CHALLENGES IN THE UPTAKE OF PENSION BACKED HOME LOANS FOR PUBLIC SECTOR EMPLOYEES IN KENYA

MUCHIRA MICHAEL MWANGI

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DECLARATION

STUDENT
I, the undersigned, declare that this is my personal work and has not been submitted to any other institution of higher learning for any award

Signed: …………………………… Date: ……………………………

Michael Mwangi Muchira

Reg. No: B92/72401/2008

SUPERVISOR

This research project has been submitted for examinations under my approval as the University supervisor.

Prof Paul Syagga Signed: ……………………… Date: ………………………

School of The Built Environment, University of Nairobi
ABSTRACT

Housing has become the defining issue in any government because it is at the heart of current world economic crisis. The provision of affordable housing characterizes economic and political ingenuity. It is of greater political consequences than most other areas of government policies. Kenya recognizes housing as one of its key component in social sector pillar under vision 2030. The Kenyan Constitution (2010) under bills of right provides for the right of every person to accessible and adequate housing. The aim of this study was to assess the challenges affecting the uptake of pension-backed home loans in Kenya with a view to developing a working pension scheme system that caters for the high uptake of home loans in Kenya. The study adopted a mixed approach (questionnaires and interviews); the choice of this approach was informed by the nature of data as the expected data was both numerical and descriptive that justified the choice of the research strategies. The findings of this study revealed that existing pension backed home loan has failed to meet the needs of the public sector employees. As a result, the uptake of the pension backed home loan is quite low (World Bank, 2011), even with allowing of the members to use 60 % for the accumulated benefits as the security, though, it is envisioned to increase with the systems approach provided in this study. Key components of the existing pension backed home loan as a system have been identified in both the literature review and the primary findings and include: housing inputs such as actors, innovative products, interest rates, RBA regulations, availability of land and provision of long-term funds; the process elements such as Construction, execution, planning, financing; external environment (Formal and informal institutions, economic (interest rates), social institutions (create awareness), enabling legal framework) and feedback (Customer expectations, policy interventions) (Ochieng, 2018; Table 4.6). The study has established that in order to address the challenges of low uptake of pension-backed home loan, it is important to create awareness, provide long term funds to meet housing demand, offer incentives to acquire land and improve socio-economic welfare of the members since lack of these came out as the most significant challenges in the low uptake of pension backed home loan study (Table 4.5). The study recommends that the state as the major stakeholder need to transform existing pension backed home loan system to a functional system. This would be in form of input, process elements, external environment, output, and the feedback control. Further reforms in existing statutes that relate to housing provision would be key to boost housing supply and demand. For instance, the regulations could be amended so as to allow the members to assign the 60 % of the savings as the security to buy land in either the rural or urban areas. This has not been explicitly addressed in the current regulations. Further, the review of the Central Bank Act would improve mortgage availability and enhance the capacity of the mortgage market.
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CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Globally, many countries have experienced rapid growth in the pension home-backed loans, given that any citizen in every part of the world has a right to housing (Central Bank & World Bank, 2010). In a World Bank (2011) reports further that the growth in institutions is a critical area that has been considered in most countries across the world due to the sensitivity of the transactions for the pensions. Pension funds act as a stimulus of the capital markets in which they exist through the financial intermediation. The importance of pension funds have further been defined by the World Bank and became a major focus since they are an essential part of the social safety for workers who are covered by a formal pension system. Leong (2014) argues that while pension funds influence long-term investment through investment funds, they have faced various challenges on their developments across the world.

According to the World Bank (2011) report, in the developed countries, even under the favorable conditions, delivery of enough benefits for the pension backed home loans to acceptable levels face a number of risks on institutional or systematic. Some of the challenges for instance, the capacity of the financial markets to create sustained returns on the large scale, impact of administrative costs on the returns, global diversification of the portfolio as well as impact of aging on the investment returns have been explicitly discussed by the World Bank ensures efficient delivery of pension in the developed countries.

To fulfill the agenda for the World Bank, majority of the countries around the world recognize the need to develop a functional pension system to facilitate poverty eradication and ensure that people have better access to quality and insurance products. In the United States, for instance, pension backed home loan challenges were accentuated through the conditions set by the economic transitions such as a virtual absence of the financial market institutions in the 1990s, the banking and the financial crises, and demographic changes that have exacerbated through the net emigration in the recent
years (UN Habitat, 2016). In the UK, integration of Central, Eastern and Southern Europe (CESE) to the global economy means that the development of a fully functional financial market could still take time and the political will for crafting the implementation of any relevant reforms (Durrheim & Painter, 2006).

In South Africa, it uses pension backed home loan as a way of improving projects rather than to acquire new homes (Ling 2009). The Pension Fund Act No 24 of 1956 (n.d), meant that the country allows the retirement fund that offers direct loans to the members. This means that the challenges associated with the pension backed home loans are the pay as you go that is characterized by risk for the plan sponsors (government), who are denied an opportunity to grow through diversification of the risks as well as investing savings in the emerging financial sectors.

In contrast, Kenya, the Retirement Benefits Mortgage regulations (2009), allows its members to be able to attach the percentage of the benefits to acquire property or erect a house on an immovable property. Further, the National Social Security Fund (NSSF) which came into place in 1965, Act of Parliament Cap 258 of the Kenyan laws, helps to administer all the funds for Kenyan employees (Cited in the Centre for Affordable Housing in Finance n.d). Its aim is to encourage retirement savings. With the government of Kenya relaxing the pension funds rules in 2009, which allowed the worker to borrow house loans secured by the retirement savings, the uptake of pension-backed home loans is still low due to the likely challenges the sector faces.

1.2 Problem statement

Housing has become the defining issue in any government because it is at the heart of current world economic crisis. The provision of affordable housing characterizes economic and political ingenuity. It is of greater political consequences than most other areas of government policies. Kenya recognizes housing as one of its key component in social sector pillar under vision 2030. The Kenyan Constitution (2010) under bills of right provides for the right of every person to accessible and adequate housing.
It is in this regard, Kenya has made significant efforts and developing policies and regulations that are geared towards housing for all of its citizens. Housing is one of the “Big Four Agenda”, which seeks to come up with affordable housing in the country. The Constitution of Kenya focuses on the right of the citizens to be offered housing by the government. Chapter 4 under Article 43, sub-article 1 (a) assures all Kenyans the economic and social rights by stating that “each person has the right to access adequate housing and in reasonable standards of sanitation”. In line with this, in the next five years, the government plans to build more than 500,000 houses all over the country so as to cater for the growing demand. In order to achieve this, the Finance Bill (2018), established the National Social Housing Development Fund so as to augment existing financing mechanisms to spur economic activities within the housing sector and to offer more alternative financing strategies to improve investment in the low cost housing.

Nonetheless, came up with the pension scheme in 2009, this was after amendment of section 38 under the Retirement Benefit Authority Act, cap 197 of 1997. This gave the members a chance to attach up to 60% of the benefits as a security to get mortgage from financial institutions (GoK, 2013). However, there has remained high demand for housing in the country and the uptake of pension backed mortgages in Kenya has remained rather slow. These has been attributed to limited supply of housing units, high mortgage rates, undeveloped mortgage finance, lack of land and lack of appropriate policy for housing to meet the needs for the public sector employees (Centre for Affordable Housing Finance in Africa, 2012).

Since the introduction of pension backed home loan into the mortgage industry only 2,440 (0.06%) out of 406,623 pension members have taken up the opportunity (RBA, 2016). The members have been reluctant in the uptake of the facility. In a World Bank report, about Kenya’s mortgage market (World Bank, 2011), it was recommended that the need to review further on the products as well as a regulatory framework to control future crisis in case the lenders began losing the retirement income. Therefore, the right policies and legal framework could be key drivers in the “Big Four Agenda”, housing forms a major pillar of the agenda. It is for these reasons that this study sought to
examine the challenges in the slow uptake of pension backed home loan among the public sector employees in Kenya.

A number of studies in developed countries seek to realize an efficient mortgage market (Leong, 2014; Hausler, 2002; Flick, 2002). Every nation has developed its destiny. For instance, the U.S and the UK, until the recent years, most of the loans to improve homes were facilitated by the deposits in the institutions for instance the commercial banks U.S and also use of Building Societies for the UK (World Bank, 2015). Sharing of risks is based on the nature of the mortgage instrument. However, critics argue that in order for every member to have access to the housing, the existing pension system need to be reviewed so as to address the challenges associated with low uptake of pension-backed home loans (Ling, 2009).

Housing experts contend that delivery of pension backed home loan is a system that constitutes a number of components. Theorieen overzicht (2014) state that systems have a number of components that include the objects, external environment, input, output processing and feedback. The improved uptake of pension backed home loan has similar components which can be categorized into the same grouping. Therefore, as per the systems approach, the challenges of low uptake of pension backed home loan in Kenya can hence be viewed as an open system that has failed to work with each other in a collaborative manner so as to achieve a common goal (provide housing for public sector employees). Feedback mechanisms are required to offer policy interventions needed to address the challenges of pension backed home loan and cater for the high demand in housing.

Therefore, because of systems failure in the pension backed home loan, Kenya is still far from meeting the high demand of housing through pension backed home loans. In a report by the Daily Nation (2018), it shows that calls have been made in order to unlock pension fund capital in Kenya to address housing shortage and drive social and economic growth, but none has talked about the need to review the pension backed home loan as a system which is supposed to work with other components at all levels to provide the
housing need for the public sector employees. Therefore, this study examined the extent in which Kenya has adopted the systems approach in the pension backed home loan with the view to assessing the challenges in the uptake of pension backed home loans in the country and providing solutions to the working pension scheme system to cater for the high demand for housing in the country.

1.3 Hypothesis

The following hypotheses were tested following the review of literature:

H0 – There is no relationship between provision for long term funds and low uptake of pension backed home loan

H1 - There is a relationship between provision for long term funds and low uptake of pension backed home loan

H0 – There is no relationship between household income and low uptake of pension backed home loan

H1 - There is a relationship between household income and low uptake of pension backed home loan

1.4 Aims and objectives

This study sought to assess the challenges affecting the uptake of pension-backed home loans in Kenya with a view to developing a working pension scheme system that caters for the high uptake of home loans in Kenya. Specifically, it sought to address the following objectives:

i. To examine pension backed home loan to understand its advantages and disadvantages with a view to understanding its role in meeting housing demand

ii. To determine the extent of the uptake of pension backed home loan system in addressing acquisition of housing.

iii. To assess the challenges of existing pension backed home loan system in addressing acquisition of housing
iv. To determine how best to address the challenges associated with the existing pension scheme within the context of a systems approach to improve uptake of pension-backed home loans.

1.5 Research questions

i. What are the advantages and disadvantages of the pension-backed home loan in meeting the housing demand?

1. What is the extent of uptake of pension backed home loan system in addressing acquisition of housing?

ii. What are the challenges of existing pension backed home loan system in addressing acquisition of housing?

iii. How can the challenges associated with existing pension scheme be addressed within the context of the systems approach so as to improve uptake of pension-backed home loans?

1.6 Significance of the study

In addressing the challenges in the uptake of the pension-backed home loan, the findings of this study are essential in coming up with the right system of housing which meets the demand for housing among the public sector employees in Kenya. Indeed, this could be in line to the “Big Four Agenda” that seeks to build more than 500,000 houses in the next 5 years. In addition, this would be significant to the policymakers in the long-term financing of the demand for housing in the public sector, whose proportion is 32.4 % as of 2016 Kenya National Bureau of Statistics Report. In addition, this study contributes to the growing debate about the definition of appropriate policy and legal framework direction of the high demand for housing for the members of the retirement benefit authority.

Lastly, most of the public sector employees have not been able to access adequate housing and there are limited investigations in this area to examine how this situation can be improved through the systems approach. Since the pension backed home loans were
introduced in 2009, there have been misconceptions that the 60% of the person’s accumulated pension benefits could be released towards buying a home or land and this can be attributed to systems failure to provide adequate information and awareness on this scheme. The proposed study is hence a pioneering work in this area and contributes towards filling the existing gaps on the challenges in the uptake of the pension-backed home loan in Kenya and other similar developing countries. The findings in the proposed study shall be used housing pension schemes so as to improve housing provision to a majority of the Kenyans as outlined in the social pillar of vision 2030 Development Blue Print and the Article No 43 (1b) of the constitution of Kenya.

1.7. Scope and limitations of the study.

The study focuses on the public sector employees that constitute 32.4% of the Kenyan workforce, most of whom are members of the civil service pension scheme, NSSF and other public sector pension schemes. The area of study is public pension Schemes based in Nairobi. The choice of Nairobi as the area of study is informed by the fact that most public sector pension schemes NSSF are headquartered in Nairobi and therefore, proximity of the area in terms of data collection. Finally, this being an academic work is supposed to be completed within a certain period of time and so constrained in terms of the time and budget, it could be impractical to focus in the whole country.

1.8 Definition of terms

Pension scheme
This is a social security scheme in which funds are contributed by either the employer or joint contribution between the employer and the employee and invested with the objective of accessing them during retirement, the early termination of employment or payment to the dependents of a member who has passed on (Were, 2012).
**Sponsor and member**

Firms and institutions are involved in organizing pension schemes for the members of the employees (Diamond & Lea, 1995). The firms are the “sponsors” and the employees are the “members”.

**Housing**

This term is used as a process and also a product of developing a shelter for humans (Benjamin et al, 2007). The proposed study shall use housing to refer to all kinds of dwellings which offer shelter to a family and meet the required standards in according security.

1.9 **Structure of the study**

Chapter one is the introduction to the study. This chapter provided the foundation of this study including the problem statement, research objectives, research questions, hypothesis setting, and definition of key terms as well as significance of the study.  
Chapter two is the literature review. This chapter provided details of the past research findings in this area so as to identify existing body of knowledge and gaps for exploitation. In addition, it focuses on the theories and concepts related to the proposed study to develop a conceptual model that informs the direction of the proposed study.  
Chapter three is the research methodology. It provided the methodological approach or the research strategy for the proposed study. It provides the research approach, the design, target population, sampling, methods of data collection, analysis and measures to improve reliability and validity of the proposed study.  
Chapter four. This chapter provided the analysis from the primary research conducted for this study.  
Chapter five. This chapter provided a summary, recommendations and conclusions for the study.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section reviews the literature to identify the research gaps to help in developing the theoretical framework.

The major aim of pension schemes globally has been developed out of the concern of the elderly. The elderly required help to maintain their standard of living even after employment. Additionally, the elderly required to be given a share of the economic growth. For a majority of the developed countries, it is the role of the government to relieve poverty. As a way to alleviate poverty and avoid destitution with elderly members of the society, laws have been enacted in Europe even as early as the 16th century. For instance, the Poor Relief Act of 1576 followed the Poor Law Act of 1601 in Britain (Cited in the World Bank, 2015). The Acts needed the church parishes to levy a rate for poor members in society. Nonetheless, in the U.S, the Virginia Poor Laws Act came into place in 1646 (Durrhaim & Painter, 2006). The initial legislation of such kind came into place in Denmark in 1891. Based on this legislation, the aged people over 70 years, got paid regular pension financed by taxation. There have been similar laws in New Zealand that came into place in 1898 as well as Australia and France in 1905.

For the developing countries, the future of pension scheme system is hinged on addressing existing challenges in the pension scheme system so as to enable access to finance for the high demand for housing. The proposed study looks at the systems approach as the model framework in which to offer solutions to the challenges in the uptake of the pension-backed home loan by the public sector employees in Kenya. This has been informed by the fact that the research inquiry is underpinned in the systems theory. Accordingly, it can be noted that failure in the uptake of the pension backed home loans in Kenya by the public sector employees would be attributed to lack of collaborative effort of the various components of the pension scheme provision. It is therefore important that the systems theory is used to provide basis of this study.
2.2 The Concept of Pension backed home loans

Pension funds have a major role to play in the support of access to housing, which is largely attractive to the advocates of housing development. The pension funds represent a major proportion of the domestic savings and hence a substantial source of capital that can be used to finance the demand for housing (Lanier et al 1987). Although Lanier et al (1987) offer notions that shall form the foundation of the proposed study, their writing is broader in comparison to other sources and carries some of the limitations of previous studies in this area: the writings by Lanier et al might be slightly focused on the developed countries and some of the concepts considered in the study could be slightly outdated. Pension funds are important since they can improve housing affordability, improve the flow of funds in the housing sector as well as allocate risks inherent in the housing finance.

Furthermore, Blake (2002) state that for the economies characterized by pools of contractual savings funds, pension funds help to tap on the new funds for housing. Therefore, the institutional investors, more so the pension funds that have long-term liabilities have a potential source of funds for the purpose of housing which manages liquidity risk in the housing loans in an effective manner as compared to the short-funded depository institutions. This is a vital concept which develops on the work by Lanier et al by providing a good direction of the study in comparison. Additionally, investors who specialize in certain kinds of securities are able to broaden borrowers served through the primary market. The securities that are issued against the pension pools could differ in terms of duration and credit quality, therefore, different investors might choose securities which meet their preferences. The growth in the supply of funds, with other things staying constant, lowers the relative cost for the mortgage finance and in the process, improve access to housing finance by the general population.

In South Africa, Ling (2009) state that pension secured loans are used in the home improvement projects unlike in the purchase of new homes. The Pension Fund Act in the country allows for retirement funds to offer direct loans to the members or to furnish the guarantee from the loan of a member (Pension Fund Act No 24 of 1956). The loan which
need not exceed 90% for the value of the property or accumulated benefits by the member can help in buying land or erecting a building on it, in the home improvement or to repay the third party for a secured loan. Further, the loan could be increased to 100% when the employer provided an added guarantee on the difference (Pension Fund Act No 24 of 1956).

In Kenya, the situation is slightly different due to the low level of economic growth that cannot support the pension fund as the deposit but rather a guarantee for the backed home loans. Benjamin et al (2007) argued that provision of adequate housing in the developing countries is a challenge if left to the market forces but rather, a more direct government intervention would help to address the challenges in the low uptake of pension-backed home loans in Kenya. Under the Retirement Benefits Mortgage Regulations (2009), a member could, when the rules of the scheme permit and is subject to this Act, be able to assign a portion of their benefits for the role of furnishing a guarantee, help a member get an immovable property where a house has been erected, to add or change repairs in a house where ownership or right in ownership is got by acquisition or the right of occupation through the member and the spouse; secure financing or waiver on the deposits, stamp duty, valuation fees and the legal fees and any kind of transaction costs needed in the process of acquiring immovable where the house is erected.

Despite these efforts, Kenya still faces challenges in the uptake of pension-backed home loans. The pension system in the country is fragmented and constitutes the civil service pension scheme and the NSSF. The low level of uptake might mean that individuals still face challenges in raising enough funds as the deposit in order to own a home, even if there were laws to allow the practice of using pension savings as the deposit rather than a guarantee. The low uptake of the pension backed home loans to the public employees may be attributed to failure of the pension fund stakeholders to work in a synergic manner, for instance, lack of laws and regulations, considering that as per the 2011/2012 Policy Brief by RBA, assigning of benefits is not an easy task due to the legal document of the gross monthly income of the employees; lack of education and awareness campaigns from the trustees; lack of long-term funds in order to finance the demand for
housing by the private sector (less developed mortgage system); lack of collaborative effort from the government all of which have contributed to the low uptake of the pension backed loans.

The approach in the developed countries has been more successful in which the different entities which influence the cost of housing work together to ensure that the financial system is working, in which the financial systems take the lead in the provision of the mortgage (World Bank, 2011). The pension funds could offer access to the money for investment. The regulators need to amend the pension’s laws so as to make sure that funds within the sector can be channeled to real estate for the purpose of development. The impact would be to create room for more players, growth in competition and in the end reduce the overall prices of housing.

2.3 Theories underpinning the study

2.3.1 Systems theory
Various definitions of a system vary from one person to the other. Bertalanffy (1956) is the pioneer of the systems theorists and talks of a system as being a “complex interaction” of various elements (cited in Brenart, 2006). He considers a system as being a new scientific paradigm. On the other hand, Hjorland and Nicolaisen (2005) define a system as a set of social, technological or material partners who work together in order to meet a common objective. Laszlo and Krippner (1998) add on this definition by arguing that a system is a set of related and interacting subsystems, which do functions which seek to meet a common goal. This meaning has been supported by the work of Meles et al (2010) and Amagoh (2008).

Although the definitions bring about common aspects of systems theory, there is a divergence in regard to the focus of individual scholars. The definitions converge on the meaning of systems theory. Generally, a system is a coherent entity of a “whole”, although with interdependent and interactive parts that seek to achieve a common goal (Diamond & Lea, 1995). It can be noted that the arguments do agree on the characteristics of a system, such as its holistic nature, goal oriented, openness, feedback
mechanism, boundedness, the ability to achieve equilibrium after disturbance, ability to communicate with the other parts and the external environment. These are essential features that offer a new line of thinking on complex issues that are witnessed in the pension sector. In view of the arguments, these features offer the proposed study a chance to conduct a research with a view to offering solutions on the challenges in the uptake of pension-backed loans in Kenya.

In the pension sector, systems thinking provides detailed operational thinking to look at the pension backed home loan at influencing affordable housing market as the financing option for the incremental housing in a holistic way and subsequently provides insights to address the challenges of uptake of the pension backed home loan. The pension backed home loan has the initially stated characteristics (holistic in nature, feedback mechanism and interactive) that are mirrored to a system. The characteristics enable it to achieve its objective of providing a home backed loan to the members in different categories. The openness of the pension system is a feature which enables it to interact with the external environment such as political and economic conditions, customer satisfaction and the statutory regulations as the control mechanism to realize the amount of pension-backed home loan delivered in the market.

Whenever there are political or economic challenges, then the pension scheme need to adjust accordingly in terms of the proportion of pension savings to be used as collateral. Nonetheless, changing the regulations in order to allow access to home ownership using the pension savings as the deposit or down payment can rectify the system to improve the uptake of the pension-backed home loan. Despite the similarities of the pension scheme to the working of a system, the uptake of the pension backed home loan is still low and this can be attributed to failure of the different components to work in a synergic manner, i.e encouraging the private sector to provide long-term funding to finance demand for housing, development of innovative products to meet market demand or retirement benefits mortgage regulations to ensure that the pension savings is used as the down payment or deposit for home ownership rather than as a collateral.
2.4 Empirical Review

Globally, international conventions and treaties recognize the importance of housing as a basic human need and right. As a result, various countries have come up with measures geared towards ensuring a workable pension scheme system in order to address the high demand for housing. For instance, in 1955, Singapore came up with a fully instituted pension fund that was meant to take care of the employees at their retirement age (Government of Singapore, 2011). Each employer and employee was supposed to contribute a given portion towards the Central Provident Fund (CPF). Later, this scheme was enhanced in order to allow the members to withdraw the savings to finance the purchase of the public houses. In addition, the funds would be used as a down payment, mortgage payments, the interest on the loans or the stamp duty.

The Singapore government has been critical towards the efficient working of this system that further highlights the significance of the various players in the system working together to enhance its success. In comparison to the UK, France, and Japan, Singapore has a high proportion of the household residential property (Leong, 2014). Recent statistics show that the house owners in the country as of 2016 stood at 88% (UN Habitat, 2016). However, the country has suffered from challenges of lack of long-term funds needed to finance the demand for housing, limited innovative products and lack of regulations to support efficient working of this system. Blake (2002) asserts that efficient working of the pension backed home loan required a collaborative effort of various actors such as financial institutions, regulatory bodies, the government, markets authorities, retirement benefits and above all involving the user who provides feedback control to address any issues if available in the pension backed home loan. In South Africa, Ling (2009) state that the pension secured loans have been used in order to improve the home projects unlike the acquisition of new homes. The Pension Fund Act in the country allows for the retirement funds to grant the direct loan to the members so that they would furnish their homes or guarantee a loan for a third party (Pension Fund Act No 24 of 1956). Although, this loan need not exceed the 90% of the property’s value or the accumulated benefits for the given member.
Nonetheless, the housing finance system in developing countries is still work in progress due to the less demand for the home backed loans in the country to acquire new homes. In addition, South Africa, has pent up the demand in the exchange of the current residential structures, either in matching the housing locations with the job locations or for the family cycle reasons (Centre for Affordable Housing Finance in Africa, n.d). This kind of trading on existing structures brings about a large demand for housing finance. Further, low levels of the new housing, as well as value for the housing asset as the inflation hedge, create excess demand in housing, meaning that there is excess demand in the housing finance. In general, there is high demand for housing finance in the developing countries, though fewer people are willing to take pension funds for home loans, this would be due to the fact that the available pension backed home loans does not cater for the needs of the citizens, presumably, high interest rates, low levels of income, lack of an enabling framework and limited awareness on this system.

Nigeria with the huge burden on its population faces a tremendous shortfall on the provision of housing for its citizens, more so the public sector employees. Makinde (2013) believes that uptake of pension backed home loan is a challenge for the low income earners and is attributed to the land allocation costs, cost of construction, high mortgage finances, planning and execution. The government of Nigeria has tried to rectify the pension backed home system by appropriate housing policy reforms by involving the private sector as a key player to increased output of the housing units for the low income earners in the public sector. This is in addition to creating awareness on the system, favorable mortgage regime, improving the economic performance, improving the legal framework and encouraging a collaboration with housing actors (capital markets authority, retirement benefits authority and government). With this approach of involving the private sector, the country still faces a challenge on the uptake of pension backed home loans.

In a recent review by Ochieng (2018), he noted that interest rates and legal framework issues have a hindrance in the access of finances for home ownership. He stated that the interest rate by the financial institutions now stand at 14.07 % and continues to increase,
hence, making it difficult for low income earners to access mortgages to finance housing. Nevertheless, the Department of Housing and Urban Development (2012) identified other costs that go with rent or mortgage such as taxation, availability of land, insurance and legal costs, however, the study cautions that mortgage costs over 30% of the household income and this is a burden that destabilizes the household budget. When the mortgage becomes a burden due to limited income by the household, there are consequences faced by the household such as reducing or foregoing food, clothing, transport or medical care. Besides, lack of practice notes in explaining the way mortgage institutions work; for instance, there is a widely held misconception that the 60% for the accumulated benefits are often accessed for the purpose to buy a home or land or for home improvement. A process that seeks to assign the benefits would not be an easy process, due to various legal documents that are signed to make sure that guarantee is in place. The Act needs that the property is transferred prior to accessing funds. This makes the transaction a little challenging since the property market is under control of the seller, which means that a seller insists of a deposit to be made prior to perfecting the primary security.

Kenya faces similar challenges in the pension backed home loans that are characterized by low uptake. According to a World Bank (2011) Survey, long-term access to the funds, lack of awareness among the public sector employees and lack of innovative products to meet the demand in the market were cited as the major constraints in the uptake of pension-backed home loans. These are essential considerations for a working pension scheme. Nonetheless, in the recent work by Ochieng (2018), the mortgage market in Kenya is characterized by low level of income, lack of enough mortgage financing institutions and the credit risk and the high-interest rates; similarly, such challenges cannot be ignored when talking about the low uptake of pension backed home loans in Kenya. In addition, the RBA Act requires that funds get transferred first prior to access of funds and this creates a challenging transaction and the misconception of the 60% on the accumulated benefits as being for buying a home.

It is believed that these challenges are associated with the low uptake of the pension backed home loans as well as the affordability power of the households. The market
dynamics theory as reflected in the work of “Adam and Smith” becomes significant in the proposed study. In addition, Chogu (2007) decry that a working pension fund is one of the requisites towards ensuring housing for all, more so to the public sector employees but this still remains a major challenge across the globe. This justifies the need to review the pension backed home loan system in Kenya with a view to addressing the challenges associated with the low uptake of the loans.

2.5 Theoretical Model

The literature review has confirmed that the low uptake of pension-backed home loans in Kenya and the other developing countries is a system that has broken down as a result of lack of enough components and failure to work together in a synergic manner. From the literature review, these components are interest rates, policy interventions, improved pension backed home loan uptake, lack of understanding the Retirements Benefits Mortgage Regulations, the underdeveloped financial mortgage market and can be classified as the inputs, outputs, processing, external environment and feedback mechanism (Figure 1).

In line with the characteristics of the system, the system components are viewed to be interdependent and interacting with the external environment so as to continue existing (improve uptake of pension-backed loans in Kenya in this case). However, any disorder in the interactive process of the system brings about low uptake of the pension backed home loans in Kenya (failure of the system to function in a synergic manner). This would trigger a feedback mechanism in order to facilitate appropriate policy interventions so as to make necessary adjustments to the uptake of pension fund inputs and the processes so as to meet the new target (improve uptake of pension-backed home loans). Figure I indicates a theoretical framework showing the interaction of the different components of the systems approach. This model forms the foundation of this study. The framework is interactive in nature to help address the challenges related to low uptake of pension-backed home loans in Kenya.
Figure 2.1: Conceptual Model

**Feedback Loop**
- Customer expectations
- Policy interventions

**External Environment (Aspects)**
- Both formal and informal institutions
- Economic (interest rates)
- Social institutions (creating awareness)
- Enabling legal framework

**Input Elements**
- Provision of long term funds
- Innovative products
- Interest rates
- Household income
- RBA regulations
- Availability of land
- Housing actors (capital markets authority, retirement benefits authority and government)

**Process Elements**
- Construction
- Execution
- Planning
- Financing

**Final Output**
Improved uptake of pension backed home loan (public sector employees)

Source: Researcher (2018)
CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter provides the details of the procedures on the way the study was conducted. It focuses on the research design, population, sampling techniques/sample, methods of data collection and analysis. In addition, the means of reliability and validity of the research data and results are presented. Having clarity of these procedures could be important for any interested party who would like to replicate the results when the need arises.

3.2 The area of study

This study makes an inquiry on the challenges in the low uptake of pension-backed home loans in Kenya with the view to come up with the model to address the challenges of low uptake of pension-backed loans for the public sector employees in Kenya. Most of these employees stay in urban areas of this country as indicated in the World Bank report of 2011. The recent statistical information reveal that the County of Nairobi has a population of 3.14 million people and the largest concentration of the formal employees (the target for this study) reside in the city and so the choice of the area of study. In addition, the choice of Nairobi County as the study area was based on the fact that the researcher is located in Nairobi County and data collection could be fast and easily accessible. Therefore, easy access to data as by observations most of the pension organizations are located in the Capital city, influenced the choice of Nairobi for the study. This is occasioned by the fact that this is an academic work that is constrained in terms of time and resources (costs). Figure 2 provides Map of Nairobi County (study area).
The public sector is the major employer of the formal employees in Kenya, these employees belong to different pension schemes. According to the Retirement Benefits Authority (RBA) of 2015, there was a total of 130 public sector pension schemes in Kenya which formed the basis of the data collection (attached in appendix 1). Further, the pension schemes being a public fund, they represent publicly managed entities so that any challenges they face has implications on housing provision in Kenya.

3.3 Research strategy and design

The research design is a survey, which seeks to make inquiries from the public servants on the low uptake of pension-backed home loans. Kathari (2004) postulates that survey design is more appropriate to examine social issue; since it allows the researcher to
collect original data to describe the population too large to observe directly. Issues with low uptake of pension is a social problem, where survey approach is more appropriate.

This study adopted a mixed approach (qualitative and quantitative methods). The choice of a mixed strategy is informed by the need to address the weakness of each other’s method (Kothari, 2004). Quantitative approach helped in the analysis of the numerical data and qualitative approach helped in the analysis of descriptive data. The use of these approaches is critical to meeting the objectives of the study.

Further, the survey design has been influenced by the nature of data and the need to address the goals of the study.

3.3.1 Target population
For the purpose of this study, the target population constituted all the public sector pension schemes in Kenya; according to Retirement Benefits Authority (RBA, 2010) there was a total of 1200 public pension schemes in Kenya as of 2010. During this period, the number of people members who had been registered with the scheme was a total of 406,623. However, this is an academic work that is limited by time period and hence this study relied on the accessible population to take its sample.

The accessible population estimate was 1,200 for the public sector employees (Ochieng, 2018). Following the formula by Mugenda and Mugenda (2013), the sample size for the members shall be

\[ nf = \frac{n}{1+n/N} \]

Where:

- \( nf \) = desired sample size when the population is less than 10,000
- \( n \) = desired sample size when the population is more than 10,000
- \( N \) = estimate of the population size.

\[ Nf = \frac{384}{1+384/1200} = 291 \text{ members.} \]
3.4.2 Sample and sampling procedure

The sample shall be drawn from the administrators of the retirement pension schemes, 2 mortgage financing institutions (Housing Finance and CFC Stanbic Bank) and a sample of 291 members of the retirement benefit schemes who have benefited from pension backed home loan (sample calculated in the previous section from the accessible population). The choice of CFC Stanbic and Housing Finance was based on the fact that the two financial institutions are well known in Kenya to have taken an initiative which enables the potential home buyers to easily take the mortgages. For instance, CFC has re-launched the 100% mortgage financing and so this means that customers do not need to pay for the deposit, which the bank had initially pegged at 25% of the property. It was interesting to see the way in which both of these leading banks in the mortgage market handle the pension backed home loan issues. Further, both of these financial institutions were the initial ones to venture into the pension backed home loans and hence, their choice.

As of 2016, there were a total of 130 public schemes in Nairobi County (details attached in appendix 1) and a representative sample was drawn from this population. Convenience sampling was used so as to identify the schemes to be sampled. Specifically, these were schemes that are headquartered in Nairobi County. In total, the pension schemes whose headquarters are in Nairobi County were 130. The estimate of the administrators is 130 members, if one individual is selected from each of the schemes, implying that it is less than 10,000 cases. According to Mugenda and Mugenda (2003) when the population is more than 10,000 a sample size of 384 is adequate. For a population lower than 10,000, the formula below need to be adopted:

\[ nf = n/1+n/N \]

Where:

- \( nf \) = needed sample size if population is < 10,000
- \( n \) = needed sample size if population is > 10,000
- \( N \) = the estimate of population

It follows that the sample is got by:

\[ Nf = 384/1+384/130 = 97 \text{ administrators} \]
Further, out of convenience, a sample of 30 respondents were chosen from Housing Finance and CFC Stanbic Bank for interviewing (15 respondents from each bank). These were top management in both banks that were deemed essential to offer vital information on the pension backed venture. Both of these financial institutions were the initial ones to venture into the pension backed home loans.

The summary of the study methodology is as shown in table 1.

Table 1: Summary of Methodology

<table>
<thead>
<tr>
<th>Item</th>
<th>Research objective</th>
<th>Data requirements / units of analysis</th>
<th>Sources of data</th>
<th>Data analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>To examine pension backed home loan to understand its advantages and disadvantages with a view to understanding its role in meeting housing demand</td>
<td>Identify the advantages and disadvantages of pension funds</td>
<td>Literature review Administrators of sampled public schemes and beneficiaries</td>
<td>using mean item score interval scale</td>
</tr>
<tr>
<td>2.</td>
<td>To determine the extent of the uptake of pension backed home loan system in addressing acquisition of housing</td>
<td>Understand the role of pension backed home loan in provision of housing</td>
<td>Literature review Administrators of sampled public schemes and beneficiaries</td>
<td>using mean item scores interval scale</td>
</tr>
<tr>
<td>3.</td>
<td>To assess the challenges of existing pension backed home loan system in addressing acquisition of housing</td>
<td>Identify the challenges of existing pension funds through systems approach</td>
<td>Literature review Administrators of sampled public schemes, mortgage institutions and beneficiaries</td>
<td>Inferential statistics Cross tabulations Descriptive using mean item score</td>
</tr>
</tbody>
</table>
4. To determine how best to address the challenges associated with the existing pension scheme within the context of a systems approach to improve uptake of pension-backed home loans.

| Provision of solutions of pension backed home loan challenges through systems approach | Questionnaires of sampled public schemes, mortgage institutions and beneficiaries | Inferential statistics Cross tabulations using mean item score |

Source: Field Survey (2018)

### 3.5 Data collection methods and instruments

This study used both qualitative and quantitative methods in data collection. The tools to be used are the semi-structured questionnaires and interviews. The questionnaires shall be administered to 97 administrators; 291 beneficiaries while interviews shall be administered to 30 individuals of mortgage institutions (15 members from each institutions) (details provided in the previous section). The administrator shall be requested to submit a member who had benefited from the pension backed home loan for the interview. The document review shall be on the RBA records to support the objectives of the study. All the above methods of data collection were incorporated so as to secure adequate data to facilitate this investigation. Besides, this is important to get enough data in order to meet the objectives of the study. The tools of data collection are attached in the appendix.

### 3.6 Data sources

The data used in this study are classified into primary and secondary sources. The primary data was sourced from the semi-structured questionnaire and interviews. The secondary data came from a review of literature in this area, journals, articles and the document reviews from the mortgage institutions on the members that have used accumulated benefits so as to secure the home loans.
3.7 Study variables

The literature review has confirmed the independent variables in the low uptake of pension-backed home loans. These variables are the challenges that hinder uptake of pension-backed home loans in one way or the other. Further details are as shown in table 2.

Table 2: Summary of study variables and sources

<table>
<thead>
<tr>
<th>Item</th>
<th>Variable name</th>
<th>Variable type</th>
<th>Data source</th>
<th>Unit of measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Legal Framework</td>
<td>Independent</td>
<td>Administrator</td>
<td>Likert scale</td>
</tr>
<tr>
<td>2.</td>
<td>Availability of land</td>
<td>Independent</td>
<td>Public servants</td>
<td>Likert scale</td>
</tr>
<tr>
<td>3.</td>
<td>Interest rate</td>
<td>Independent</td>
<td>Administrator</td>
<td>Likert scale</td>
</tr>
<tr>
<td>4.</td>
<td>Construction</td>
<td>Independent</td>
<td>Administrator</td>
<td>Likert scale</td>
</tr>
<tr>
<td>5.</td>
<td>Execution</td>
<td>Independent</td>
<td>Administrator</td>
<td>Likert scale</td>
</tr>
<tr>
<td>6.</td>
<td>Planning</td>
<td>Independent</td>
<td>Administrator</td>
<td>Likert scale</td>
</tr>
<tr>
<td>7.</td>
<td>Financing</td>
<td>Independent</td>
<td>Mortgage financial institutions / administrator</td>
<td>Likert scale</td>
</tr>
<tr>
<td>8.</td>
<td>Household income</td>
<td>Independent</td>
<td>Public servant</td>
<td>Likert scale</td>
</tr>
<tr>
<td>9.</td>
<td>Creating awareness</td>
<td>Independent</td>
<td>Administrator / public servants</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Policy interventions</td>
<td>Independent</td>
<td>Administrator</td>
<td>Likert scale</td>
</tr>
<tr>
<td>11.</td>
<td>Customer expectations</td>
<td>Independent</td>
<td>Public servant</td>
<td>Likert scale</td>
</tr>
</tbody>
</table>

Source: Field Survey (2018)

3.8 Data analysis and Presentation

The collected data was first be edited, coded and then entered to the Statistical Package for Social Sciences (SPSS) for the purpose of analysis. Qualitative data was analyzed through content analysis while quantitative data that was analyzed through descriptive
statistics, for instance, the mean item scores and inferential statistics that shall analyze numerical data. Descriptive analysis is important so as to understand basic characteristics of the study and inferential statistics shall involve the use of chi-squares for hypothesis testing at 5 % level of significance. The interval scale provided a way in which to measure the socio-economic characteristics of the respondents over a scale so as to quantify the difference on the values of measure. These included the measure on income level and age of people that have used pension backed as a security to get mortgage. The relationship of the different variables was investigated by measuring the extent of their contribution to the uptake of pension backed home loans. Specifically, the level of significance of the factors that hinder uptake of pension backed home loan provided the basis of recommendations in this study and so their relationship to address the challenge of uptake of pension backed home loan. In order to make decisions on rejecting or accepting the proposed hypotheses in section 1.5, when the expected table value is greater than observed or calculated value, the null hypothesis shall be rejected in favor of the alternative hypothesis.

3.9 Validity and reliability of study

According to Heper et al (2010) reliability is a measure of the level in which the study instruments provide a consistent result after a number of repeated trials. This will be enhanced in this study by making the questionnaires simple and precise so as to avoid ambiguities and the interviews were made to be as objective as possible. On the other hand, validity is the accuracy with which the results represent an issue under investigation. The validity in this study is enhanced through convenience sampling and this helped to meet the objectives of the study (details in table 1).

3.10 Summary

This chapter has covered the methodology adopted in this study. In particular, details on how the study was undertaken are provided. Clearly, this study adopted a mixed approach (both qualitative and quantitative) because of the need to get enough data to inform the findings of the study. The relationship of the different variables was investigated by measuring the extent of their contribution to the uptake of pension backed home loans.
The level of significance of the factors that hinder uptake of pension backed home loan provided the basis of recommendations in this study and so their relationship to address the challenges of uptake of pension backed home loan. In order to make decisions on rejecting or accepting the proposed hypotheses in section 1.5, when the expected table value is greater than observed or calculated value, the null hypothesis shall be rejected in favor of the alternative hypothesis.
CHAPTER FOUR: DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter presents the data findings on the analysis done from the primary data. It covers survey response, socio-economic characteristics of the respondents, extent of uptake of pension backed home loan, challenges of existing pension backed home loan and hypothesis testing.

4.2 Survey response rate

Table 3: Response Rate

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item Description</th>
<th>Number of questionnaires / interviews issued</th>
<th>Number of questionnaires / interviews returned</th>
<th>Percentage response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pension Scheme administrators</td>
<td>97</td>
<td>95</td>
<td>97.9%</td>
</tr>
<tr>
<td>2</td>
<td>Beneficiaries</td>
<td>291</td>
<td>230</td>
<td>79.03%</td>
</tr>
<tr>
<td>3</td>
<td>Financial institutions</td>
<td>30</td>
<td>30</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Field Survey (2018)

A good response rate improves representativeness of results to the target population. Therefore, it influences the accuracy of an inquiry. According to Mugenda and Mugenda (2003) a response rate of at least 50% is considered as satisfactory. Table 3 indicates that the response rate of 97.9 % from the administrators; 79.03 % from the beneficiaries and 100 % on the financial institutions were achieved which is good enough to make conclusive judgments about the responses in this study.
4.3 Socio-economic characteristics of the respondents

The enquiry in this section was meant to understand the socio-economic characteristics of the beneficiaries. The findings showed that majority of the beneficiaries earned kshs 12,000-25,000 representing 50% (Table 4). It implies that income is a challenge which makes it difficult for them to acquire mortgage from financial institutions, which explains the low uptake of pension backed home loan from the socio-economic characteristic of the beneficiaries.

Table 4: Income of the respondent

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 12,000</td>
<td>35</td>
<td>15.2</td>
</tr>
<tr>
<td>12,000-25,000</td>
<td>115</td>
<td>50</td>
</tr>
<tr>
<td>25,000-53,000</td>
<td>50</td>
<td>21.7</td>
</tr>
<tr>
<td>Above 53,000</td>
<td>30</td>
<td>13.1</td>
</tr>
<tr>
<td>Total</td>
<td>230</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field Survey (2018)

4.4 Extent of Uptake of pension backed home loan system in Nairobi County

Further enquiries on this area, support the above assertion on ineffectiveness in the home backed home loan as a system. From the interview administered to the administrators, it was clear that existing delivery components for pension backed home loan have features which are aligned to the features of the systems theory. From the findings, it was clear that the components are not able to work together to improve uptake of pension backed home loan due to failure in one or the other component and so the low uptake of pension backed home loan system. In the literature review, Ochieng (2018) showed that components are interdependent and interactive in improving uptake of pension backed home loan and failure in one implies that the whole system ceases to work.
In the last 5 years, the respondents revealed that 20 members and below (56 respondents) which represented 58.5%; 21 to 40 members (37 respondents) and 41 to 60 (2 respondents) (Table 5). It is clear that despite the set of new laws in the Finance Bill of 2012, the pension backed home loan uptake is still low, shown by majority of the poor mortgage loan uptake in the past 5 years. Perhaps, there is lack of goodwill or collaborative effort from the key stakeholders into ensuring that the Finance Bill of 2012 to use pension scheme savings as a deposit to own a home is implemented.

Table 5: Number of people in your scheme that have used Pension as security for Mortgage in last 5 years

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid 20 and below</td>
<td>56</td>
<td>58.5</td>
<td>58.5</td>
<td>58.5</td>
</tr>
<tr>
<td>21 to 40</td>
<td>37</td>
<td>38.5</td>
<td>38.5</td>
<td>96.9</td>
</tr>
<tr>
<td>41 to 60</td>
<td>2</td>
<td>3.1</td>
<td>3.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>95</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey (2018)

However, the public civil servants continue to invest heavily in the public pension schemes. An enquiry made on the percentage of pension fund invested in real estate. The findings showed that 2 respondents stated below 10%, which represented 2.3%; 3 respondents stated 10 to 20% which represented 3.1%, 51 respondents stated 21 to 30% which represented 53.8% and 39 respondents stated above 30% which represented 40.8% (Table 6). This shows that majority of the respondents have invested their pension funds in real estate, which shows the high demand in real estate in Kenya, but then, there is a deficit in housing, a key pillar in the Big Four Agenda of President Kenyatta. This phenomenon has been largely due to the fact that the pension schemes have funds to invest in real estate because of the savings from the members, hence, diversification into
real estate is not a tall order for the pension schemes. Pension schemes could prove to be key in the reduction of housing deficit if Housing as one of the Big Four Agendas is to be realized.

Table 6: Percentage of pension fund invested in real estate

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 10%</td>
<td>2</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>10 to 20%</td>
<td>3</td>
<td>3.1</td>
<td>5.4</td>
</tr>
<tr>
<td>21 to 30%</td>
<td>51</td>
<td>53.8</td>
<td>59.2</td>
</tr>
<tr>
<td>Above 30%</td>
<td>39</td>
<td>40.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>95</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.5 Challenges of Existing Pension Backed Home Loan System in Nairobi County

The literature review confirmed that the existing pension backed home loan has failed to achieve its objectives because of limited income from the public sector employees, lack of awareness, lack of long term funds to meet housing demand, lack of access to land and lack of enough income. These factors were ranked in order of significance so as to identify the most significant challenge to inform policy and recommendation actions for this study. Table 7 provides a summary of the challenges faced by beneficiaries in their effort to acquire pension backed home loan. The findings show that all the challenges have at least a mean score above 3.0 (population mean) and hence should be considered if the pension backed home loan is to realize its objectives.
Table 7: Challenges of pension backed home loan

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Mean score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of awareness on the system</td>
<td>3.1</td>
</tr>
<tr>
<td>Lack of an enabling legal framework</td>
<td>3.3</td>
</tr>
<tr>
<td>Lack of affordable mortgage finance</td>
<td>3.6</td>
</tr>
<tr>
<td>Lack of access to land</td>
<td>3.4</td>
</tr>
<tr>
<td>Lack of long term funds to meet demand for housing</td>
<td>4.6</td>
</tr>
<tr>
<td>Lack of enough income</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Source: Field Survey (2018)

The findings in this study are closely related to the work of CAHF (2012) and Noppen (2012), whose investigations focused on Kenya’s housing demand. The significant challenges affect the systems sub components of the input, process elements, feedback and external environment in the uptake of pension backed home loan by the public civil servants. The systems theory content that when the significant challenges have an effect on any of the components of pension backed home loan, they are not likely to perform as required and in this study, the needs of the public sector employees will not be addressed. It is therefore, important that appropriate solutions are sought to ensure that the sub components and the components perform towards meeting the objective of uptake of pension backed home loan for the public sector employees.

The interviews on the beneficiaries revealed that the Retirement Benefits Authority Act of 2009, has not been enough to guarantee access to housing since the regulations contemplate that before a guarantee is issued by the Trustees, the first mortgage is registered as a primary security under section 7(1)a. Although, this fails to account for the financier paying for the upfront costs to execute the sale agreement, legal fees and valuation and stamp duty which facilitates registration as it has been envisaged in section 4d. Another beneficiary asserted that the redemption of guarantee as envisioned in sections 11(2) and 11(3) where in case of default by a member, the trustees are at liberty
to redeem the guarantee is not actionable. These have been the proposals by the mortgage institutions where upon confirmation of default by a financier, trustees need to be at liberty to redeem the guarantee. What this means is that there are less regulations and control mechanisms in the existing pension backed home loan that seemingly inhibit the members from assigning the 60% of accumulated benefits in order to guarantee mortgage loan acquisition.

Nonetheless, the beneficiaries seemed to be in agreement that the increasing property prices, high interest rates, risk of members losing their pension if unable to pay for the mortgage, the concept not clearly explained, lack of transparency in charging models, limited mortgage financing provider are some of the challenges that they face in the access of pension backed home loan. However, the mortgage institutions believed that lack of access to long term funds, low level of income of borrowers, high interest rate and credit risk limited access of most of the public sector employees from accessing housing through the present pension backed home loans. Accordingly, these are the key challenges that should be focused for either elimination or to reduce the low uptake of pension backed home loan. The interpretations of the findings indicate that majority of the beneficiaries of the pension backed home loan did not get the loan with ease and the low disbursement of the mortgage loans as provided by the data form the financial institutions indicates that public sector employees are not getting these loans towards their housing purchase. The interest rate is capped at 14.07% and even with the 60% security from the savings as per the RBA 2009 Act, there are costs associated with stamp duty, valuation, legal fees and sale agreement that further limit the civil servants for accessing housing through pension backed home loan.

The findings of this work are similar to those of Ochieng (2018) on his review of systems approach to housing who found that the mortgage market in Kenya is characterized by low level of income, lack of enough mortgage financing institutions and the credit risk and the high-interest rates; similarly, such challenges cannot be ignored when talking about the low uptake of pension backed home loans in Kenya. Notwithstanding the above, low level of employee income and credit risk is a cause of concern for the
mortgage experts with only less than 30 public sector employees having attached 60% of their savings as a collateral for the home loan. This could probably be due to the low savings over the period and hence unable to meet other costs such as stamp duty or legal fees.

On the other hand, enquiries were equally directed to the 95 out of 130 administrators of pension schemes to get their opinion on the means to address the challenges which limit improved uptake of pension backed home loan. In line to the systems theory, the components of the pension backed home loan should be configured within the systems framework of the input, process elements, external environment and feedback mechanism. The interview findings in this study confirmed the findings by Ochieng (2018) on systems approach to housing that poor design and execution, upfront costs and down payment, lack of affordable mortgage finance, shortage of building materials, high poverty levels, lack of contract capacity, lack of access to land and lack of long term funds to meet demand for housing as key challenges that the pension backed home loan face (attached in appendix 4). These factors may be the looked at, if the pension backed home loan system should work effectively.

However, the solutions to the challenges of low uptake of pension backed home loan can be viewed as incentives which need to be provided by the state so as to boost the uptake of pension backed home loan. The findings agree with those from Blake (2002), who found out that incentives are a way to enhance uptake of pension backed home loan for the public sector employees. While the Retirement Benefits Mortgage Regulations of 2009, has been viewed as key to improve uptake of pension backed home loan, there is need for further review the administrative process to cut on the legal costs, valuation and stamp duty. The solutions to the challenges of low uptake of pension backed home loan are drawn from the components of pension backed home loan system of input, process elements, external environment and feedback. The present pension backed home loan components have failed to ensure improved uptake of pension backed home loan for the public sector employees. To address the challenges, the investigation has indicated the need to focus on innovative products to build low cost houses, establish a national
authority to address contractor capacity, monitor and control macro-economic environment, streamline the planning process and create awareness and educate the members (Table 8).

Table 8: assessment of the solutions of low uptake of pension backed loan

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Streamline land administration and management</td>
<td>Streamline planning standards and development control</td>
<td>Lower taxation on construction inputs</td>
<td>Effective policy interventions to regulate housing sector</td>
<td>Adequate uptake of pension backed home loan</td>
<td></td>
</tr>
<tr>
<td>Provide innovative products through R &amp; D.</td>
<td>Stimulate research into alternative materials/technology</td>
<td>Entrenching the National housing fund to law / bill</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensure collaborative effort in housing actors</td>
<td>Streamline planning process and building approval</td>
<td>Subsidize mortgage / expand mortgage market</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Effective control of the prevailing macro-economic climate</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Create awareness and educate members</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey (2018)
4.6 Hypothesis testing

The literature review confirmed that provision of long term and interest rates are indirectly theoretical determinants in the improved uptake of the pension backed home loan. Long term access to funds has components such as land, legal fees, stamp duty, valuation and finance charges that have an impact on the mortgage rate (Shelter Afrique, 2013). The mortgage rate essentially has an influence on the affordability and by extension the uptake of pension backed home loan by the public civil servants. Further, Schwartze and Wilsine (2012); and Disney (2007) believe that 30 % of the threshold on the gross household income is key in housing affordability for the mortgage rates. This has implications in that the household income is key in accessing pension backed home loan by the public civil servants. The two variables hence stood out as key determinants in the uptake of pension backed home loan by the public civil servants. This study hence tested the relationship between long term access to funds and household income with the improved uptake of pension backed home loan by the public sector employees as stated under section 1.5.

Table 9: Hypothesis testing

<table>
<thead>
<tr>
<th></th>
<th>Test Value = 0</th>
<th>N</th>
<th>df</th>
<th>Significance level (+5%)</th>
<th>Critical table / expected $\chi^2$</th>
<th>Calculated / observed $\chi^2$</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision of long term funds</td>
<td></td>
<td>95</td>
<td>4</td>
<td>5</td>
<td>7.05</td>
<td>2.081</td>
<td>0.086 0.015</td>
</tr>
<tr>
<td>Household income</td>
<td></td>
<td>95</td>
<td>4</td>
<td>5</td>
<td>7.05</td>
<td>1.765</td>
<td>0.086 0.015</td>
</tr>
</tbody>
</table>

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.03.

The null hypothesis are rejected on both tests and conclude that provision of long term funds and household income are related to uptake of pension backed home loan and hence essential considerations for policy makers if they are to achieve an effective uptake
of pension backed home loan system in Kenya. The findings in both hypotheses is further supported by the sampled respondents (administrators) and the interview on key informants. The implications of the findings is that long term access to finance would increase available mortgages for the public sector employees and increase production of affordable housing while the increased household income will increase affordability of the mortgages and by extension being a beneficiary of the home backed home loan.

4.7 Contribution of Independent Variables

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficients&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>2.140</td>
<td>.556</td>
<td>5.636</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Legal Framework</td>
<td>.084</td>
<td>.049</td>
<td>.310</td>
<td>0.498</td>
</tr>
<tr>
<td></td>
<td>Availability of Land</td>
<td>.123</td>
<td>.063</td>
<td>.340</td>
<td>0.863</td>
</tr>
<tr>
<td></td>
<td>Interest Rate</td>
<td>.090</td>
<td>.078</td>
<td>.360</td>
<td>0.018</td>
</tr>
<tr>
<td></td>
<td>Construction</td>
<td>.025</td>
<td>.103</td>
<td>.349</td>
<td>0.019</td>
</tr>
<tr>
<td></td>
<td>Planning</td>
<td>.151</td>
<td>.103</td>
<td>.310</td>
<td>0.335</td>
</tr>
<tr>
<td></td>
<td>Financing</td>
<td>.137</td>
<td>.121</td>
<td>.480</td>
<td>0.236</td>
</tr>
<tr>
<td></td>
<td>Execution</td>
<td>.094</td>
<td>.056</td>
<td>.310</td>
<td>-0.091</td>
</tr>
<tr>
<td></td>
<td>Policy intervention</td>
<td>.193</td>
<td>.136</td>
<td>.350</td>
<td>0.527</td>
</tr>
<tr>
<td></td>
<td>Creating Awareness</td>
<td>.153</td>
<td>.182</td>
<td>.610</td>
<td>0.438</td>
</tr>
<tr>
<td></td>
<td>Household income</td>
<td>.151</td>
<td>.114</td>
<td>.680</td>
<td>0.231</td>
</tr>
<tr>
<td></td>
<td>Customer Expectations</td>
<td>.139</td>
<td>.132</td>
<td>.590</td>
<td>0.145</td>
</tr>
</tbody>
</table>

<sup>a</sup> Dependent Variable: Uptake of Pension Backed Home Loan

Using the B coefficients associated with the 11 variables that are the challenges in the uptake of pension backed home loan in the public sector, it is possible to develop a multiple regression that explains the contribution of these factors to the uptake of pension
backed home loan in Kenya when the values of the independent variables is known. Therefore, using the coefficients, the prediction equation on the contribution of these factors to the uptake of pension backed home loans.

Uptake of Pension Backed Home loan = 2.140+ .084Legal Framework + .123 Availability of Land + .090 Interest rate + .025 Construction + .151 Planning + .137 Financing + 0.094 Execution + .193 policy intervention + .153 Creating Awareness + .151 Household Income + .139 Customer Expectations

It is clear that all the independent variables have a positive contribution to the uptake of the pension backed home loan. A unit change in any of the factors has a significant impact on the level of uptake of the pension backed home loan. They are key considerations, if the challenges in the uptake of pension backed home loan are to be addressed.
CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter discusses the summary of the main findings from the study as aligned to the objectives of the study with the objective to draw conclusions and recommend policy actions for the policy experts. It also makes discussions on the contribution of the study to the existing body of knowledge and further areas of research. It includes the summary of the main findings, conclusions, recommendations, contributions to knowledge and further areas of research.

5.1 Summary of main findings

This study aimed at assessing the challenges affecting the uptake of the pension-backed home loan in Kenya with the view to developing a working pension scheme systems that cater for improved uptake of pension-backed home loans in Kenya for the public civil servants. There were four objectives that guided this study to meet its objectives. This section looks at the summary of main findings in line to the objectives of the study.

5.2.1 Findings on objective 1

This objective sought to examine the pension backed home loan to understand its advantages and disadvantages with a view to understanding its role in meeting housing demand. The findings indicate that the existing pension backed home loan as a system has failed to meet the housing demand of the public civil servants in Kenya. Among the key constraints that have resulted to the low uptake of pension-backed home loan include: lack of long-term funds to finance demand for housing, limited access to land, shortage of building materials, high poverty levels, low income of the public sector employees, lack of affordable mortgage finance, mortgage upfront costs and down payment and poor design and execution of pension-backed home loan as a system. Further findings identified the components of the existing pension backed home loan which include: housing inputs such as actors, innovative products, interest rates, RBA regulations, availability of land and provision of long-term funds; the process elements
such as Construction, execution, planning, financing; external environment (Formal and informal institutions, economic (interest rates), social institutions (create awareness), enabling legal framework) and feedback (Customer expectations, policy interventions). The findings indicate how the external environment variables are highly rated by the respondents in the present housing backed home loan system. Therefore pension backed home loan as a system is essential in meeting the demand for housing among the public sector employees.

5.2.2 Findings on objective 2
The second objective sought to determine the extent of uptake of pension-backed home loan system in addressing acquisition of housing. Majority of the respondents (58.5%) revealed that despite the set of new laws in the Finance Bill of 2012 (Table 4.3), they have not been able to take the backed home loan uptake is still low (only 20 members against a possible total of 1200 accessible population), implying a poor mortgage loan uptake in the past 5 years. Perhaps, there is a lack of goodwill or collaborative effort from the key stakeholders into ensuring that the Finance Bill of 2012 to use pension scheme savings as a deposit to own a home is implemented.

5.2.3 Findings of Objective 3
This objective was set to examine the challenges of existing pension backed home loan system in addressing acquisition of housing. The findings showed that limited income from the public sector employees, lack of awareness, lack of long term funds to meet housing demand, lack of access to land and lack of enough income are all significant challenges in the uptake of pension backed home loan, and should be considered by policy makers, if they are to meet the goals of effective uptake of pension backed home loan (Table 4.5). Based on the systems theory, the significant challenges have an effect on any of the components of the pension-backed home loan, they are not likely to perform as required and in this study, the needs of mortgage loans of the public sector employees will not be addressed. It is, therefore, important that appropriate solutions are sought to ensure that the subcomponents and the components perform towards meeting the objective of uptake of pension-backed home loan for the public sector employees.
5.3 Conclusions

The findings of this study indicate that the existing pension backed home loan has failed to meet the needs of the public sector employees. As a result, the uptake of the pension backed home loan is quite low, even with allowing of the members to use 60% for the accumulated benefits as the security, though, it is envisioned to increase with the systems approach provided in this study. Key components of the existing pension backed home loan as a system have been identified in both the literature review and the primary findings and include: housing inputs such as actors, innovative products, interest rates, RBA regulations, availability of land and provision of long-term funds; the process elements such as Construction, execution, planning, financing; external environment (Formal and informal institutions, economic (interest rates), social institutions (create awareness), enabling legal framework) and feedback (Customer expectations, policy interventions). The study has established that in order to address the challenges of low uptake of pension-backed home loan, it will involve periodic reforms in housing policy that evolves around components such as planning and development processes, expanding the mortgage market, customer satisfaction/policy reforms, provide innovative products, collaborative effort from key actors, establish the national contractors authority, monitor and control of macroeconomic environment, household income, providing long-term funds, streamlining land and building approval, creating awareness and educating the members and construction process.

Therefore, in line to the systems dynamics, the various identified components of a pension-backed home loan of input, process elements, external environment, feedback, and output need to be interdependent and interactive in order to improve the uptake of the pension-backed home loan. The challenges associated with the low uptake of pension-backed home loan appear at the input, process element, external environment, feedback and output and this implies that they should be addressed comprehensively at all levels as failure to address any challenge renders the pension backed home loan system inappropriate to meet the needs of the public sector employees.
5.4 Policy recommendations

The findings in this study revealed that limited income from the public sector employees, lack of awareness, lack of long term funds to meet housing demand, lack of access to land and lack of enough income are significant challenges that have contributed to the low uptake of pension backed home loan. This study recommends creating awareness on the pension backed home loan, specifically on the 60% of savings as security in buying a home, reforms in existing statutes so as to provide long term funds to meet housing demand, offer incentives to acquire land such as reduction of taxes on land and improve socio-economic welfare of the members since lack of these came out as the most significant challenges in the low uptake of pension backed home loan in the study.

5.6 Areas of further research

Housing provision in Kenya is one of the key pillars of President Kenyatta’s Four Agendas. It has also been recognized in article 43 (1b) on economic and social rights in Kenya’s constitution. While this study has focused on the formal sector employees, further research needs to focus on the informal sector employees and pension schemes so as to offer a comprehensive investigation on the challenges of low uptake of pension-backed home loans in Kenya.