THE RELATIONSHIP BETWEEN PENSION FUND ASSETS AND ECONOMIC
GROWTH IN KENYA

BY

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DECLARATION

I declare that this work entitled ``the relationship between Pension Fund Assets and Economic Growth in Kenya'' is as a result of my own research except as cited in the references. The work has not been presented or accepted to any degree and is not concurrently submitted in by any student of any other degree.

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DEDICATION

I dedicate this project to my dear parents MR. and MRS. Wanjala, my wife Pauline, family members, colleagues and friends for their moral support, patience and encouragement throughout my studies. It is the achievement they have indeed worked for. Thank you and be rewarded abundantly.

ABSTRACT

The primary objective of this research work is to carry out proper investigation as regards to the "the relationship between Pension Fund Assets and Economic Growth in Kenya. The main Focus was to establish any correlation between Retirement Pension Assets, Equity Turnover, Treasury Bill, Inflation and Domestic Debt. The study analyzed the relationship between Pension Assets, Domestic Debt and GDP. It also established the relationship between Pension Assets and Stock Market Capitalization. A further analysis was done by establishing the relationship between Pension Assets and Inflation. The background to the study was discussed by looking at the Pension Industry in Developed Economies and the Emerging Market Economies as well as its evolution since the early periods. Different scholars perspectives was also looked at with regards to the contribution the Pension Industry brings to any Economy. Key terminologies used in the Pension Fund Industry were also defined as well as the statement of general problems. The statement of the problem was arrived at by carrying out a critical analysis of the previous studies in the area thereby identifying the research gap in the past studies.

A comprehensive review of related literatures of different authors was made. Here, the study looked at the conceptual domain of pension, where it was defined by several scholars and its importance conferred appraisal. Secondary data was gathered through the utilization of the Retirement Benefit Authority publications, figures from KNBS, economic reports from KIPPRA, data on consumer price index from the Ministry of Finance and Planning and National Social Security Fund financial statements. The study utilized ratios and percentages to demonstrate the relationship between retirement benefits assets and economic growth. The data that was used for the purpose of this research was from the periods 2002 to 2011; it was presented and analyzed using SPSS, frequencies tables and percentages that were used to establish the relationship between the variables. The collected and organized data was classified and analyzed using the frequency tables with the help of the Statistical Package for Social Sciences (SPSS) to establish the relationship between pension fund assets and economic growth in Kenya, the percentage method was also utilized in the presentation, interpretation and analysis of data in tabular form. The qualitative data was analyzed by way of content analysis method through the use of descriptive statistical methods such as measures of central tendency and inferential statistics such as multiple regression analysis. The results of the findings showed a Positive Relationship between Retirement Pension Assets and Economic Growth in Kenya.

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LIST OF ABBREVIATIONS

ACTSERV.................................... Actuarial Services East Africa Limited

CBK………………………………Central Bank of Kenya

CBR ………………………………Central Bank Rate

DB ………………..………………...Defined Benefit Plan

DC ………………..………………...Defined Contribution Plan

EMEs ……………………………...Emerging Market Economies

ETI ……………………………….. Economically Targeted Investments

GDP………………………………Gross Domestic Product

GFC ……………………………… Global Financial Crisis

GNP ....Gross National Product

G-7 ……………………………….Group Seven Countries

IPP ……………………………..Individual Pension Plan

KENGEN …………………………Kenyan Generators

KES ………………………………Kenyan Shilling

KIPPRA ……………………….. Kenya Institute of Public Policy Research and Analysis

KNBS …………………………... Kenya National Bureau of Statistics

MPC……………………………….Marginal propensity to consume

M3………………………………....Money Supply

NSSF ……………………………...National Social Security Fund

PAYG ……………………………..Pay As You Go

PSPS ……………………………... Public Service Pension Scheme

RBA ……………………………... Retirement Benefit Authority

SDB ………………………………Savings Development Board

SPSS …………………………….. Statistical Package for Social Sciences

TB ………………..………………Treasury Bill

U.S ………………………………. United States

USD ………………………………United States Dollar

% ………………………………….Percentage

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The pension fund industry, in both developed and emerging market countries, has grown rapidly during the past decade. For instance, pension funds in the Group of Seven (G-7) countries accounted for 45 percent of these countries' GDP in 2001, up from 29 percent in 1991. During the same period, pension fund assets grew to 20 percent of GDP from barely 5.5 percent (Walter, 1999). Retirement Pension funds have in the recent past gained popularity since they contribute to the economic growth of countries worldwide through direct contribution to the GDP, accumulation of savings, financial market development, reducing old-age poverty and acting as consumers of financial services. (Watson, 2007; Corbo et al., 2004). The growth of the pension fund industry has profound potential implications for the emerging market asset class. In terms of assets under management, pension fund assets in the developed world greatly exceed the market capitalization of external and domestic emerging markets. Thus, even a small permanent allocation by pension funds to the emerging market asset class may have a stabilizing effect. In emerging market countries, the domestic pension fund industry is rapidly becoming a major source of domestic financing and has the potential to shape the future evolution of domestic markets.

Pension funds fulfill an important role in the economy by channeling the current retirement savings into investments in financial assets, and subsequently transforming these assets into a predictable post-employment income. The rate of return on these financial assets – typically long-term bonds and equities – plays an important role in determining the level of the retirement income from Defined Contribution plans, and the benefits that can be guaranteed in Defined Benefit plans. A key variable that influences the rate of return on financial assets is the long-term real interest rate. (Sharpe *et al.,* 2008). Since it is the pension schemes that happen to be the majorly available structures for saving for retirement, it is important that we evaluate its role in an economy. This research looks at the relationship between pension fund assets and economic growth in emerging markets economies. It focuses specifically on the factors that determine the emerging market asset allocation of pension funds in developing countries, and assesses the contribution of domestic pension funds to the development of local securities markets in emerging market countries. The main factors determining the investment performance of emerging market pension funds is also analyzed.

1.1.1 Pension Funds/Schemes

Pension funds are defined as forms of institutional investor, which collect, pool and invest funds contributed by sponsors and beneficiaries to provide for the future pension entitlements of beneficiaries (Davis, 2005). They thus provide means for individuals to accumulate saving over their working life so as to finance their consumption needs in retirement, either by means of a lump sum or by provision of an annuity, while also supplying funds to end-users such as corporations, other households (via securitized loans) or governments for investment or consumption. Pension funds are designed to grow money for your retirement years. Pensions generally fall into two categories: defined benefit plans and defined contribution plans. Within these two categories, there are a variety of plan types and you or your employer can choose to invest your pension money in a number of different types of investment funds

1.1.1.1 Defined Benefit Plan

This is an arrangement where the employer guarantees the employee to receive a definite amount of benefit upon retirement, regardless of the performance of the underlying investment pool (Davis, 2005). When you participate in a defined benefit plan, you are assured of receiving future income benefits. In some cases, your employer may make payment guarantees that are based on fixed dollar amounts. In a defined benefit plan, your employer normally invests the pension money for all employees into one single fund. Benefit guarantees are based upon estimates of the performance of that fund over the course of time. Employees leaving the firm or high mortality rates can cause the performance of the pension fund to deviate from the initial projections. If a shortfall occurs, your employer must cover it with separate funds. The Pension Benefit Guaranty Corporation insures most defined benefit plans and ensures that you receive a minimum income benefit if your actual pension provider goes bankrupt or becomes insolvent.

1.1.1.2 Defined Contribution Plan

In a defined-contribution plan the employer makes predefined contributions for the employee, but the final amount of benefit received by the employee depends on the investment's performance. With a defined contribution plan, the performance of your own investment has no impact on your employer or any other plan participants. Defined contribution plans allow you to defer some of your taxable salary by depositing the money into a tax-sheltered fund (Ngugi, 2000). Your employer may or may not make a contribution to the plan on your behalf. With defined contribution plans, your money normally gets invested in mutual funds. As the name suggests, the contributions to these plans are defined but the withdrawals are not.

1.1.1.3 Individual Pension Plan

An Individual Pension Plan or IPP is a retirement savings vehicle. An IPP is a one-person maximum Defined Benefit Pension Plan which allows the plan member to accrue retirement income on a tax-deferred basis. As such, an IPP must conform to the Authority's Income Tax Act and regulations as well as the requirements of the state with respect to defined benefit pension plans (Ngugi, 2000).

1.1.1.4 Funded Pension Systems

A funded pension scheme is one in which the employer and employees' contributions are vested in separate trustees who may be individuals or corporate bodies. It is normally separate and distinct from the employer's business. Most employers set up their pension funds under trust deed and the appointed trustees control the funds. Each party (the employer and the trustees) has separate responsibilities, duties and activities, and has to consider their own ability to treat tax incurred as input tax (Davis, 2005)

1.1.1.5 Non-Funded Pension Systems

In contrast to an advanced funded pension plan, an unfunded pension plan uses actuarial assumptions to determine the periodic contributions it makes to the plan. Defined benefit plans are more difficult to fund in advance because there are so many variables in computing the funding necessary to produce the benefit (Davis, 2005)

1.1.1.6 Pension Fund Assets

An asset is something which has monetary value and which is most likely to become profitable and offer potential earnings in the future. Pension fund assets are forms of asset which are invested in for the purpose of meeting the requirement of retirees at retirement age. Pension fund assets are therefore long-term assets which arise from the pension contributions made by members towards their retirement. These assets are therefore not easily converted into cash and are mostly liquidated only in the case of a withdrawal by a retiree when it falls due.

1.1.2 Domestic Debt

Domestic Debt is the amount of money raised by the Government, in local currency and from its own residents. Generally, domestic debt consists of two categories, which are Bank and Non-Bank borrowing. Bank borrowing is made up of advances to the Government by the Central Bank while Non-Bank borrowing made by the Government from the general public.

1.1.3 Equity turnover

Equity turnover, more commonly known as capital turnover, is a business formula applied to a company's annual sales and stockholder equity. This is a measurement of how well the company is using its equity, and a high turnover shows both a good return for stockholders and good business potential. There is no standardized good or bad equity turnover; instead, the number should be compared with similar businesses.

1.1.4 Treasury bill

These are short-term debt obligation with a maturity of less than one year. T-bills commonly have maturities of one month (four weeks), three months (13 weeks) or six months (26 weeks). T-bills are issued through a competitive bidding process at a discount from par, which means that rather than paying fixed interest payments like conventional bonds, the appreciation of the bond provides the return to the holder.

1.1.5 Market capitalization

Market capitalization (or market cap) is the total value of the issued shares of a publicly traded company; it is equal to the share price times the number of shares outstanding. As outstanding stock is bought and sold in public markets, capitalization could be used as a proxy for the public opinion of a company's net worth and is a determining factor in some forms of stock valuation. The total capitalization of stock markets or economic regions may be compared to other economic indicators.

1.1.6 Inflation

Inflation is defined as a sustained increase in the general level of prices for goods and services. It is measured as an annual percentage increase. As inflation rises, every shilling you own buys a smaller percentage of a good or service. The value of a shilling does not stay constant when there is inflation. The value of a shilling is observed in terms of purchasing power, which is the real, tangible goods that money can buy. When inflation goes up, there is a decline in the purchasing power of money. For example, if the inflation rate is 2% annually, then theoretically a Shs1 pack of gum will cost Shs1.02 in a year. After inflation, your dollar can't buy the same goods it could beforehand.

1.1.7 Correlation

Correlation analysis deals with relationships among variables. The correlation coefficient is a measure of linear association between two variables. Values of the correlation coefficient are always between -1 and +1. 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. For simple linear regression, the sample correlation coefficient is the square root of the coefficient of determination, with the sign of the correlation coefficient being the same as the sign of b1, the coefficient of x1 in the estimated regression equation.

1.1.8 Economic Growth

An increase in the capacity of an economy to produce goods and services, compared from one period of time to another. Economic growth can be measured in nominal terms, which include inflation, or in real terms, which are adjusted for inflation. For comparing one country's economic growth to another, GDP or GNP per capita should be used as these take into account population differences between countries. Economic growth is usually associated with technological changes. An example is the large growth in the U.S. economy during the introduction of the Internet and the technology that it brought to U.S. industry as a whole. The growth of an economy is thought of not only as an increase in productive capacity but also as an improvement in the quality of life to the people of that economy (Walubengo, 2012).

1.1.8.1 Relationship between pension fund assets and economic growth

This section discusses the data and the relationship between economic growth and retirement pension assets. Mobilization of resources for national development has been a central issue for policy makers in many countries. The role of savings in economic growth has therefore been given considerable attention given the fact that for any sustainable growth and development, resources must be effectively mobilized and allocated efficiently so as to achieve the growth objectives. One of the avenues of mobilizing resources is through retirement benefits schemes. Many countries both in developed and emerging markets have seen a rapid growth in the number of retirement benefits schemes as well as the value of the retirement benefits assets. This has been most notable following the pension reform which has seen the shift in the finance of the retirement income from pay-as-you-go (PAYG) to funding (Davis, 2005). According to the Global Pension Asset Study Report of 2011, the total retirement benefits asset for thirteen selected countries as at the end of 2010 was USD 26,496 billion which was approximately 76 percent of the GDP of the surveyed countries. This represented an increase of 12 percent compared to the 2009 fund value. In Kenya, the retirement benefits assets have increased over time, both in absolute terms and as a ratio of GDP. The Pension assets grew from Kshs. 117.4 billion in 2002 to Kshs. 432.8 billion in 2011, translating to an average annual growth rate of 26.9 percent over the period. As a share of GDP, the ratio improved over the period from a ratio of 11.5 percent in 2002 to approximately 14.3 percent in 2011. Compared to the GDP growth rate, the retirement benefits asset growth rate exhibits sharp fluctuations. There was a sharp drop in the retirement benefits assets growth rates during the period between 2002 and 2004, declining from a growth rate of 36 percent in 2002 to 5.2 percent in 2004. Surprisingly, the GDP growth rate increased over the period. During the period 2004/2005, the retirement pension assets grew to reach a growth

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rate of 26.6 percent but stagnated in 2006. There was a drop again in the asset's growth rate in 2007 through 2008 and 2009 to stand at 9.6 percent in 2009. Interestingly, the retirement pension asset growth rate picked in 2010 but dropped in 2011, witnessing a negative growth of 4 percent. The GDP growth rate on the other hand witnessed a positive growth between the periods 2008 to 2010 but dropped in 2011. The decline in the growth of the pension assets between 2002 through 2004 may partly be attributed to the effects of 2002 general election and the change over in government in 2003 while the decline in 2007 through 2009 may partly be attributed to a number of factors; the effects of the general election of 2007 and the 2008 post election violence; and, the effects of the Global Financial Crisis (GFC). The negative growth in the pension assets in 2011 may be attributed to the unfavourable macro-economic conditions which include high inflation and interest rates. Although, the growth rate in the retirement pension assets exhibits sharp fluctuations compared to the GDP growth rate, the ratio of retirement pension assets to GDP has been somewhat stable.

1.1.8.2 Pension Funds and Economic Growth in Kenya

The Central Bank of Kenya (CBK) has projected that Kenya's real Gross Domestic Product (GDP) will expand by 5.2% with Monetary Policy focusing on achieving and maintaining low inflation. CBK reports that the Kenyan economy performed modestly in 2011 and realized growth in gross domestic product (GDP) of 4.4% compared with expansion of 5.8% in 2010 and 2.7% in 2009. The economic growth in the said period rode on Agriculture and Forestry, Electricity and Water Supply, Mining and Quarrying, Financial Intermediation, Wholesale and Retail Trade, Repairs, and Transport and Communication. In the first three months of 2012 the economy performed sluggishly registering real growth of 3.5%, or 140 basis points below 4.9% growth in the corresponding period in 2011. The twelve month inflation rate slowed down from 18.31% in January 2012 to 10.1% in June 2012 on account of reduced food inflation and fuel inflation in the year to June 2012 and prudent monetary policy stance. The rate has since dropped to 3.25% in October 2012. The annual average inflation, however, rose to 16.0% in June 2012 from 15.1% in January 2012 and 6.9% in June 2011. The Central Bank says monetary policy tightening started in March 2011 and was sustained through June 2012 to contain domestic inflation. Money supply (M3) growth decelerated to 15.5% from 19.3% in September 2011, and reserve money grew by 17.6% in the year to June 2012; against target growths of 18.7% and 14.2%, respectively. According to CBK, The Central Bank Rate (CBR) continued to signal the direction of monetary policy.

At the beginning of the fiscal year 2011/12, the MPC initially adopted a gradual approach by raising CBR by 75 basis points from 6.25% in July 2011 to 7.0% in September 2011. Pension Schemes Performance Survey, prepared by Actuarial Services East Africa Limited (ACTSERV), is a survey on

the performance of pension schemes in Kenya. In the second quarter of 2012, results from 88 schemes were analyzed. Their margin of error was 5.5% with 95% confidence level. The schemes analyzed had a total fund size of about Kshs. 42.9 Billion (compared to assets of Kshs. 35.2 Billion in the previous quarter) with an average of Kshs. 487.1 Million compared to Kshs. 502.7 Million in the previous quarter. This shows a decline of 15.6 Millions. The survey indicates that, according to the number of participating Schemes, small schemes constitute the largest proportion in number of 64%, medium schemes have 20% while large schemes have 16%. In terms of the total fund value of the participating schemes, large schemes constitute the largest proportion of 84%, medium constitutes 10% while small schemes constitute 6 % (Kilibwa and Muriuki, 2012). The second quarter saw marginal changes in the distribution of funds across the different asset classes. Pension schemes invested 66.8% of their funds in fixed income compared to 66.4% in the previous quarter. The Equity portfolio registered a marginal decrease from 28.1% in the previous quarter to 27.1% in the second quarter. Investments in offshore remained at 1.9%, same as in the previous quarter. Approximately 2.3% was invested in cash & cash equivalents, up from 1.4% in the previous quarter. 1.9% of the aggregate funds were invested in property. The survey compares the overall returns and the returns in different asset categories with their respective benchmarks and the overall Kenyan inflation.

1.1.8.3 Small Scheme Analysis

The weighted average overall returns of small schemes improved by 23.7% from 6.0% in the previous quarter to 7.4% in the quarter ending 30th June 2012. This return was higher than the overall inflation rate of 0.4%. The weighted average overall returns for the year ending 30th June 2012 to 2.6% from the returns in the previous quarter of (5.8)%. This was however; lower than the overall inflation of 10.1%. The 3-year annualized weighted average returns for the period ending 30th June 2012 marginally improved by 5.1% to 9.6% compared to 9.1% in the previous quarter. 94.3% of the schemes assets were invested in fixed income and equities compared to 96.1% in the previous quarter. There was no investment in property.

1.1.8.4 Medium Scheme Analysis

The weighted average overall returns of medium schemes for the quarter ending 30th June 2012 of 7.2% were marginally higher than the 6.8% returns of the previous quarter by 5.6%. The overall inflation rate was 0.4%. The weighted average overall returns for the year ending 30th June 2012 was 1.3% up from (5.3) % in the previous quarter. This was still lower than the overall inflation of 10.1%. The 3-year annualized weighted average returns for the period ending 30th June 2012 dropped by 3.5% to 10.8% compared to 11.2% in the previous quarter.

This return out-performed the annualized overall inflation rate of 9.2%. 92.5% of the schemes assets are invested in fixed income and equities compared to 94.1% in the previous quarter. There was no investment in property.

1.1.8.5 Large Scheme Analysis

The weighted average overall returns of large schemes for the quarter ending 30th June 2012 of 7.6% were marginally higher than the 7.1% of the previous quarter. The overall inflation rate was 0.4%.The weighted average overall returns for the year ending 30th June 2012 improved to 2.7% up from the (6.1)% returns of the previous quarter. This was lower than the overall inflation of 10.1%. The 3-year annualized weighted average returns for the period ending 30th June 2012 marginally went down to 10.3% compared to 10.7% in the previous quarter. 94.1% of the schemes assets are invested in fixed income and equities as compared to 94.5% in the previous quarter.

1.2 Statement of the Problem

As a result of pension system reform, pension fund assets are growing rapidly and are increasingly providing a source of investment funds to their domestic financial markets. Pension fund investments are expected to increase the availability of long-term funds, enhance competition, induce financial innovation, and improve corporate governance (Omondi, 2008). Overall, we find that the impact of pension funds on capital market development differs significantly according to country's level of financial development. In the short run dynamics of capital markets, the countries with well-developed financial systems generally can expect to enjoy significant benefits from the growth of their pension funds, while the evidence of such benefits is much less clear for countries with 'low' financial development. The pension fund industry is a significant source of capital in the Kenyan financial markets. Pension funds invested a sum of Kshs 223 billion in the Kenyan financial sector in 2007 of which Kshs 77 billion (22% of the outstanding domestic debt) was invested in government securities (Omondi, 2008).

Ngugi (2000) argued that Pension funds accumulate huge sums of money. Most of this money lies idle until pensioners retire. The accumulated returns from the investments of these funds are amounting to millions of shillings. On the other hand, most of the pension fund contributors live in poor environments, are unable to own houses and are subjected to more suffering after retiring. She therefore concluded that pension funds have not played a significant role in housing supply in Kenya, although this sector holds a momentous accumulation of funds. The study recommended that the Retirement Benefits Act be amended to include a clause requiring pension funds to devote a proportion of their investible funds in housing for their members. Investment of funds should also be handled by investment consultants in order to prevent loss of funds in bad investments. In this regard, Ngugi narrowed her focus on financing housing products for members covered under pension funds. Kipkoech (2012) argued that Individual pension schemes are the principal sources of retirement income for millions of people in Kenya. Pension schemes are also important contributors to the gross domestic product (GDP) of countries. His conclusion was that fund governance exerts a significant

relationship on the growth of the pension schemes. This means that pension fund governance lead to improved growth of the individual pension schemes. He therefore recommended that reducing the benefits processing period, providing relevant education to the trustees, maintaining an appropriate internal control system, communicating regularly with members, defining the roles of the trustees clearly, regulating the fees charged by the service providers, controlling default risk on the part of the sponsor and implementing investment strategies that are major factors that influence the growth of individual pension schemes in Kenya.

In his Variables, none was exploited to the contribution of pension funds towards economic growth in Kenya. Raichura (2008) argued that the current Pensions Act does not contain any explicit provision on the constitution, operation and management of the Public Service Pension Scheme (PSPS); nor are there explicit provisions for disclosure and governance structures. From his findings, the current Constitution of Kenya provides that any modifications to the PSPS must not be less favourable for existing employees than the existing arrangements. Raichura argues that this does limit the ability to reform the current system for existing staff although an amended scheme may be considered for new staff. He therefore recommended that for any forms to be fruitful in the Kenyan pension industry, we must have a co-ordinated approach to pension reform in which all Government policy arms and stakeholders actively engage and dialogue. Of these local studies that have been done in this field, little if any has been discussed on the relationship between pension fund assets and economic growth in Kenya. This is where our study finds the gap because it looks at the relationship that exists between pension fund assets and economic growth.

1.3 Objective of the Study

1.3.1 General Objective
The general objective of the study is to investigate the relationship between retirement pension assets and the Kenyan economy.

1.3.2 Specific Objectives
    i. To establish any correlation between retirement pension assets, equity turnover, treasury bill, inflation and domestic debt.

    ii. To analyze the relationship between pension assets, domestic debt and GDP.

    iii. To establish the relationship between pension assets and stock market capitalization

    iv. To establish the relationship between pension assets and inflation

    v. To analyze the impact of retirement benefit assets on economic growth in Kenya.

1.4 Significance of the Study

The finding and recommendations of the study should be useful to Investment Managers of retirement pension funds. Henceforth they will not rely on haphazard personal experiences or subjective expert judgment, but base their methods, decisions and actions on concrete knowledge of issues supported by research findings. This will go a long way towards organizational excellence.

The research work will be of importance to the Government and those that are in the helm of affairs of pension scheme to know the type of environment that they are operating in so that they can formulate policies that are market driven considering the contribution that is made to the economy by the pension industry.

The study shall provide important insight to the Finance managers of Pension Funds, responsible for asset selection and allocation towards ensuring the most efficient and effective portfolios, that aims at maximizing output and reducing risks associated with them.

Therefore the study will form a basis for further research on pension funds. This will lead to the generation of new ideas for the better and more efficient administering of pension funds in the Kenyan economies and the world at large.

CHAPTER TWO

LITERATURE REVIEW

2.1   INTRODUCTION

Pension is the model realization by the employer to make available to its employee some cash when the employee becomes retired either due to old age or physical disability or change of service. The fund being set aside by the employer is a kind of insurable even if privately invested. In view of this, the chapter aims at reviewing some scholars' conception about pension funds and to investigate their role as Institutional Investors in Emerging Market Economies. The chapter further seeks to create more light on the concept of pension Funds, investigate the contribution of pension funds in emerging markets economies, establish the main factors determining the investment performance of emerging market pension funds, assesses the contribution of domestic pension funds to the development of local securities markets in emerging market countries, establish the factors that determines the emerging market asset allocation of pension funds in developing countries and highlight on the concept of Emerging Market Economies.

2.2 REVIEW OF THEORIES

2.2.1 The Financial Theory of Defined Benefit Pension Scheme

Increasingly, modern business and investment management techniques are founded on approaches to measurement of profit and risk developed by financial economists (Exley et al., 1997). This theory begins by analyzing corporate pension funds provision from the perspective of such financial theory. The theory then proposes a successful blueprint for this mark-to-market valuation discipline and considers whether and how it can be applied to pension schemes both in theory and in practice. In their work, it is asserted that adoption of this market based approach appears now to be essential in many of the most critical areas of actuarial advice in the field of defined benefit corporate pension provision and that the principles can in addition be used to establish more efficient and transparent methodologies in areas which have traditionally relied on subjective or arbitrary methods. They extend the hope that the insights gained from financial theory can be used to level the playing field between defined benefit and defined contribution arrangements from both corporate and member perspectives. In their work ''the financial theory of defined benefit pension scheme'' They suggest that there are many companies across the world running occupational pension schemes of one form or another.

These companies do not exist purely for the purpose of providing pension benefits but are set up with a core business in mind; for example, supplying goods or services to customers. However, the assets and liabilities of a pension scheme can be very substantial in relation to the size of a company, and the value of the pension promises can constitute an important component of the members' aggregate wealth. In their work ''Management of Economic Value'' The theory asserts that: a meaningful economic value can be assigned to future net cash flow streams. In particular, this value is independent of ownership - a given set of cash flows has the same 'value' to members of a pension scheme or shareholders in a company - and is also independent of the vehicle in which the cash flow arises. The purpose of their research paper was to apply the principles of modern corporate finance to pension management, to review and reconcile current actuarial approaches with their analysis and to suggest a framework for the valuation and management of a defined benefit (DB) pension fund consistent with financial economic theory and practice. This value concept looks through accounting conventions to an underlying economic reality. The key reality check for such a value concept is current prices and market conditions. A management can best serve shareholders by maximising the value of future cash flow. Such management actions also generate wider social benefits, for example efficient use of capital and labour.

2.2.2 The Theory of Financial Intermediation

Traditional theories of intermediation are based on transaction costs and asymmetric information. They are designed to account for institutions which take deposits or issue insurance policies and channel funds to firms. The theory as put forward by Franklin Allen and Anthony M. Santomero 96-32, their work was to review the state of intermediation and attempt to reconcile it with the observed behaviour of institutions in modern capital markets. They argue that many current theories of intermediation are too heavily focused on functions of institutions that are no longer crucial in many developed financial systems. They focus on products and services that are of decreasing importance to the intermediaries, while they are unable to account for those activities which have become the central focus of many institutions. They offer a view of intermediaries that centres on two different roles that firms currently play. These are facilitators of risk transfer and in dealing with the increasingly complex maze of financial instruments and markets. Risk management has become a key area of intermediary activity, though intermediation theory has offered little to explain why institutions should perform this function. In addition, they argue that the facilitation of participation in the sector is an important service provided by these firms. They suggest that reducing participation costs, which are the costs of learning about effectively using markets as well as participating in them on a day to day basis, play an important role in understanding the changes that have taken place in all financial institutions that perform the role of intermediation.

2.2.3   Role Theory

According to this theory, retirement is an adjustment of one's principal role usually as a paid worker, a role that is central to a person's identity (Kim and Moen, 2001). Choi (2001) argues that roles give people a sense of worth and achievement and help shape their behaviour and self-concept. Further, role theory suggests that retirement can be a stressful event for individuals due to the loss of a fundamental social role. Learning to deal with role loss may cause individuals to feel a sense of vulnerability. For instance, some retired individuals may experience feelings of disconnect and anxiety that may lead to low levels of life satisfaction during retirement (Kim and Moen, 2001; Richardson and Kilty, 1991; Quick and Moen, 1998). The theory also points out that many women return to work after retirement either because of the lack of fulfillment during retirement or worse more because of lack of finance. It is because of these reasons that a person upon retirement needs sufficient funds from the pension savings to help finance replacements for roles lost by engaging in some activities financial or otherwise that will keep them busy and not feel left out by the society due to retirement

2.3 REVIEW OF EMPIRICAL STUDIES

Raichura (2008) looked at the Analytical review of pension systems in Kenya. In his study, he presented an analysis of the current pension system in Kenya and the reforms undertaken to date, he identified key areas and weaknesses of the existing system which merit further attention and he further suggests strategies that may enable the objectives of broader pension reform to be met. According to Raichura, the current Pensions Act does not contain any explicit provision on the constitution, operation and management of the Public Service Pension Scheme (PSPS); nor are there explicit provisions for disclosure and governance structures. The current Constitution of Kenya provides that any modifications to the PSPS must not be less favourable for existing employees than the existing arrangements. This does limit the ability to reform the current system for existing staff although an amended scheme may be considered for new staff. Raichura estimates that the total assets of occupational schemes stands at KShs 181bn and are more than double those of the National Social Security Fund (NSSF). An increasing number of African countries have recently initiated reform of their pension and social protection systems. Over the last decade, Kenya has also undertaken a major reform of parts of its pension system. Whereas the primary motivation for reform of pension systems in many countries worldwide has been to address the growing fiscal burden of pension liabilities, in Kenya the major driver for reform was to strengthen the governance, management and effectiveness of the existing pensions system. Thus, the occupational retirement schemes sector in Kenya whilst smaller in terms of membership than the NSSF is larger in terms of invested assets reflecting the higher average contributions to occupational schemes. 51% of the total schemes by number are invested in guaranteed funds (i.e. invested with insurers on a pooled basis) whilst 49% are on a segregated basis; by value, however, over 90% of the total assets of occupational schemes are

currently invested on a segregated basis. The schemes invested in guaranteed funds tend to be smaller schemes. On regulatory issues, the enactment of the Retirement Benefits Act ('RBA') (1997) and the establishment of the Retirement Benefits Authority ('the Authority') in 2000 marked the beginning of a regulated, organized and more responsible retirement benefits sector in Kenya. He concludes that many developing countries in Africa, Kenya's current pension system is characterised by poor overall levels of coverage and benefit adequacy, small size of formal economy relative to informal economy, low levels of disposal income, insufficient insurance against longevity and competing priorities. In his recommendation, an important lesson of the pension reforms in Kenya is to have a co-ordinated approach to pension reform in which all Government policy arms and stakeholders actively engage and dialogue.

Ngugi (2000) did a study on the Role of pension funds in housing provision in Kenya. In her study she sets out to seek ways in which pension funds in Kenya can be applied as an additional source of finance for housing .The study examines the stocks of accumulated funds held by and the investment portfolios of the three case studies of NSSF, East African Industries and University of Nairobi. This study also established the proportion of the assets that these funds have invested in housing. She sought the Views of members of these funds in order to establish their preferences on how their funds are managed and invested. To obtain the required information, the researcher conducted oral interviews and administered questionnaires to the fund managers of the case studies. Official records like annual reports of accounts of the Funds were also examined in detail where they were available. In addition, the researcher interviewed members of these funds (contributors) by use of questionnaires. The main findings of the study supported the view that pension funds have not played a significant role in housing supply in Kenya, although this sector holds a momentous accumulation of funds. In her recommendation, a great potential thus exists for pension funds to play a greater role in housing provision. The study also established that members of pension funds would wish to see their funds invested in affordable housing that they can acquire even before they retire. The study recommends further, therefore, that the Retirement Benefits Act be amended to include a clause requiring pension funds to devote a proportion of their investible funds in housing for their members. Investment of funds should also be handled by investment consultants in order to prevent loss of funds in bad investments. Ngugi concluded that Pension funds in Kenya have thus invested negligible amounts into housing, even less in housing for their members. Given the importance of housing as a socio-economic good and the many problems existing in the housing sector, in her study she sets out to seek ways in which pension funds in Kenya can be applied as an additional source of finance for housing.

Kipkoech (2012) studied on the Determinants of the growth of Individual Pension Schemes in Kenya; the general objective of the study was to investigate the factors influencing the growth of individual pension schemes in Kenya. More specifically, the study explored the effect of fund governance, regulations, investment strategy and fund ethics on the growth of pension schemes. The study adopted the descriptive research design. The target population for this study comprised of 22 individual pension schemes in Kenya (RBA Directory, 2012) out of which all are privately owned and compete for customers in the market. The findings of the study revealed that fund governance exert a significant relationship on the growth of the pension schemes. This means that pension fund governance lead to improved growth of the individual pension schemes. The result further shows that reducing the benefits processing period, providing relevant education to the trustees, maintaining an appropriate internal control system, communicating regularly with members, defining the roles of the trustees clearly, regulating the fees charged by the service providers, controlling default risk on the part of the sponsor and implementing investment strategies that are major factors that influence the growth of individual pension schemes in Kenya. Fund regulation was also found to exert a significant relationship on the growth of individual pension schemes. This implies that the implementation of the following regulations improve the performance of individual pension schemes: monitoring of performance of the service providers; regulation of compliance costs; limiting the size of the pension fund board; conducting regulatory meetings; the separation of fund ownership from the sponsor's business; and the investment policy. According to Kipkoech, Individual Pension schemes are also important contributors to the gross domestic product (GDP) of countries. Retirement income accounts for 68% of the total income of retirees in Kenya, while pension assets account for 30% of Kenya's GDP. It is therefore important that pension schemes be managed effectively to ensure their growth.

2.4 Conclusion

As a result of pension system reform, pension fund assets are growing rapidly and are increasingly providing a source of investment funds to their domestic financial markets. Pension fund investments are expected to increase the availability of long-term funds, enhance competition, induce financial innovation, and improve corporate governance. To the extent that such financial market improvements are related to financial market size and activity, our study confirms only to an extent the existence of positive impacts from pension funds on the development of stock markets and private bond markets. Overall, we find that the impact of pension funds on capital market development differs significantly according to country's level of financial development. In the short run dynamics of capital markets, the countries with well-developed financial systems generally can expect to enjoy significant benefits from the growth of their pension funds, while the evidence of such benefits is much less clear for countries with 'low' financial development. These findings suggest that as a whole, Pension funds fulfill an important role in the economy by channeling the current retirement savings into investments in financial assets, and subsequently transforming these assets into a predictable post-employment income. Since it is the pension schemes that happen to be the majorly available structures for saving for retirement, it is important that we evaluate its role in an economy. A mix of policies like reliance on greater funding, relaxation of investment policies, encouraging private participation, enhancing system efficiency and developing regulatory capacity could help improve the role of pension fund and promote better economic security for the Emerging Economies. The benefit of such a pension regime is also likely to foster aggregate rate of savings and accelerate capital market development.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter the study looked at the research methodology. This was the overall framework for carrying out a research work and it covered the following: Research design, Population of the study, Sample Size and Sampling Techniques, Sources of data, instrument of data collection and methods of data analysis.

3.2 Research Design

Research design is the plan for research project. It provides guidelines which direct the researcher towards solving the problem and it may vary depending on the nature of the problem being studied. Also, consideration regarding limitation posed by time, money and availability of data is an important factor in determining research design for a particular study. The study adopted the descriptive research design. Mugenda and Mugenda (1999) notes that a descriptive research attempts to get the descriptive existing phenomenon by exploring the existing status of two or more variables at a given position time, hence was the most suited in analyzing our two variables in this research.

3.3 Population of the Study

A population is the totality of all elements, subjects, or members that posses a specified set of one or more common features. The population comprised of secondary data from public pension fund herein referred to us the National Social Security Fund, Retirement Benefit Authority, locally based Occupational Pension Funds and Individual Pension Plans, report from world bank on the Kenyan economic update, publications from KNBS, Publications on the Kenyan economic report from KIPPRA, publications on the Domestic economy from Central bank, Publications from Ministry of Finance and Planning on Consumer price index and extracts from the Kenya's vision 2030 document on government expenditure perspective.

3.4 Sampling Techniques and Sample Size

A population may be finite yet, so vast that only a sample could be used for research purpose. In practice, most of the information obtained by researchers about any population comes from examining a small representative subject of the population. This is called a sample. Sampling is the process of selecting units (e.g., people, organizations) from a population of interest so that by studying the sample we may fairly generalize our results back to the population from which they were chosen (Baridam, 1987). The objective is to draw conclusions about populations from samples, the study adopted inferential statistics which enabled us to determine a population`s characteristics by directly observing only a portion (or sample) of the population. The study obtains a sample rather than a complete enumeration (a census) of the population for many reasons.

Obviously, it is cheaper to observe a part rather than the whole, but we should prepare ourselves to cope with the dangers of using samples. Also this aims at gaining an understanding about some of the features of the whole research population based on the common characteristics of the sample (Baridam, 1987). For the purpose of this research, random sampling was used to reduce the data to be used by focusing 10 pension firms which consisted of public pension fund herein referred to us the National Social Security Fund, Retirement Benefit Authority, Eight locally based Occupational Pension Funds and Individual Pension Plans.

3.5 Sources and Instruments of Data Collection

There are two basic sources of data. These are:

3.5.1 Primary Data

Primary data is a type of information that is obtained directly from first-hand sources by means of surveys, observation or experimentation. It is data that has not been previously published and is derived from a new or original research study and collected at the source such as in marketing.

3.5.2 Secondary Data

A secondary data research project involves the gathering and/or use of existing data for purposes other than those for which they were originally collected. These secondary data may be obtained from many sources, including literature, industry surveys, compilations from computerized databases and information systems, and computerized or mathematical models of environmental processes.

3.5.3 Instruments of Data Collection

For the purpose of this research purely secondary source of data was used. The data was from public pension fund herein referred to us the National Social Security Fund, Retirement Benefit Authority, locally based Occupational Pension Funds and Individual Pension Plans, report from world bank on the Kenyan economic update, publications from KNBS, Publications on the Kenyan economic report from KIPPRA, publications on the Domestic economy from Central bank, Publications from Ministry of Finance and Planning on Consumer price index and extracts from the Kenya's vision 2030 document on government expenditure perspective, text books and economic release journals.

3.6 Method of Data Analysis

In this section the study focuses on reducing the data collected, after the data gathering, to such a size and shape that can be easily comprehended as well as to enable the extraction of new information from it. Analysis of data is a process of inspecting, cleaning, transforming, and modeling data with the goal of highlighting useful information, suggesting conclusions, and supporting decision making. The collected and organized data was classified and analyzed using the frequency tables with the help of the Statistical Package for Social Sciences (SPSS) to establish the relationship between pension

fund assets and economic growth in Kenya, the percentage method was also utilized in the presentation, interpretation and analysis of data in tabular form. The qualitative data was analyzed by way of content analysis method through the use of descriptive statistical methods such as measures of central tendency and inferential statistics such as multiple regression analysis.

3.7 Research Model

A multiple regression model was used to show the relationship between pension fund assets and economic growth in Kenya.

$$y_i = \beta_0 + \beta_1 x_i + \varepsilon_i, \quad i = 1, \ldots, n.$$

Where:

y_i =dependent variable which in this case is the Economic growth in Kenya as measured by GDP.

β_0 =the constant variables that affects the relationship of pension funds assets and the economy.

β_1=Parameter which is the coefficient of the independent variable to the dependent variable

x_i =Independent variable in this case is pension fund assets which constitutes the entire fund credit

ε_i = Is the error term and the subscript i indexes a particulart observation.

CHAPTER FOUR

Data Analysis and Presentation of Findings

4.1 Introduction

Data analysis is the process of inspecting, cleaning, transforming and modelling data with the aim of obtaining useful information to support decision making. The purpose of this research was to investigate the relationship between retirement pension assets and the Kenyan economy. The chapter involves the presentation of the findings in reference to the data collected. The findings were obtained from secondary data sources among them, economic surveys and statistical abstracts. Data from the RBA publications, figures from KNBS, economic reports from KIPPRA, data on consumer price index from the Ministry of finance & planning and NSSF financial statements were utilized. The study utilized ratios and percentages to demonstrate the relationship between retirement benefits assets and economic growth. The study used quarterly data for the period 2002 to 2011. The data was presented and analyzed using SPSS, frequencies tables and percentages that were used to establish the relationship between the variables.

4.2 Data Presentation

4.2.1 Findings on the relationship between retirement pension assets and economic growth in Kenya

In Kenya, the retirement benefits assets have increased over time, both in absolute terms and as a ratio of GDP as indicated by the below table:

Table 4.1 showing relationship between Retirement Pension Assets and GDP

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Assets Kshs(Billions)	150	140	145	200	300	350	300	400	420	400
GDP Kshs(Billions)	280	300	350	400	450	500	550	600	680	780

Source: RBA financial statements on the retirement benefit sector assets

The Pension assets grew from Kshs. 150 billion in 2002 to Kshs. 400 billion in 2011, translating to an average annual growth rate of 26.9 percent over the period. As a share of GDP, the ratio improved over the period from a ratio of 11.5 percent in 2002 to approximately 14.3 percent in 2011.

Compared to the GDP growth rate, the retirement benefits asset growth rate exhibits sharp fluctuations. There was a sharp drop in the retirement benefits assets growth rates during the period between 2002 and 2004, declining from a growth rate of 36 percent in 2002 to 5.2 percent in 2004, this also being the period when retirement assets also recorded a very dismal growth in the fund

credit. During the period 2004/2005, the retirement benefits assets grew to reach a growth rate of 26.6 percent but stagnated in 2006. There was a drop again in the asset's growth rate in 2007 through 2008 and 2009 to stand at 9.6 percent in 2009. Interestingly, the retirement benefits asset growth rate picked in 2010 but dropped in 2011, witnessing a negative growth of 4 percent. The GDP growth rate on the other hand witnessed a positive growth between the periods 2008 to 2010 but also dropped in 2011. The decline in the growth of the pension assets between 2002 through 2004 may partly be attributed to the effects of 2002 general election and the change over in government in 2003 while the decline in 2007 through 2009 may partly be attributed to a number of factors; the effects of the general election of 2007 and the 2008 post election violence; and, the effects of the Global Financial Crisis. The negative growth in the pension assets in 2011 may be attributed to the unfavourable macro-economic conditions which include high inflation and interest rates.

Figure 4.1 Growth rate in retirement pension assets and GDP
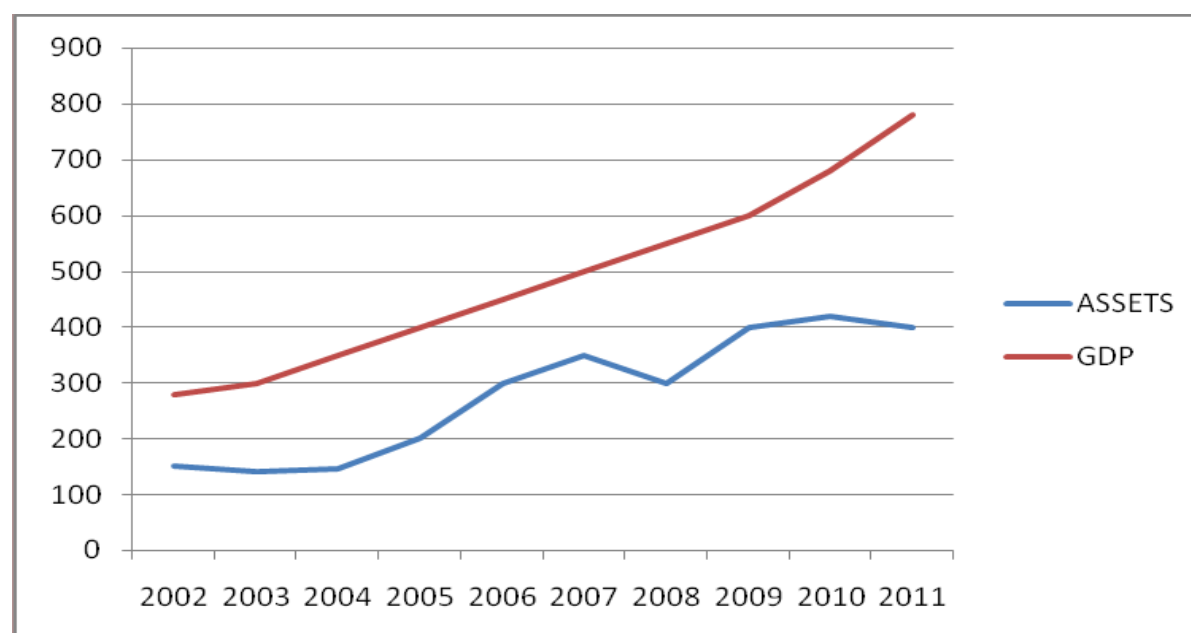
Source: RBA Financial Statements on the retirement benefit sector assets

The above figure shows the graphical relationship between the growth rate in retirement pension assets and GDP. Although, the growth rate in the retirement benefits assets exhibits some fluctuations compared to the GDP growth rate, the ratio of retirement benefits assets to GDP has been somewhat stable.

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4.2.2 Findings on correlation between assets, equity turnover, TB rates, inflation and debt.

Correlation and regression analysis are related in the sense that both deal with relationships among variables. The correlation coefficient is a measure of linear association between two variables. Values of the correlation coefficient are always between -1 and +1. A correlation coefficient of +1 indicates that two variables are perfectly related in a positive linear while a correlation coefficient of -1 indicates that two variables are perfectly related in a negative linear sense whereas a correlation coefficient of 0 indicates that there is no linear relationship between the two variables. Neither regression nor correlation analyses can be interpreted as establishing cause-and-effect relationships. They can indicate only how or to what extent variables are associated with each other. The correlation coefficient measures only the degree of linear association between two variables. The conclusions about cause-and-effect relationship ware based on the judgment of the analyst. Multiple regressions were performed to explain the correlation between retirement pension assets, equity turnover, Treasury bill rates, inflation and debt. After running the regression on SPSS, the results were as shown below;

Table 4.2 showing correlation between assets, equity turnover, TB rates, inflation and debt.

	GDP	ASSETS	DEBTS	INFLATION	TB	EQUITY TURNOVER
GDP	1.00					
ASSETS	0.97	1.00				
DEBTS	0.95	0.97	1.00			
INFLATION	0.05	-0.04	0.01	1.00		
TB	0.29	0.19	0.19	0.43	1.00	
EQUITY TURNOVER	0.55	0.61	0.46	-0.31	0.02	1.00

Source: Central bureau of statistics (Ministry of finance and planning) – SPSS output

The correlation shows that the retirement pension assets are positively and highly correlated to GDP at +0.97 which indicates that the two variables are perfectly related in a positive linear. The correlation also shows that the domestic debts are positively and highly correlated to GDP at +0.95 which is an indication that the two variables are also perfectly related in a positive linear. The correlation between assets and inflation shows a -0.04 indicating that the two variables are related in a negative linear sense. The equity turnover and Treasury bill rate are also positively correlated to retirement benefits assets at 0.61 and 0.19 respectively.

### 4.2.3 Retirement Pension Assets, Domestic Debt and GDP

Table 4.3 showing the relationship between assets, debt and GDP

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Assets Kshs (Billions)	150	140	145	200	300	350	300	400	420	400
Debt Kshs (Billions)	280	300	300	350	400	450	450	600	700	800
GDP Kshs (Billions)	280	300	350	400	450	500	550	600	680	780

Source: RBA financial statements and KIPPRA Publication on Kenya economic report

The retirement pension assets; GDP and domestic debt have been increasing in absolute terms over the years. However the retirement pension assets declined slightly in 2011. As a ratio of GDP both the retirement pension assets and domestic debt exhibit slight fluctuations but have a similar trend implying a positive relationship between the two variables. Both ratio of retirement benefits assets and domestic debt to GDP declined between the periods 2003/2004 and 2007/2008 and 2011.

Figure 4.2 Growth rate in assets, debt and GDP
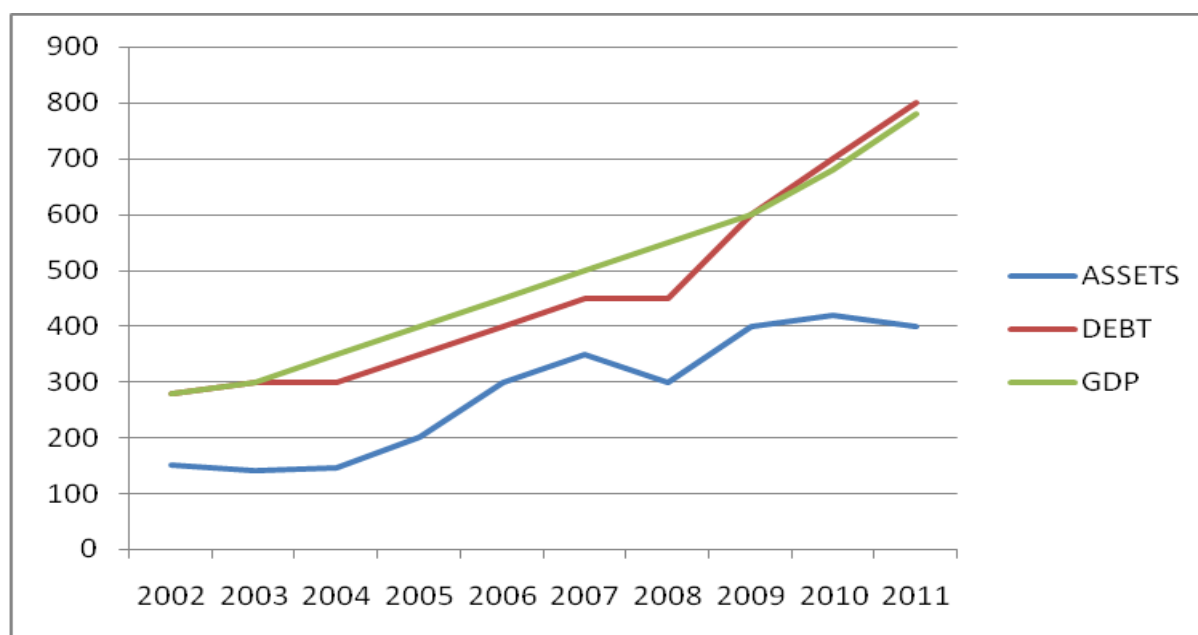
Source: RBA financial statements and KIPPRA Publication on Kenya economic report

Figure 4.2 above demonstrates this relationship graphically. This can be attributed to the effect of the general elections in 2002 and the change over in government in 2003; post election violence in 2008 and the financial and economic crises in 2011. Similarly, the retirement pension assets invested in government securities as a ratio of GDP and as a ratio of domestic debt also exhibit similar trend, increasing gradually, but declined in 2011.

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4.2.4 Retirement Pension Assets and Stock Market Capitalization

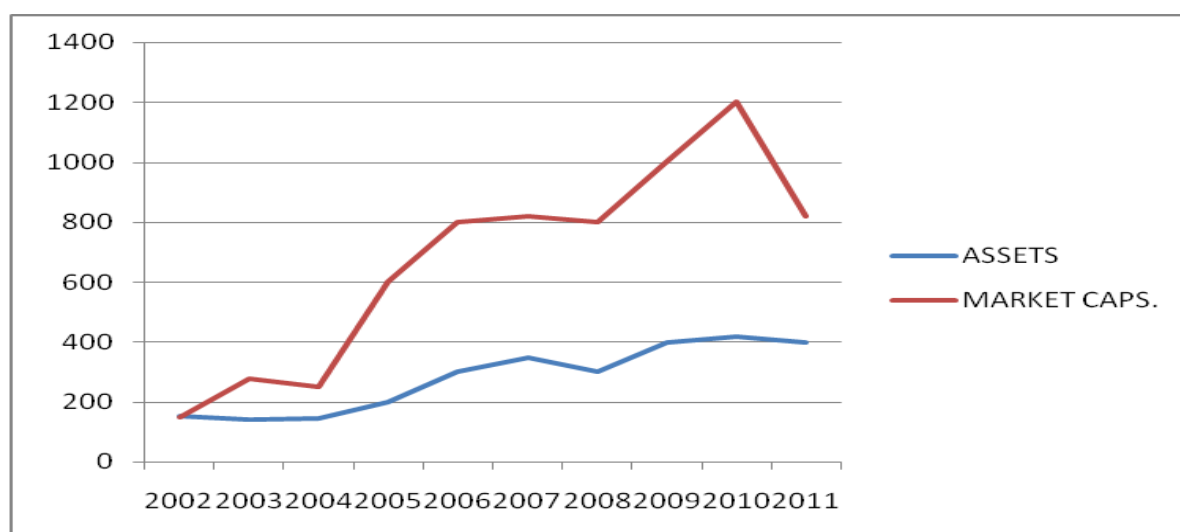**Table 4.4 showing relationship between Retirement Pension Assets and Stock Market Capitalization.**

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Assets Kshs(Billions)	150	140	145	200	300	350	300	400	420	400
Market Capitalization Kshs(Billions)	150	280	250	600	800	820	800	1000	1200	820

Source: RBA financial statements publications

The retirement pension assets and the stock market capitalization has been increasing in absolute terms over time though stock market capitalization exhibits some shocks in the periods 2003/2004, 2007/2008 and 2011. Both the retirement pension and stock market capitalization dropped in 2011.

Both the growth rates of retirement pension assets and the stock market capitalization on the other hand exhibits sharp fluctuations, but, in most cases, tends to move towards the same direction as depicting a positive relationship between the two variables. Notable drops in the growth rates are between the periods 2003/2004, 2007/2008 and 2011. This may be attributed to multiple factors which include General elections in 2002 and the change over in government in 2003; post election crisis in 2008, global financial and economic crises in 2008 and 2011; and, the weakening Kenya shilling in 2011. Similarly, the ratio of retirement pension assets invested in quoted equities to stock market capitalization exhibit slight fluctuation with slow growth. The ratio dropped between the periods 2003/2004; 2007/2008 and 2011. As at 31st December 2011, the quoted equities amounted to Kshs. 93 billion, constituting 21 percent of the total retirement benefits assets and accounting for 10.7 percent of the total market capitalization. From the analysis above it is evident that the retirement pension assets have a positive relationship with stock market capitalization

Figure 4.3 Growth rate in assets and stock market capitalization

Source: RBA financial statements publications

From figure 4.3 above, the two variables also exhibit sharp fluctuations between the periods 2002/2003; 2003/2004; 2007/2008 and 2011, implying that the two variables are susceptible to shocks and show a similar directional trend.

4.2.5 Retirement Pension Assets and Inflation

Table 4.5 showing relationship between Retirement Pension Assets and Inflation

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
%Assets Growth	37.00	12.00	5.00	27.00	27.00	20.00	15.00	10.00	35.00	-0.50
% Inflation	7.00	20.00	25.00	22.00	30.00	12.00	30.00	10.00	25.00	34.00

Source: RBA and NSSF financial statements publications

The retirement assets and inflation have a negative relationship as depicted by the tabulation above implying that an increase in the rate of inflation leads to a decrease in the growth of retirement benefits assets. In 2002 when the % growth rate in pension assets was at 37, inflation rate was at its lowest mark of 7%. Similarly in 2011, the period when the economy recorded the lowest percentage growth in pension asset, that was the time inflation rate recorded the highest mark of 34%. This inverse relationship depicts the effect the economy faces in the event we have highs and lows in inflation rate in the economy.

Figure 4.4 Growth rate in retirement pension assets and inflation
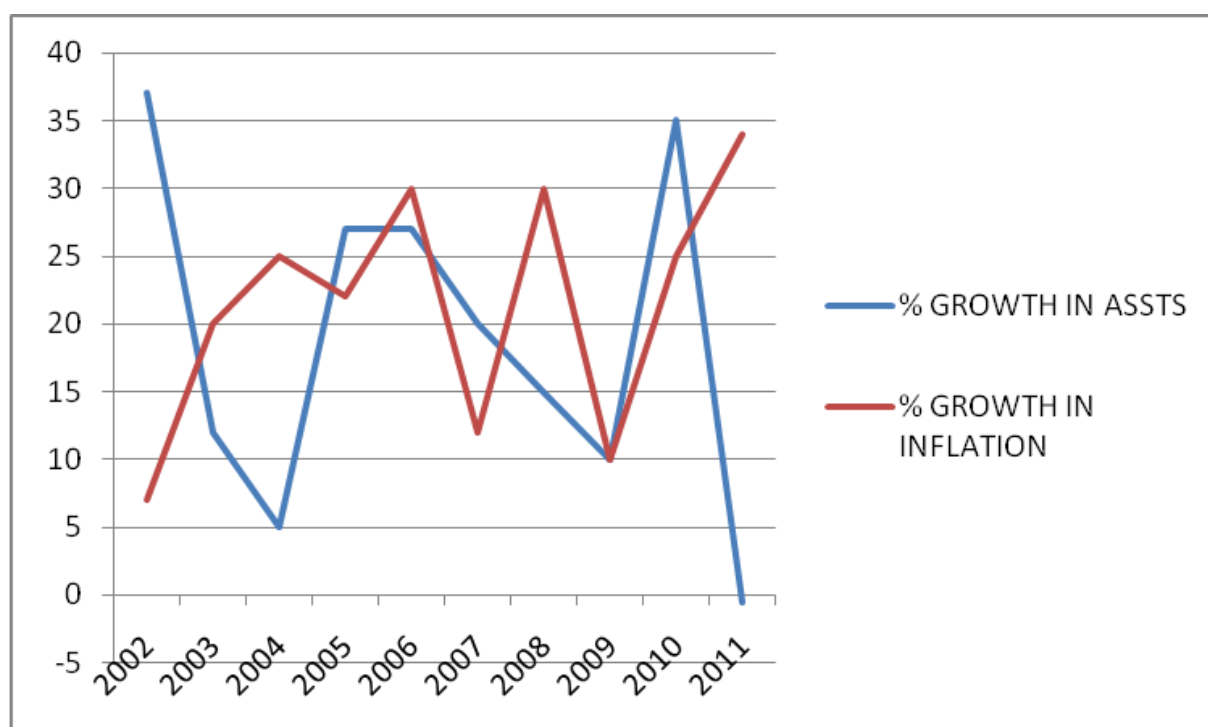
Source: RBA and NSSF financial statements publications

4.3 Summary and Interpretation of the findings

From the findings, Pension assets grew from Kshs. 150 billion in 2002 to Kshs. 400 billion in 2011, which translated to an average annual growth rate of 26.9 percent over the entire period. An analysis on the share of GDP, the ratio improved over the period from a ratio of 11.5 percent in 2002 to approximately 14.3 percent in 2011. Compared to the GDP growth rate, the retirement benefits asset growth rate exhibits sharp fluctuations. The analysis showed a drop in the retirement benefits assets growth rates during the period between 2002 and 2004, declining from a growth rate of 36 percent in 2002 to 5.2 percent in 2004, during this period retirement assets also recorded a very dismal growth in the fund credit. During the period 2004/2005, the retirement benefits assets grew to reach a growth rate of 26.6 percent but stagnated in 2006. There was a drop again in the asset's growth rate in 2007 through 2008 and 2009 to stand at 9.6 percent in 2009. The GDP growth rate on the other hand witnessed a positive growth between the periods 2008 to 2010 but also dropped in 2011. The decline in the growth of the pension assets between 2002 through 2004 was attributed to the effects of 2002 general election and the change over in government in 2003 while the decline in 2007 through 2009 was attributed to a number of factors; the effects of the general election of 2007 and the 2008 post election violence; and, the effects of the Global Financial Crisis.

The negative growth in the pension assets in 2011 was attributed to the unfavourable macro-economic conditions which included high inflation and interest rates. From the findings, retirement pension assets have a positive relationship with economic growth. This means an increase in retirement pension assets leads to a better economic growth, consequently a drop in retirement pension assets affects economic growth negatively.

The findings on correlation between retirement pension assets, equity turnover, treasury bill rates, inflation and public debt revealed varied relationships when the variables were tested. Coefficient measured only the degree of linear association between two variables. The conclusions about cause-and-effect relationship ware based on the judgment of the analyst. After running the regression on SPSS, the correlation showed that the retirement pension assets are positively and highly correlated to GDP at +0.97 which indicates that the two variables are perfectly related in a positive linear. The correlation also showed that the domestic debts are positively and highly correlated to GDP at +0.95 which is an indication that the two variables are also perfectly related in a positive linear. The correlation between assets and inflation showed a -0.04 indicating that the two variables are related in a negative linear sense. The equity turnover and Treasury bill rate are also positively correlated to retirement benefits assets at 0.61 and 0.19 respectively. This therefore means variables that are correlated to retirement pension assets positively have a similar effect towards economic growth, in the sense that an increase in retirement pension assets, equity turnover, treasury bill rate and public debt contributes towards a better economy while a variable like inflation which has a negative correlation to retirement pension assets have a similar effect towards economic growth, in the sense that an increase in inflation contributes towards poor economic growth.

The findings on the retirement pension assets; GDP and domestic debt, it was evident that they increased over the years. As the retirement pension assets declined slightly in 2011 so did the GDP and domestic debt. As a ratio of GDP both the retirement pension assets and domestic debt exhibit slight fluctuations but have a similar trend implying a positive relationship between the two variables. Both ratio of retirement benefits assets and domestic debt to GDP declined between the periods 2003/2004 and 2007/2008 and 2011. The kind of similarity exhibited in the variables led to the interpretation that domestic debt and GDP also affects economic growth in a similar way as pension assets. An increase in debt led to an increase in GDP and subsequently improving the economic growth of an economy. Further findings on retirement pension assets and the stock market capitalization revealed a similar positive trend. From the research there was an increase in absolute terms over time though stock market capitalization exhibits some shocks in the periods 2003/2004, 2007/2008 and 2011. Both the retirement pension and stock market capitalization dropped in 2011.

Both the growth rates of retirement pension assets and the stock market capitalization on the other hand exhibits sharp fluctuations, but, in most cases, tends to move towards the same direction as depicting a positive relationship between the two variables. Similarly, the ratio of retirement pension assets invested in quoted equities to stock market capitalization exhibit slight fluctuation with slow growth. The ratio dropped between the periods 2003/2004; 2007/2008 and 2011. As at 31st December 2011, the quoted equities amounted to Kshs. 93 billion, constituting 21 percent of the total retirement benefits assets and accounting for 10.7 percent of the total market capitalization. From the analysis above it is evident that the retirement pension assets have a positive relationship with stock market capitalization and as such stock market capitalization was found to contribute towards economic growth in a similar way as retirement pension assets. A better stock market capitalization leads to vibrant economic growth.

As the study revisit the earlier findings reviewed under the empirical studies, a quick comparison of these findings from other previous researchers shows that all scholars are appreciating the fact that pension industry plays a critical role in an economy. Raichura (2008) argues that occupational retirement schemes sector in Kenya whilst smaller in terms of membership than the NSSF is larger in terms of invested assets reflecting the higher average contributions to occupational schemes. 51% of the total schemes by number are invested in guaranteed funds (i.e. invested with insurers on a pooled basis) whilst 49% are on a segregated basis; by value, however, over 90% of the total assets of occupational schemes are currently invested on a segregated basis. The schemes invested in guaranteed funds tend to be smaller schemes. Ngugi (2000) also believes that Pension funds in Kenya have invested negligible amounts into housing, even less in housing for their members. Given the importance of housing as a socio-economic good and the many problems existing in the housing sector, in her study she sets out to seek ways in which pension funds in Kenya can be applied as an additional source of finance for housing. Kipkoech (2012) in his study on determinants of the growth of individual pension schemes in Kenya argues that Individual Pension schemes are important contributors to the gross domestic product (GDP) of countries. In his analysis, retirement income accounts for 68% of the total income of retirees in Kenya, while retirement pension assets account for 30% of Kenya's GDP.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENTATIONS

5.1 Summary

The chapter focuses on summary of the findings of the study, the conclusions, the recommendations and suggested areas of further research to build the study variable under consideration. The research begins by looking at the background information on pension fund industry from both a global perspective and local point of view. We further compared the proportion of the economy's GDP in relation to the economy also on both the global and local perspective. We also defined the basic terminologies used in the pension fund industry, we further looked at the key variables of the research problem, a deeper analysis was made on both retirement pension assets and economic growth which were the key variables in our problem. We further introduced an analysis on the relationship between retirement pension assets and economic growth, this analysis was narrowed to the Kenyan situation although a global comparison was also looked at. The researcher also analysed the pension schemes in Kenya in terms of their fund size, an analysis was made on the small schemes, medium schemes and large schemes. From the size analysis, it was noted that small size schemes had an overall higher returns followed by the medium size schemes and lastly the large size schemes had the lowest returns. The researcher looked at the various theorists in the pension industry, the study limited to the key theories which included the financial theory of defined benefit pension scheme as was done by the financial economist (Exley, 2007). The study also appreciated the work of Frankline, A & Anthony, M (1996) in their theory of financial intermediation. The researcher also analysed the role theory as was proposed by (Kim & Moen, 2001).

A summary on the findings revealed that retirement benefits assets and GDP which is a key determinant of economic growth have a positive relationship and in effect have an influence on the economic growth in Kenya. The findings on correlation also revealed that retirement pension assets were positively and highly correlated to GDP, however when tested on inflation the retirement pension assets showed a negative correlation. Retirement pension assets and stock market capitalization moving in the same direction over the period depicted a positive relationship between the two variables. Market capitalization being a variable influencing economic growth brings into play therefore a strong relationship between Retirement pension assets and economic growth in Kenya. The relationship between retirement benefits assets and inflation was revealed to be negative, inflation influences economic growth negatively and since inflation affects also pension assets negatively, it implies that retirement benefits assets and economic growth move in the same direction.

5.2 Conclusion

The retirement benefits sector in Kenya has recorded significant growth in membership and assets since the introduction of the pension reforms in the early 2000. As at the end of 2011, the sector had generated a pool of over Kshs. 432 billion investible funds which have been invested in the various assets classes in the various sectors of the economy. Over time, investment of retirement pension assets in government securities has been increasing and as at December 2011 the pension sector held a large proportion of its assets in government securities amounting to Kshs. 145.7 billion accounting for 34 percent of the total retirement pension assets and 4.8 percent of GDP. However, although the retirement benefits assets held in government securities are long term bonds (8 years and above) which constitutes 83.9 percent (122 billion) of the total government securities. The infrastructure bonds (inclusive KENGEN Public Infrastructure Bond) accounts for only 14.9 percent (21.8 billion) of the total government securities held by the pension funds. Similarly, the fixed income assets or corporate bonds accounted for only 5.2 percent (20.9 billion) of the total assets held by pension funds and controlled by the pension fund managers as at December 2011. Given the fact that retirement benefits assets investment government securities forms part of the domestic debt it is prudent that these are invested in productive sectors of the economy like infrastructure. It has also been notes that effect of retirement pension assets on economic growth depends on the quality of investment.

Investment of pension funds in government debt has been noted to lead to crowding out of private sector investment as government competes with the private sector for private savings. This is more so in developing countries like Kenya where the national savings are quite low. Extensive use of domestic debt may have severe implications on the economy, more so if the domestic debt interest payments consume a significant part of the government revenue and if the debt is held in short term instruments. Equally, the average maturity has implications on the rollover/refinancing risks with a short average maturity implying a high refinancing risk through pressure on interest rates and liquidity. To this end therefore, retirement benefits assets are an important source of funds for investment and hence contributing to the growth of the economy as a whole. The retirement benefits sector also holds a significant proportion of its assets in form of government securities which forms the bulk of the domestic debt and hence contributing to the government development agenda.

5.3 Policy recommendations

Review of investment Guidelines: a large proportion of the retirement benefits assets are currently invested in government securities, which basically forms part of the domestic debt of which in most cases are used for budgetary support. For instance the 30 year Savings Development Bond (SDB) issued in February 2011 amounting to Kshs. 18 billion was basically for the purpose of budgetary support. This may not translate to the anticipated effects on economic growth. Retirements benefits assets therefore need to be invested in more productive sectors. There is therefore need to consider Economically Targeted Investments (ETI) of retirement benefits assets so as to yield the expected results of good returns to members as well as boosting the economic growth. Pension funds may also be invested in specific sectors of the economy for instance infrastructure so as to stimulate economic growth. Investments of pension funds need not to be solely driven by investment returns/investment yield but also the desired economic and social goal. Investment of retirement benefits assets need to compliment the government development agenda like Kenya Vision 2030. However, government needs to provide incentives for schemes to invest pension funds in government ventures. There is therefore need to amend the investment guidelines so as to enable retirement benefits assets be invested in innovative/alternative market products geared towards the achievement of the desired economic growth as well as the Kenya vision 2030 objective.

Development and Promotion of Innovative Retirement Benefits Products: the retirement benefits assets have been increasing over the last decade and the trend is expected to continue given the various initiatives the Retirement Benefits Authority (RBA) is undertaking. However, the asset base to GDP is low compared to the target of 30 percent as envisioned in the Kenya Vision 2030 Medium Term Plan. There is therefore need to develop and promote innovative products in the pension industry particularly those which target the informal sector and the self employed.

The Authority therefore needs to intensify the awareness campaigns/initiatives to support and encourage the development and implementation of innovative products tailored to suit the uncovered population in the informal sector and the self employed. Sound Macroeconomic Environment: there is need for the government to put in place the necessary fiscal and monetary policy measures aimed at reducing inflationary pressures and ensuring stable and predictable macroeconomic environment which reward savers and reduce fears of inflation.

5.4 Limitations of the study

The main limitation of this study was accessing the databases of National Social Security Fund, Retirement Benefit Authority, locally based Occupational Pension Funds, Individual Pension Plans, World Bank, Kenya National Bureau of Statistics, Kenya Institute of Public Policy Research and Analysis, Central bank and from the Ministry of Finance and Planning. These sources had restrictions to a certain level. This therefore restricted the amount of information gathered for this purpose. However on accessing the key information, conclusion was able to be made.

The aspect of time and financial resources also came into play considering the official day to day activities and also the use of internet to access this information was costly. Finally, the time allocated to complete the research was also limited.

The period covered in the study coincides with external factors beyond the control of the organization, such as the post election violence and the change in leadership in the country. These therefore affected the economic performance. This led to inconsistency in the findings making it a challenge to make a decision based on the results of the performance during such periods. However, the external factors affected both variables in a similar way from our various test.

5.5 Suggestions for further study

There is need for further research on the GDP variable that affects the relationship between retirement pension assets and economic growth on a global perspective considering that the study had its focus on the Kenyan perspective.

There is need for further research on the Administrative functioning of the retirement pension assets and how the function affects the growth of the retirement pension assets and its impact on the economy of the country.

The study also suggests further research on the legislative framework that affect the retirement pension industry in Kenya and how such legislations should be improved to ensure compliance and flexibility in pension remittance.

There is also need for further research in the area of retirement pension assets and technology to ensure faster and efficient service delivery to the members so as to create confidence in the industry between members and service providers.

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