II: List of Real Estate Firms in Kenya as at 2014

- 1. Active Homes
- 2. Afriland Agencies
- 3. Ark Consultants Lt
- 4. Barloworld Logistics (Kenya) Ltd
- 5. Betterdayz Estates
- 6. British American Asset Managers
- 7. Canaan Properties
- 8. Capital City Limited
- 9. CB Richard Ellis
- 10. Colburns Holdings Ltd
- 11. Coral Property Consultants Ltd
- 12. Country Homes and Properties
- 13. Crown Homes Management
- 14. Crystal Valuers Limited
- 15. Daykio Plantations Limited
- 16. Double K Information Agents
- 17. Dream Properties
- 18. Dunhlill Consulting Ltd
- 19. East Gate Apartments Limited
- 20. East Gate Apartments Limited
- 21. Ebony Estates Limited
- 22. Economic Housing Group
- 23. Elgeyo Gardens Limited
- 24. Fairway Realtors And Precision Valuers
- 25. FriYads Real Estate
- 26. Gimco Limited
- 27. Greenspan Housing
- 28. Hajar Services Limited
- 29. Halifax Estate Agency Ltd.
- 30. Hass Consult
- 31. Hewton Limited
- 32. Homes and lifestyles
- 33. Housing Finance
- 34. Jimly Properties Ltd
- 35. Jogoo Road Properties
- 36. Josekinyaga Enterprises Ltd
- 37. Josmarg Agencies
- 38. Karengata Property Managers

- 39. Kenya Prime Properties Ltd
- 40. Kenya Property Point
- 41. Kilifi Konnection
- 42. Kiragu & Mwangi Limited
- 43. Kitengela Properties Limited
- 44. Knight Frank Limited
- 45. Kusyombunguo Lukenya
- 46. Land & Homes
- 47. Langata Link Estate Agents
- 48. Langata Link Ltd
- 49. Lantana Homes
- 50. Legend Management Ltd
- 51. Lloyd Masika Limited
- 52. Mamuka Valuers (M) Ltd
- 53. Mark Properties Ltd.
- 54. Market Power Limited
- 55. Mentor Group Ltd
- 56. Merlik Agencies
- 57. Metrocosmo Ltd
- 58. Mombasa Beach Apartments
- 59. Monako Investment Ltd
- 60. Muigai Commercial Agencies Ltd.
- 61. Myspace Properties (K) Ltd.
- 62. N W Realite Ltd
- 63. Nairobi Real Estates
- 64. Neptune Shelters Ltd
- 65. Oldman Properties Ltd
- 66. Oloip Properties
- 67. Ounga Commercial Agencies
- 68. Raju Estate Agency Limited (REAL)
- 69. Tysons Limited

Source: Property and Real Estate Agents Kenya Fiscal Report as at 2014.

Appendix III: Actual Prices of Real Estate Units sold

| YEAR | Value of real estate for sale asking prices (Ksh) |
|------|---|
| | |
| 2006 | 11,569,153 |
| | |
| 2007 | 12,875,039 |
| | |
| 2008 | 14,892,007 |
| | |
| 2009 | 18,003,710 |
| | |
| 2010 | 19,672,606 |

Source: Hass Consult as at 2014.