



FACTORS AFFECTING INVESTMENT DECISIONS OF PENSION SCHEMES IN KENYA

SHARON CHEPKOECH, DR. GLADYS ROTICH, MR. ANDREW NDEGE NDAMBIRI

FACTORS AFFECTING INVESTMENT DECISIONS OF PENSION SCHEMES IN KENYA

Sharon Chepkoech^{*1}, Dr. Gladys Rotich², Mr. Andrew Ndege Ndambiri³

^{*1} MBA Candidate, Jomo Kenyatta University of Agriculture and Technology [JKUAT], Nairobi, Kenya

² Jomo Kenyatta University of Agriculture and Technology, [JKUAT], Nairobi, Kenya

³ Jomo Kenyatta University of Agriculture and Technology, [JKUAT], Nairobi, Kenya

Accepted: October 11, 2017

ABSTRACT

This study sought to determine the factors affecting investment decisions of Pension schemes in Kenya. Its objectives were to: establish the effect of risk-return tradeoff on investment decisions of pension schemes in Kenya and determine the effect of macroeconomic factors on investment decisions of pension schemes in Kenya. It was conceptualized that investment decisions in pension schemes (dependent variable) were dependent on risk–return trade off and macroeconomic factors (the independent variables). The investment decisions of pension schemes depend on the overall influence of these factors. The study adopted the descriptive research design. The study sampled 125 fund managers from 1232 pension schemes using simple random stratified sampling techniques. Data was collected using questionnaire. Statistical Package for the Social Sciences (SPSS) was used to analyze the data. On the basis of the study findings, it was evident that risk-return trade off affected investment decisions of pension schemes in Kenya. It was made apparent that successful pension schemes investment should be one whose returns justify the risk taken. In this regard, it was evident that fund managers balanced the risk to ensure optimal return. Regarding the effect of macroeconomic factors on investment decisions of pension schemes in Kenya, it was evident that pension schemes investment decision were influenced by interest rates, capital markets performance, the rate of national economic growth and other macroeconomic factors before making investment decisions.

Keywords: Risk-return trade off, Macroeconomic Factors, Investment Decisions, Pension Schemes in Kenya

INTRODUCTION

According to Musalem and Souto (2009) pension schemes offer platforms for contributors to accumulate savings during their working life so as to finance their financial needs at old age. This is done either as a lump sum or by an annuity. The pension fund is a common asset pool meant to generate stable growth over the long term, and provide pensions for employees when they reach the end of their working years and commence retirement.

The fact that early withdrawal of funds from pension schemes is, more often than not, restricted or forbidden, makes pension schemes have long term liabilities. This allows such funds hold high risk and high return instruments. Accordingly, monies are intermediated by pension schemes into a variety of financial assets, which include corporate equities, government bonds, real estate, corporate debt (loans or bonds), securitized loans, foreign holdings of the instruments mentioned above and money market instruments and deposits as forms of liquidity (Rudolf & Rocha, 2009).

Pensioners, as required by law, provide a steady flow of funds to pension schemes for many years. This will make the latter a stable source of capital. Essentially, since pensioners are required to hold their investments in at least one pension scheme until retirement, the stability of the whole system will be ensured. Pension schemes are required to invest most of their capital domestically. As such, they are expected to invest in diverse domestic assets, diversifying risk as much as possible in the country. Therefore, relative to other institutional investors, pension schemes are thought to be the ones who contribute the most to the development of capital markets (Raddatz & Schmukler, 2008).

One significant attribute of pension schemes asset holdings is that investments are usually made in assets that can be liquidated easily. These include government bills and bond, bank deposits, other short-term instruments among fixed-term securities. This is influenced by the fact that many

countries expect these schemes to play critical roles in enhancing the development of capital markets, reducing cost of capital for big firms and increasing savings in the private sectors. This is usually in the bid to achieve more developed, market-oriented financial systems. Since pensioners save for the long run, pension schemes, are expected to be able to provide long-term financing to domestic corporations, as well as governments (Raddatz & Schmukler, 2008).

Labour friendly pension schemes in many countries are generally either jointly trusted or union trusted multi-employer plans, or public sector pension schemes with a significant presence of union trustees. These schemes often have a range of labour friendly policies and programs aimed at building strong and healthy communities. Such programs include responsible contractors' policies, responsible investors' policies, and specific allocations for targeted (or economically targeted) investments in their investment portfolio. These 3 targeted investments often require union built construction or are aimed at job creation and retention as in the case of private equity investments (Hebb & Beeferman, 2008).

Although various economic issues arise due to various developments of pension schemes it is notable that similar issues also arise in least developed countries. Thus, traditional methods for providing the elderly with care are disintegrating because of the rapidly ageing population, industrialization, and ill-conceived social-security systems (Sampson, 2007). The successful development of pension schemes entails a prior level of development in the financial sector, the absence of political interference, the availability of skilled employees and the economy's administrative efficiency. According to Davis (2012) pensions often necessitates free-market orientation, capital markets and administrative development that would further the regulation.

The world over, pension schemes are the main sources of retirement income for millions of

people. The total income of retirees is made up of huge percentages from retirement income. In Australia, it accounts for 45%; Austria 44% and; France 80%. This means that pension schemes should be managed efficiently to ensure higher retirement income for pensioners (Njuguna, 2011).

Pension scheme systems have been part and parcel of African countries since the dawn of Independence. Although most of the existent pension scheme systems were developed after independence, the vast majority of them are modeled after the colonial prototypes (Ahmad, 2008). Over the years, there has been immense rise of use of pension schemes.

In most African countries, most retired working populations relying in pension schemes. In South Africa for example, Alliance Global Investors (2007) points out that over 75% of the elderly population relies on pension schemes. In the last several decades, Dovi (2008) opines that there has been an increase in savings in Africa with up to 22% domestic savings in Sub-Saharan Africa and up to 30% in Northern Africa. The numbers have been increasing.

Most African countries have a multiplicity of pension systems. In Tanzania for example, there are six (6) major formal institutions that provide social security protection. These are: National Social Security Fund (NSSF); Local Authorities Pensions Funds (LAPF); Parastatal Pensions Fund (PPF); Government Employees Provident Fund (GEPF); Public Service Pensions Fund (PSPF); and National Health Insurance Fund (NHIF) (Kyando, 2014).

In Kenya, employers or Trust Corporations set up pension schemes under irrevocable trusts. This is done in accordance with following Acts of Parliament: Trustees (Perpetual Succession) Act Cap 164; Trustees Act Cap 167; Public Trustee Act Cap 168; Perpetuities and Accumulation Act 1984; Income Tax Act Cap 487 and Retirement Benefit Act, (1997). The Retirement Benefit Act, (1997) gave rise to the development of the Retirement

Benefit Regulation for occupational schemes 2001.

The Kenyan retirement benefits industry is regulated by the RBA. The funds are divided into four categories: the Civil Service Pension Scheme and the National Social Security Fund both created by Act of parliament; and Occupational Schemes and Individual Schemes both created by trustee deeds. Except Civil Service Pension Scheme, the categories are under the RBA. In total there are 1232 pension schemes registered by the RBA as at 06th May 2016 (RBA, 2016).

Statement of the Problem

There is need to carefully safeguard the retirement package of employees. In most of the developing countries after many years of working, it tends to take more often or not, longer to pay the retirement dues (Agolla, 2012). Sometimes such dues are meagre. As such, there is need to invest pension schemes with the investment guidelines so as to enable them to attain maximum results. This calls for meticulous information before making investment decisions as posited by Odundo (2011) who points out that good investment decision making brings in the highest returns under the given circumstances. It is also important to investigate the factors that affect investment decisions in a country. In Kenya, there is scanty information on such factors.

According to the Africa Asset Management 2020, the projected returns on equity for the period starting in 2011 to 2018 continued to decline from 7.8 to 7.2% as at the end of 2016 (Price Water Coopers, 2016). For the year ending June 30, 2013, NSSF saw an increase in return on investment from KShs.1.74 billion in 2012 to KShs.27.32billion in 2013. However, the market values of the portfolios decreased in 2009, 2011 and 2012. Net investment value also decreased in these years in response to these changes in market value (NSSF, 2013). In the following year, net returns on investments by the fund went on to drop by 40% despite a 14% per cent rise in assets under management between 2013 and

2014. During the same time, return on investment dropped from Sh27.32 to Sh16.3 billion, (NSSF, 2014). In 2016, NSSF reported a decline in the net return on investment from Ksh 10.71 billion in 2015 to Ksh. 6.17 billion in 2016. This was attributed to a steady decline in activity at the NSE which controls a major share of the Fund's portfolio (NSSF, 2016).

On its part, the public service pension scheme saw a decrease in the value of financial assets in quoted equities (-8.3%), offshore (-51.23%) and unquoted equities (shares of a private company not listed in a recognized stock exchange) (-39.07%), (RBA, 2016). Therefore such declines in projected returns could affect investment in stocks by pension schemes in Kenya. The level to which these factors affect investment decisions in the country cannot be determined without systematic studies. There is limited knowledge in the public domain on how changes in the financial market among other factors affect such decisions. This means that investment managers lack tailor-made information to guide them as they decide where to make investments.

Studies such as Njuguna (2011) focus on intake of pension schemes generally but do not investigate the factors influencing investment decisions. Aiyabei (2013) studied the determinants influencing the likelihood of risk management strategies adoption by pension schemes in Kenya. His study did not focus on investment decisions. The study by Oluoch (2013) investigated the determinants of performance of pension schemes in Kenya but does not narrow down to the factors affecting the factors influencing investment decisions.

The fact that most of the existing literature focuses on investments in other sectors or countries and that few of the studies in the Kenya public domain focus on all the variables under investigation in this current study shows that it is hard to understand these variables without studies such as this current one. With the rise and rise of pension funds in Kenya, this ought not to be so since the millions of contributors money

should be invested prudently. This therefore necessitated this study which investigated the factors affecting investment decisions of Pension schemes in Kenya.

Objectives of the Study

The general objective was to determine the factors affecting investment decisions of Pension Schemes in Kenya. The specific objectives were:

- To establish the effect of risk-return trade off on investment decisions of pension schemes in Kenya
- To determine the effect of macroeconomic factors on investment decisions of pension schemes in Kenya

LITERATURE REVIEW

Theoretical Review

The study was founded on the following theoretical foundations.

Risk-Return Trade-Off Theory

The Risk-Return Trade-Off Theory (RRTOF) was advanced by Leon, Nave and Rubio in 2005. The theory casts light on the relationship between risk-return trade off and investment decisions. According to RRTOF, risk-return tradeoff is a long standing phenomenon in investment analysis and is the foundation of financial economics. The rate of return on an investment is assessed by finding out the perceived risk of making a given investment. This means that there is direct relationship between market risk and return due to the fact that risk-averse investors need additional compensation for assuming extra risk. In this accord, markets which investors perceive to be high risk are associated with high returns. This is for purposes of compensating the risk involved in investing in such markets. On the other hand, markets that have lower risk are characterized by relatively lower returns. Thus it is unambiguous that the risk-return relationship is a fundamental concept in investment decision making and that it is accepted as the cornerstone

of rational expectations of asset pricing models (Leon, Nave & Rubio, 2005).

Hubbard (2009) defines risk as the expectation that the actual returns of an asset will be lower than the expected return. The matter of interest is to identify the tradeoff between risk and expected return. Generally, an investment in a risky asset should yield a higher return, than for example a risk-free investment. The relationship has been expressed in a variety of ways. Fama and French (2004) developed in the Capital Pricing Models explains the relationship between expected return and the risk associated with an investment-the capital asset pricing model. The model attempts to show how an asset can be valued taking into account the risk associated with the asset.

According to Elton, Gruber and Brown (2011), an individual asset would be priced so that its expected return is equal to the expected return of the market as a whole less the return on a riskless asset like a treasury bill multiplied by the asset beta. The entire risk in owning the assets is in their beta, which is a measure of the covariance with the market, reflecting how the fluctuations in the return earned on an asset compares with the volatility of the market as a whole. Stocks with a greater volatility than the market have betas of more than 1.0, while less volatile stocks have betas of less than 1.0. Stocks fluctuating precisely with the market would have betas of 1.0.

Elton, Gruber and Brown (2011) argue that three concepts apply for Capital Asset Pricing Model (CAPM). Firstly, the higher the risk associated with the asset, the higher the level of return should be associated with the asset. Secondly, return is positively linearly connected to risk, i.e. every time risk increases, return will equally increase. And thirdly, unsystematic risk is not rewarded since it can be diversified away. The theory however does not always consideration of outliers and unexpected changes in the market. In some instances, the riskiness of an asset can change abruptly due to technological advancements or changes in the market. In this regard, the

anticipated returns could be affected immensely and vice versa.

In line with this study, the Risk-Return Trade-Off Theory was vital in guiding risk-taking ventures in the management of pension schemes. Fund managers have to have superior understanding of risk dynamics so as to make investments that can bring in more returns at lower risk. This does not mean that pension managers do not take risk. They should do so. But as this happens, the funds at their disposal should be safeguarded through investment in diversified assets and products.

Modified Neoclassical Theory

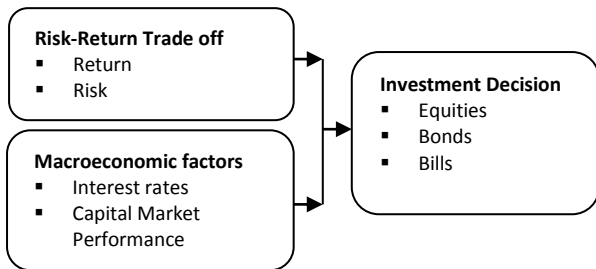
The Neoclassical theory of investment behavior can be used to explain the influence of macroeconomic factors on investment decisions. The theory, as developed by Jorgenson and Stephenson (1967), is based on an optimal path for capital accumulation, according to which the desired level of capital services at every period is derived from a maximization of the present value of future expected net revenue, over an infinite number of years. The desired level of capital services thus derived is a function of relative prices and not output. The cost of capital incorporates the rate of interest (Ismail, Ibrahim, Yusoff, & Zainal, 2010).

The theory assumes that in investment activities, firms face cost of capital in order to acquire the desired stock of capital. The financial factors are unimportant in this model because the optimization process of firms does not depend on the factors. The model only takes into account factors that may affect the cost of capital such as changes in the tax policy. Under assumptions of both theories internal and external funds are assumed as perfect substitutes which imply that firms may easily obtain external funds to smoothen their investments (Ismail, Ibrahim, Yusoff & Zainal, 2010). This is a major shortcoming of this theory since obtaining external funds is not always guaranteed for fund managers.

Since pension schemes usually have enough capital, the cost of capital is not a major

challenge. However, making investment decisions has to take cognizance of the fact that riskiness in the markets invested in can have adverse effects on the capital invested. This could go a long way increasing the cost of capital since pensioners' money has to be safeguarded at all cost.

Conceptual Framework



Independent Variable Dependent Variable
Figure 1: Conceptual Framework

Risk-Return Tradeoff

Returns are simply increase in value expressed as a percentage of the invested amounts. Any investment has to take into consideration the risk return trade off. For pension schemes the focus is more on return stability than the rate of return. In this case pension schemes will rather go for relatively low rates of returns that are guaranteed than go for higher returns that are not guaranteed (Mogera, 2009).

Investment decisions are likely to be affected by the anticipated returns in any venture. Greenwood et al. (2014), in a desk review of various surveys found out that different types of investors make their investment decisions based on the returns expected from such investments. As such, the investment decisions of pension schemes would most likely be driven by the returns expected from such investments.

Bacchetta, Mertens and Wincoop (2009) studied the relationship between return expectations and expectational errors. The findings obtained show that returns expectations and expectational errors are pegged on the dividend yields obtained. The expected returns determine the dividend yields that investors obtained. In pension schemes, the

yields that the investments will bring are likely to influence the investment decisions made.

Nagel (2012) points out that the investment decisions made by investors are related to their personal experiences. It is thus imperative to have knowledgeable investors in funds that are held in trust for others such as pension schemes. This is particularly important since this will contribute to better investment decisions and better returns from such investments. As such, pension schemes have to ensure that they employ knowledgeable managers so as to cut down the risks associated with managers who have limited capacity to make informed investment decisions.

Risk is variability in the returns from an investment. Successful pension schemes investment should be one whose returns justify the risk taken. This means that one of the factors to be considered in making investment decisions will be risk. Risk is a major concern in pension as wherever there is an expected return there is a risk. The objective of any fund managers is to balance the risk to ensure optimal return. One of the mitigations against risk is diversification where a fund will hold amounts in many assets with varying levels of return and risk. The asset classes available and the law governing how to invest in them will determine the diversification freedom (Rono, 2009).

Hoyt and Liebenberg (2006) posit that risk is a key determinant of investment decisions. Bigger organizations are often better prepared to handle risk than smaller organizations. This stems out of the fact that they have relatively higher complexity and face a wider assortment of risks. In addition, such organizations have more capacity to handle the costs related to risk management. In this accord, organizations that have more ability to manage risks are more likely to take on more risky investment decisions than those that cannot do so.

Aiyabei (2013) investigated the determinants of adoption of risk management in the pension's scheme sector. The study attempted to find out how pensions schemes mitigated the risks

associated with investment decisions. It came out clearly that pension schemes approach investment decisions based on the riskiness of the investment, sustainability and members' confidence.

Risk often makes it hard for pension schemes to convince stakeholders that the investments made will make tangible returns (Agyeman, 2011). This comes out of the fact that pension schemes often yield low returns. Moreover the riskiness associated with some of these investments challenge the decisions made to make such investment in the first place.

Macroeconomic factors

Macroeconomic factors are major determinants of investment decisions among companies (Khalid, Iqtidar, Muhammad & Mehboob, 2012). Companies are guided by the influence of the prevailing interest rate as they make decisions on where and when to put their money. If interest rates are high, organizations may decide not to invest their money, deciding to hold it until these rates change.

O'Sullivan and Sheffrin (2003) points out that investment decisions are affected by diverse macroeconomic factors such as fluctuations in exchange rate, inflation rate, interest rate, money supply and national output among others. O'Sullivan & Sheffrin, quoting the Post Keynesian theory, points out that prevailing price and interest rates affects the decisions companies do while investing in various markets. This is for purposes of ensuring that maximum returns are obtained.

Musalem and Souto (2009) point out that interest rates is a key macroeconomic factor that institutions consider when making investment decisions. When interest rates increase in the market, the prices of properties increase drastically as cost of the capital increases and this affects price projections (Cummings, 2010).

Investment Decisions

Pensioners, as required by law, provide a steady flow of funds to pension schemes for many years. This makes the latter a stable source of capital. Pension schemes are required to invest most of their capital domestically. As such, they are expected to invest in diverse domestic assets, diversifying risk as much as possible in the country. Therefore, relative to other institutional investors, pension schemes are thought to be the ones who contribute the most to the development of capital markets (Raddatz & Schmukler, 2008).

Raddatz and Schmukler (2008) points out that one significant attribute of pension fund asset holdings is that investments are usually made in assets that can be liquidated easily. These include government bills and bond, bank deposits, other short-term instruments among fixed-term securities. This is influenced by the fact that many countries expect these funds to play critical roles in enhancing the development of capital markets, reducing cost of capital for big firms and increasing savings in the private sectors. This is usually in the bid to achieve more developed, market-oriented financial systems. Since pensioners save for the long run, pension schemes, are expected to be able to provide long-term financing to domestic corporations, as well as governments.

Hebb and Beeferman (2008) are of the view that labour friendly pension schemes in many countries are generally either jointly trusted or union trusted multi-employer plans, or public sector pension schemes with a significant presence of union trustees. These funds often have a range of labour friendly policies and programs aimed at building strong and healthy communities. Such programs include responsible contractors' policies, responsible investors' policies, and specific allocations for targeted (or economically targeted) investments in their investment portfolio. These 3 targeted investments often require union built construction or are aimed at job creation and

retention as in the case of private equity investments.

The nature of the investors also determines how pension schemes invest. Different investors react differently to risks. While majority of the investors are risk averse, there are some investors who are seeking more risky ones with expectations of higher returns (Acharya & Pedersen, 2005). Factors that contribute to the nature of the investors include: regulation; attitude towards risk and what kind of investments they prefer (Rono, 2009).

According to Roldos (2008), countries that do not place investment limits on foreign securities rely on the “prudent man rule” or prudent investor rule. According to this rule, pension fund managers are required to make sensible investment decisions. They should be based on what other large and prudent institutional investors perceive as best practice. This investor category includes mutual funds, insurers, and asset management companies. The prudent man rule thus provides pension schemes with a wide scope of asset allocation strategies. It also allows them to make investments in diverse financial securities, including emerging market securities. The prudent person rule suggests the possibility of substantial differences in asset allocations across pension schemes in any given country.

According to a Natcom Report (2012), some of the key requirements introduced in the Kenyan pension reforms that are currently being enforced by the RBA include the following: Retirement benefits schemes are required to be adequately funded and have separate assets independent of the sponsor, trustees are responsible for the running of the scheme affairs and are held responsible for any action taken, all schemes are required by law to appoint an independent fund manager registered by the RBA to invest the scheme funds. It is now mandatory for schemes to appoint an independent custodian registered by the Retirement Benefits Authority to hold financial assets of the scheme and effect all transactions.

Empirical Review

Risk-Return Tradeoff

Avram (2009) carried out a study on “Investment decision and its appraisal”. The findings obtained show that a wrong investment decision could drive companies to bankruptcy. It is thus important to comprehend the basic tenets of investment decisions so as to garner the maximum value the investment made. In making investment decisions, it is pertinent for the decision maker to understand the specific nature of the project and the anticipated returns from the project. In pension schemes understanding the nature of the areas where funds are invested and the returns so expected could contribute significantly to the returns obtained. The study by Avram is quite dated and does not focus on pension schemes in Kenya. It may thus not directly relate to this current study.

Naceur et al. (2007) undertook a study titled “The determinants of stock market development in the Middle-Eastern and North African Region”. They found out that some of the most important areas in which pension schemes are invested such as stock markets do not have stipulated ceilings on returns on investment. As such, presents a wide range of risks and return opportunities than bank-based return opportunities. In making investment decisions in the stock market, one would have to weigh the risks and returns expected through thorough appraisal of the performance of the particular stocks before such decisions are made. Since the former study did not focus on pension schemes, it pertinent to undertake studies as this current study.

Almeida and Campello (2007) in a study on “financial constraints, asset tangibility, and corporate investment” show that investors often look at the anticipated sales growth of a particular project before making investment decisions. One of the ways used by investors is Return on Assets (ROA). This is used as a way of gauging the profitability of a project. Higher ROA would encourage more investment in the project and vice versa. This current study attempts to find out

how ROA affects investment decisions of pension schemes in Kenya since that was not the focus of Almeida and Campello's study.

Hinz et al. (2010) published a paper titled "evaluating the financial performance of Pension schemes". They show that the investor risk-return perceptions towards various investment avenues challenge the investment decisions made in mutual funds. The more risk an investment avenue has, the more likely investors tend to shy away from it. The former study does not focus on pension schemes and may not directly relate to this current study.

Garman and Forgue (2011) in "personal finance" did a thorough analysis of perception of various stakeholders (consumers and experts) on the risk involved in various financial service products in the United Kingdom. The findings show significant differences between experts and lay persons in perceptions on investment risks. In line with this current study, it can be argued that pension schemes ought to be managed by experts so as to make informed analysis of the riskiness of the investment made by such funds.

Veld and Veld-Merkoulova (2008) undertook a study aimed at investigating the risk perception of individual investors. This was done through asking experimental questions to 2,226 consumers. The study analyzed various risk measures used by investors. The findings obtained showed that perceived risk, irrespective of the measure used to determine it, influence investment decisions amongst investors. Though not focused on pension schemes, the former study was important since it showed the central role played by risk within the process of making investment decisions.

Macroeconomic factors

As Lynn (2007) published a paper on "The Tectonic Forces of Global Real Estate: Implication for global investment and Portfolio Managers". The paper argues that negative constraints in the market may affect the cash flow of an organization. This may push the organization to

run into negative cash flow for a period of time. When this goes on for a long period of time, the sustainability of the firm is put at stake. Lynn's paper was done in another continent and not Africa or Kenya for that matter. It may thus not cast light specifically to the subject under investigation in this current study.

Al-Ajmi (2008) in a paper titled "risk tolerance of individual investors in an emerging market" posits cash flow problems related to hostile investment climate due to uncontrollable macroeconomic forces such as interest rates affect the performance of investment companies drastically. This emanates from the fact that companies are forced to adjust their investment plans so as to protect their capital from such constraints in the market. The work of Ajmi does not focus on Kenya or on pension schemes. Its findings may not be applied exclusively to this current study.

Renigier-Biřozor (2012) in a paper on 'The impact of macroeconomic factors on residential property prices indices in Europe' is of the view that investment in real estates in most countries depends on market organization and efficiency. Macroeconomic forces such as interest rates in the market affect the prices and investment opportunities in the real estate sector and this affects the investment decisions undertaken by companies. The former study took place in South Eastern Europe. It does not focus on Kenya or Pension schemes for that matter.

Investment Decisions

Meng and Pfau (2010) in their article titled, "the role of pension schemes in capital market development", show that owing to growing populations in the world, there has been an ever increasing need for better managed pension schemes in many countries. Since most countries are experiencing increased life expectancy and reduced fertility rates, the sustainability of traditional pay-as-you-go pension systems seems to be threatened. This means that pension contributions from the working populations may not be sufficient to support the elderly. As such,

many countries are increasingly orientating their pension systems toward partial or full funding. In addition to the main purpose of coping with demographic pressures and unsustainable fiscal positions, other motivations for countries to reform their pension systems often include the hope that funded pensions will contribute to economic development by promoting national savings and capital market development. The study by Meng and Pfau was not focused on Kenya or an African country for that matter. Its findings may thus not relate to this current study. Stewart and Yermo (2009) in a study titled, "Pension in Africa", are of the view that Investing in market securities does not seem to be thwarted by investment regulation. Quoting a survey by OECD, the two show that only Germany and Italy imposed tight investment limits on foreign securities. In Germany, pension schemes can only invest up to 10 percent of assets in foreign equity and bonds from non-European Union countries. The ceiling on foreign equity and bonds of non-OECD countries is 5 percent of assets in Italy. However, pension schemes, can invest up to 50 percent of assets under management in OECD emerging market countries. As such investments can be made in countries such as Mexico, Korea, and the EU accession countries. In contrast, there are no investment limits in Japan, the United Kingdom, and the United States, the three countries that account for most of the assets in the pension fund industry. Further, Stewart and Yermo (2009) opine that African countries place statutory obligations on pension schemes to be invested in mortgage loans. More often than not, most pension schemes in African countries are invested in direct developments. This shows the central role played by pension schemes in enhancing development in Africa through increased access to investment capital. This current study sets to find out the veracity of these findings in the Kenyan scene. Korteweg and Polson (2009) in a study on corporate credit spreads under parameter uncertainty show that like any other investment,

the most basic investment decisions revolve around the comparison of expected return. A return is the rate at which profits are expressed as a percentage of the values invested. Investors will take on investments that realize higher returns. These returns can be influenced by what the management of the organization expects, benchmarking with other similar funds or consistency of the returns. This current study sets to find out the level to which expected returns affects investment decisions in the Kenya scene as that was not the focus of the former study.

On the same note, Koszegi and Rabin (2007) in a study on reference-dependent risk attitudes show that realized return will be dependent on the expected return, expected risk and investor characteristics. If the expected return is high then the investors will only chose investments with high returns and this is likely to push realized returns high. This means there is a positive relationship between realized and expected return. When the level of risk is high, the investors who are majorly risk-averse will invest in projects with higher returns. The former study did not focus on Kenyan pension schemes. Further, it is quite dated and may not cast light on the current state of affairs in Kenya. This necessitates this current study.

Oluoch (2013) carried out a study entitled the "the determinants of performance of pension funds in Kenya." The study established that there was a weak positive relationship between returns and fund value, assets and contributions of pensioners. This shows that in most instances, pension funds in Kenya were not using the assets, values and contributions to generate income for pension funds in Kenya. In the context of this current study, it can be argued that there is need for prompt investment decisions so as to enhance the returns realized from pension funds.

METHODOLOGY

This research study used the descriptive research design. This is a design that describes the characteristics associated with the subject

population. Saunders, Lewis and Thornhill (2003) elicited that the appropriateness of the descriptive design is the ease in which a researcher can obtain the opinions of participants. There were 1232 pension schemes registered by the RBA in Kenya (RBA, 2014). The schemes were classified into civil service pension fund (1), NSSF (1), Occupational Schemes (1194) and Individual Schemes (36). The study targeted fund managers from these pension schemes. A structured questionnaire was used to collect data from the respondents. The questionnaire included close-ended questions so as to restrict the scope of the responses. The pilot study targeted 10 individuals from another pension scheme. Statistical Package for the Social Sciences (SPSS) was used to analyze the data.

FINDINGS AND DISCUSSION

Questionnaires were issued to the 125 respondents targeted. From these, only 118 responded. The response rate was thus 94.4% which was deemed enough for analysis. The majority of fund managers (21.2%) came from administration departments. These were followed

by those from pension and compliance departments each at 16.9%. The next category was those from research and development as well as finance departments each at 16.1%. The least were those from claims department (12.7%). These findings showed that each department was adequately represented in the study. On duration of work of fund managers, the majority had worked for more than 10 years (40%). These were followed by those who had worked for 6 to 10 years (32.2%) and those who had worked for 1 to 5 years (24.6%). The least (9.3%) were those who had worked for less than 1 year. These findings showed that the respondents had worked long enough in their respective pension schemes to understand the subject under investigation.

Descriptive Statistics

Risk-Return Tradeoff

The first objective of the study was to establish the effect of risk-return trade off on investment decisions of pension schemes in Kenya. The respondents were presented with Likert-type statements aimed at responding to this objective. The findings obtained were presented in Table 1.

Table 1: Risk-Return Tradeoff

Attribute	Rating					Total	Weighted Mean	Std. Dev.
	5	4	3	2	1			
(i) Successful pension schemes investment should be one whose returns justify the risk taken.	67	44	7	0	0	118	4.51	0.61
(ii) Fund managers should balance the risk to ensure optimal return.	87	27	4	0	0	118	4.70	0.53
(iii) Fund managers should diversify where a fund will hold amounts in many assets with varying levels of return and risk.	71	44	3	0	0	118	4.58	0.55
(iv) The investor risk-return perceptions towards various investment avenues challenge the investment decisions by pension schemes.	66	44	8	3	0	121	4.43	0.73
(v) The more risky an investment avenue is, the more likely investors tend to shy away from it.	45	42	23	7	1	118	4.04	0.95

(vi) Pension schemes ought to be managed by experts so as to make informed analysis of the riskiness of the investment made by such funds.	116	2	0	0	0	118	4.98	0.13
(vii) Perceived risk influences investment decisions in pension schemes irrespective of the measure used to determine it.	99	12	5	2	0	118	4.76	0.61
(viii) Expected return influences the investment decisions undertaken by the pension fund.	116	2	0	0	0	118	4.98	0.13
(ix) In making investment decisions, the pension fund managers must understand the specific nature of the project and the anticipated returns from the project.	108	9	1	0	0	118	4.91	0.44
(x) In pension schemes understanding the nature of the areas where funds are invested and the returns expected could contribute significantly to the returns obtained.	102	11	5	0	0	118	4.82	0.48
(xi) In making investment decisions in the stock market, one would have to weigh the risks and returns expected through thorough appraisal of the performance of the particular stocks before such decisions are made.	117	1	0	0	0	118	4.99	0.09
(xii) Understanding the Return on Assets, which is a way of measuring the profitability of a project is key in making investment decisions.	114	2	2	0	0	118	4.95	0.29

Average Weighted Mean

4.72

As shown by the average weighted mean of 4.72, the respondents tended to agree to a very high extent to most of the statements presented to them. With means ranging from 4.51 and 4.99, the respondents tended to agree to a very high extent that: successful pension schemes investment should be one whose returns justify the risk taken; fund managers should balance the risk to ensure optimal return; fund managers should diversify where a fund would hold amounts in many assets with varying levels of return and risk and; the investor risk-return perceptions towards various investment avenues challenge the investment decisions by pension schemes. These finding agree with Aiyabei (2013) who points out that pension schemes approach investment decisions based on the riskiness of the investment. As such it could be concluded that the riskiness of investments greatly influenced the investment decisions made by pension funds.

The respondents went on to a very great extent that pension schemes ought to be managed by experts so as to make informed analysis of the riskiness of the investment made by such funds. This agreed with Garman and Fogue (2011) who argued that pension schemes ought to be managed by experts so as to make informed analysis of the riskiness of the investment made by such funds.

The respondents went on to agree to very great extent that perceived risk influenced investment decisions in pension schemes irrespective of the measure used to determine it and that; expected return influenced the investment decisions undertaken by the pension fund. This agreed with Avram (2009) who showed that a wrong investment decision could drive companies to bankruptcy and that if pension schemes understanding the nature of the areas where

funds were invested and the returns so expected, this could contribute significantly to the returns obtained.

It came out clearly (tendency to agree to a very great extent) that in making investment decisions, the pension fund managers must understand the specific nature of the project and the anticipated returns from the project; that in pension schemes understanding the nature of the areas where funds were invested and the returns expected could contribute significantly to the returns obtained; that in making investment decisions in the stock market, one would have to weigh the risks and returns expected through thorough appraisal of the performance of the particular stocks before such decisions are made and that; understanding the Return on Assets, which is a way of measuring the profitability of a project is key in making investment decisions. These findings agree with Naceur et al. (2007) who in the same light argues that in making investment decisions in the stock market, one would have to

weigh the risks and returns expected through thorough appraisal of the performance of the particular stocks before such decisions are made. Conversely, the respondents agreed to a great extent that the more risky an investment avenue was the more likely investors tend to shy away from it (weighted mean of 4.04). This was in agreement with Hinz et al. (2010) who pointed out that investors were likely to shy away from risky investments and vice versa. As such, it could be deduced that fund managers considered the riskiness of an investment before venturing into it.

Macroeconomic Factors

The study sought to determine the effect of macroeconomic factors on investment decisions of pension schemes in Kenya. To this various Likert-type statements were presented to the respondents. The responses obtained were presented in Table 2.

Table 2: Macroeconomic Factors

Attribute	Rating					Total	Weighted Mean	Std. Dev.	
	5	4	3	2	1				
(i) Pension schemes investment decision are influenced by interest rates	117	1	0	0	0	118	4.99	0.09	
(ii) Fund managers consider capital markets performance before making investment decisions	118	0	0	0	0	118	5.00	0.00	
(iii) Pension schemes investment decision are influenced by inflation rates	117	1	0	0	0	118	4.99	0.09	
(iv) Fund managers should take into consideration the rate of national economic growth before making investment decisions	114	3	1	0	0	118	4.96	0.24	
(v) Fund managers should be aware of every negative market force in the country before making investment decisions in the country.	113	3	2	0	0	118	4.94	0.30	
Weighted Mean							4.98		

As shown by an average weighted mean of 4.98 and weighted means ranging between 4.94 and 5.00, the respondents agree to a very great extent

that pension schemes investment decision were influenced by interest rates and that; fund managers considered capital markets

performance before making investment decisions. These findings were in line with Al-Ajmi (2008) who posits that cash flow problems related to hostile investment climate due to uncontrollable macroeconomic forces such as interest rates affected the performance of investment companies drastically.

It was also made manifest (tendency to agree to a very great extent) that pension schemes investment decision were influenced by inflation rates and that; fund managers should take into consideration the rate of national economic growth before making investment decisions. These findings showed the role played by macroeconomic factors in guiding investment decisions. These findings agreed with O’Sullivan and Sheffrin (2003) who in the same light points out that investment decisions are affected by diverse macroeconomic factors such as fluctuations in exchange rate, inflation rate, interest rate, money supply and national output among others.

Table 3: Financial Policies

Attribute	Rating					Total	Weighted Mean	Std. Dev.	
	5	4	3	2	1				
(i) Our scheme invests in equities	111	4	3	0	0	118	4.92	0.36	
(ii) Our scheme invests in treasury bonds	100	11	3	2	2	118	4.74	0.74	
(iii) Our scheme invests in treasury bills	79	23	8	5	3	118	4.44	0.97	
(iv) Our scheme makes offshore investments (invests in other markets outside the country)	12	34	22	27	23	118	2.87	1.3	
Average Weighted Mean							4.24		

The respondents tended to agree to a very great extent that their scheme invested in equities (weighted mean of 4.92) and; that their scheme invested in treasury bonds (weighted mean of 4.74). These findings agreed with Hebb and Beeferman (2008) who are of the view that labour friendly pension schemes are usually invested in private equity and treasury bonds.

Lastly, the respondents tended to agree to a very great extent that fund managers should be aware of every negative market force in the country before making investment decisions in the country. This also agreed with O’Sullivan and Sheffrin, who, quoting the Post Keynesian theory, pointed out that companies should consider prevailing market forces while investing in various markets so as to ensure that they obtained maximum returns. From the findings obtained it was evident that macroeconomic policies also exerted influence on investment decisions by pension funds.

Investment Decisions

The study sought to determine the investment decisions of pension schemes in Kenya. To this various Likert-type statements were presented to the respondents to establish their opinion on the study subject. The responses obtained were presented in Table 3.

The respondents tended to agree to a great extent (weighted mean of 4.44) that their schemes invested in treasury bills. Lastly, the respondents tended to agree to a moderate extent (weighted mean of 2.87) that their scheme made offshore investments (invests in other markets outside the country). This partially agreed with RBA (2016) that pointed out that the public

service pension scheme invests in quoted equities, offshore and unquoted equities (shares of a private company not listed in a recognized stock exchange). These findings showed that pension funds invested in various areas so as to diversify and safeguard the anticipated income from incomes.

CONCLUSIONS AND RECOMMENDATIONS

The first objective of the study was to establish the effect of risk-return trade off on investment decisions of pension schemes in Kenya. The respondents tended to agree to a very high extent to most of the Likert-type statements presented to them. The respondents tended to agree to a very high extent that: successful pension schemes investment should be one whose returns justify the risk taken; fund managers should balance the risk to ensure optimal return; fund managers should diversify where a fund will hold amounts in many assets with varying levels of return and risk and; the investor risk-return perceptions towards various investment avenues challenge the investment decisions by pension schemes

The respondents went on to a very great extent that pension schemes ought to be managed by experts so as to make informed analysis of the riskiness of the investment made by such funds and that; perceived risk influences investment decisions in pension schemes irrespective of the measure used to determine it and that; expected return influences the investment decisions undertaken by the pension scheme.

It also came out clearly (tendency to agree to a very great extent) that in making investment decisions, the pension fund managers must understand the specific nature of the project and the anticipated returns from the project; that in pension schemes understanding the nature of the areas where funds are invested and the returns expected could contribute significantly to the returns obtained; that in making investment decisions in the stock market, one would have to weigh the risks and returns expected through thorough appraisal of the performance of the

particular stocks before such decisions are made and that; understanding the Return on Assets, which is a way of measuring the profitability of a project is key in making investment decisions. Further, the respondents agreed to a great extent that the more risky an investment avenue was, the more likely investors tend to shy away from it.

The study sought to determine the effect of macroeconomic factors on investment decisions of pension schemes in Kenya. In addition, the respondents agreed to a very great extent that pension schemes investment decision were influenced by interest rates and that; fund managers consider capital markets performance before making investment decisions.

It was also made manifest (tendency to agree to a very great extent) that pension schemes investment decision are influenced by inflation rates and that; fund managers should take into consideration the rate of national economic growth before making investment decisions. These findings showed the role played by macroeconomic factors in guiding investment decisions. Lastly, the respondents tended to agree to a very great extent that fund managers should be aware of every negative market force in the country before making investment decisions in the country.

The respondents tended to agree to a very great extent that their scheme invested in equities and; that their scheme invested in treasury bonds and that their schemes invested in treasury bills. Lastly, the respondents tended to agree to a moderate extent that their scheme made offshore investments (invests in other markets outside the country).

Conclusion

On the basis of the study findings, a number of conclusions were be made. It was evident that risk-return trade off affected investment decisions of pension schemes in Kenya. It was made apparent that successful pension schemes investment should be one whose returns justify

the risk taken. In this regard, it is evident that fund managers balance the risk to ensure optimal return.

Regarding the effect of macroeconomic factors on investment decisions of pension schemes in Kenya, it is evident that pension schemes investment decision are influenced by interest rates, capital markets performance, the rate of national economic growth and other macroeconomic factors before making investment decisions.

Recommendations

Since the risk-return tradeoff influence investment decisions, successful pension schemes investment should be in a position to justify the risk taken. In this regard, fund managers should balance the risk to ensure optimal return. They should also ensure they diversified where a fund will hold amounts in many assets with varying levels of return and risk so as to control unprecedented losses to the scheme. In addition, it is important that that pension schemes be managed by experts so as to make informed analysis of the riskiness of the investment made by such funds. In this regard, there should be progressive training of fund managers so as to hone their skills and enhance their capacity to making informed investment decisions.

REFERENCES

Acharya, V.V. & Pedersen. L.H. (2005). Asset pricing with liquidity risk. *Journal of Financial Economics*, 77, 375-410.

Agolla, J.W. (2012). *Challenges of Strategy Implementation in Pensions Department, Ministry of Finance - Kenya*. Masters' Thesis. University of Nairobi, Kenya.

Agyeman, A. (2011). *An Assessment of the Returns on Employee Pension Fund Investments and Their Impact on Future Benefit Payments: A Case Study of Social Security and National Insurance Trust (SSNIT)*. MBA Thesis. Kwame Nkrumah University of Science and Technology, Accra, Ghana.

Ahmad, M. (2009). "The Impact of Global Challenges on Retirement Reforms in Africa". IRF Conference. National Pension Commission.

As far as the effect of macroeconomic factors on investment decisions of pension schemes in Kenya is concerned, several recommendations can be made. To begin with, the government should ensure that interest rates do not change drastically hence influencing the investments made in markets. But when interest rates do change, fund managers should be able to make the right decision so as to safeguard contributors' money. Fund managers should also be able to make the right decisions in the wake of changing rates of national economic growth. This needs constant training of these managers to make them able to respond to changes in economic growth appropriately.

Recommendations for Further Study

This study aimed at determining the effect of government regulations on investment decisions of pension schemes in Kenya. There should be other studies investigating the influence of each of the variable of this study singly using other research methods so as to understand them more. Comparative studies in the financial sector such as in banks could be undertaken. This could play a vital role in checking the effects of the factors under investigation in guiding investment decisions in other sectors.

- Aiyabei, J.K. (2013). *Determinants Influencing the Likelihood of Risk Management Strategies Adoption by Pension Schemes in Kenya*. PhD Thesis. Jomo Kenyatta University of Agriculture and Technology.
- Al-Ajmi, J.Y. (2008). Risk tolerance of individual investors in an emerging market. *International Research Journal of Finance and Economics*, 17 (1), 15–26.
- Alliance Global Investors. 2007. *Global Pension Fund Statistics*. Available on 14May 2009 from: <http://www.pensionfundsonline.co.uk/pdfs/countryoverview.pdf>.
- Almeida, H. & Campello, M. (2007). Financial constraints, asset tangibility, and corporate investment. *Review of Financial Studies*, 20, (5) 1429-1460.
- Arnold, G. (2010). *Investing: the definitive companion to investment and the financial markets*. (2nd Ed). Financial Times/ Prentice Hall.
- Avram E. L. (2009). Investment decision and its appraisal. *DAAAM International*, 20 (1), 1905-1906. Vienna, Austria, EU.
- Bacchetta, P., Mertens, E. & van Wincoop, E. (2009). Predictability in financial markets: What do survey expectations tell us? *Journal of International Money and Finance*, 28, 406–26.
- Boyle, G. & Guthrie, G. (2003). Investment, Uncertainty, and Liquidity. *The Journal of Finance*, 58 (5), 2143-2166.
- Brick, J.M. & Kalton, G. (1996). Handling Missing Data in Survey Research. *Stat Methods Med Res*, 5, 215-38.
- Brosch, R. (2008). "Portfolio of Real Options". Lecture Notes in Economics and Mathematical Systems, Springer
- Campello, M., Graham, J. & Harvey, C. (2010). The Real Effects of Financial Constraints: Evidence from a Financial Crisis. *Journal of Financial Economics*, 97, 470-487.
- Cohen, G. & Yagil, J. (2008). On the catering theory of dividends and the linkage between investment, financing and dividend policies. *International Research Journal of Finance and Economics* (17), 33-39.
- Cooper, D. & Schindler, P. (2003). *Business research methods* (8th Ed.). Boston: McGraw-Hill.
- Cummings, J. (2010). *The McGraw-Hill 36-hour course: Real estate investing*. New York: McGraw-Hill.
- Davis E.P. (2012). "Evolving Roles for Pension Regulations: Toward Better Risk Control", in *Recreating Sustainable Retirement: Resilience, Solvency, and Tail Risk*, Raimond Maurer, Olivia S. Mitchell, and P. Brett Hammond (Eds). Oxford University Press.
- Dimitrios, I.M. (2007). Investors' behaviour in the Athens Stock Exchange (ASE). *Journal of Accountancy*, 120, 67-72.
- Dovi, E. (2008). Boosting Domestic Savings in Africa. *Rom Africa Renewal*, 22(3), 12.
- Elton, E.J., Gruber, M.J. & Brown, S.J. (2010). *Modern Portfolio Theory and Investment Analysis* (8th Ed.). Wiley.

- Fama, E.F. & French, K.R (2004). The Capital Asset Pricing Model: Theory and Evidence. *Journal of Economic Perspectives*. 18 (3): 25–46.
- Garman, E.T. & Fogue, R.E. (2011). *Personal finance*. Engage Learning.
- Gay, L. (2006). *Educational Research: Competences for Analysis and Application* (4th Ed). New York: Macmillan.
- Gibson, R., Michayluk, D. & Van de Venter, G. (2013). Financial risk tolerance: An analysis of unexplored factors. *Financial Services Review*, 22(1), 23-50.
- Government of Kenya (2015). *Finance Act*. Nairobi: Government Printer.
- Grable, J., Britt, S. & Webb, F.J. (2008). Environmental and bio psychosocial profiling as a means for describing financial risk-taking behavior, *Journal of Financial Counseling and Planning*, 19 (2).
- Greenwood, P., Robin, S. & Shleifer, A. (2004). Expectations of Returns and Expected Returns. *Review of Financial Studies*, 27 (3), 714-746.
- Hebb, T. & Beeferman L. (2008). US Pension Funds' Labour-Friendly Investments. *Journal of Comparative Social Welfare*, 25, 2.
- Hinz, R., Rudolf, H., Antolin, P. & Yermo, J. (2010). *Evaluating the financial performance of Pension Funds*. Washington, DC: The World Bank
- Holzmann, R. & Hinz, R.P. (2005). *Old-Age Income Support in the 21st Century - An International Perspective on Pension Systems and Reform*. World Bank, Washington, D.C.
- Holzmann, R., Hinz, R.P., & Dorfman, M. (2012). "Pension systems and reforms framework: Social protection and labour". Discussion paper No. 0824. Retrieved on January 8, 2017 from siteresources.worldbank.org/Socialprotection/resources/2805581225731593400/spl_at_WB_2000-08.pdf
- Hoyt R.E. & Liebenberg A.P. (2006). Determinants of Risk Management adoption among the insurance companies. *Journal of Business and other Social science*, 128, (4), 213-230.
- Hubbard, D. (2009). *The Failure of Risk Management: Why It's Broken and How to Fix It*, John Wiley & Sons.
- Hussein, A.H. (2007). Factors influencing individual investor behaviour in the UAE financial markets. *Journal of Business*, 92.
- Income Tax Act Cap 487 and Retirement Benefit Act (1997). Nairobi: Government Printer.
- Investment Performance Survey (2015). *Pension funds in Kenya reap big from equities*. Mercer Surveys.
- Ismail, M.A., Ibrahim, M.H., Yusoff, M., & Zainal, M.P. (2010). Financial constraints and firm investment in Malaysia: An investigation of investment-cash flow relationship. *International Journal of Economics and Management*, 4(1), 29-44.
- Jensen, M. & Meckling, W. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3, 305-360.

- Jorge, S.M. (2006). *Pension Reform and the Development of Pension Systems: An Evaluation of World Bank Assistance*. Washington, DC: World Bank.
- Jorgenson, D.W. & Stephenson, J.A. (1967). The Time Structure of Investment Behavior in United States Manufacturing. *Rev. Econ. And Statis.*, XLIX (1), 16-27.
- Kasomo, D. (2006). *Research Methods in Humanities and Education*. Egerton: Egerton University Press.
- Khalid, Z., Iqtidar, A., Muhammad, K. & Mehboob, A. (2012). Macroeconomic factors determining FDI impact on Pakistan's growth. *South Asian Journal of Global Business Research*, 1 (1), 79 – 95.
- Korteweg, A. & Polson, N. (2009). Corporate credit spreads under parameter uncertainty. *Working paper*. Stanford University and University of Chicago.
- Koszegi, B. & Rabin, M. (2007). Reference-Dependent Risk Attitudes. *American Economic Review*, 97, 1047–1073.
- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques* (2nd Ed). New Delhi: New Age International (P) Limited Publishers.
- Kyando, B.W. (2014). *Contribution of Pension Funds in the Development of Capital Markets in Tanzania*. Master of Business Administration Thesis. The Open University of Tanzania.
- Leon. A., Nave, J. and Rubio, G. (2005). "The Relationship between Risk and Expected Return in Europe". DFAEII Working Papers No. 200508, University of the Basque Country - Department of Foundations of Economic Analysis.
- Lintner, J. (1965). The valuation of risk assets and the selection of risky investments in stock portfolios and capital budgets. *Review of Economics and Statistics*, 47 (1), 13-37.
- Lynn, D. (2007). The Tectonic Forces of Global Real Estate: Implication for global investment and Portfolio Managers. *Journal of Real estate portfolio Management*, 13(1), 87-92.
- Makori, E. (2010). *A survey of asset liability management among defined benefits pension schemes*. MBA project, University of Nairobi, Kenya.
- Malhotra, N. (2004). *Marketing Research: An Applied Orientation* (4th edition) New Jersey: Pearson Education Inc.
- Meng, C. & Pfau, W.D. 2010. "The Role of Pension Funds in Capital Market Development". GRIPS Discussion Papers 10-17. National Graduate Institute for Policy Studies.
- Modigliani, F. & Miller, M.H. (1961). Dividend Policy, Growth, and the Valuation of Shares. *The Journal of Business*, 34 (4), 411-433.
- Mugenda, M. & Mugenda, O. (2003). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: African Centre for Technology Studies.
- Muhammad, N.M.N. & Abdullah, M. (2009). Investment decision-making style: Are Malaysian investors rational decision makers? *Interdisciplinary Journal of Contemporary Research in Business*, 1 (3), 96- 108.

- Musalem, A. & Souto, P. (2009). Unveiling the Governance of Public Pension Funds. *Working Paper N. 34*. Mimeo.
- Musalem, A. & Souto, P. (2009). Unveiling the Governance of Public Pension Funds. *Working Paper N. 34*. Mimeo.
- Mwaita, H. K. (2016). *Determinants of Use of Strategic Social Security Initiatives among Employees of Nakuru County Government, Kenya*. Masters Dissertation. Jomo Kenyatta University of Science and Technology.
- Naceur, S., Ghazouani, S. & Omran, M. (2007). The determinants of stock market development in the Middle-Eastern and North African Region. *Managerial Finance*, 33 (7), 477-489.
- Nagel, S. (2012). Macroeconomic experiences and expectations: A perspective on the great recession. *Review of Financial Studies*, 27 (3), 127.
- Natcom Report (2012). *Annual Report*. The International Finance Corporation.
- Njuguna, G. A. (2010). *Strategies to improve pension fund efficiency in Kenya*. Nelson Mandela Metropolitan University.
- Njuguna, R.W. (2012). *The Impact of Risk Based Supervision on the Financial Performance of Pension Funds in Kenya*. MBA Thesis. University of Nairobi.
- Oluoch, M. A. (2013). *The Determinants of Performance of Pension Funds in Kenya*. University of Nairobi.
- O'Sullivan, A. & Sheffrin, S. (2003). *Economics: Principles in action*. Upper Saddle River, N. J.: Pearson Prentice Hall.
- Polit, D. & Beck, C. (2004). *Nursing Research: Principles and Methods (7thEd)* Philadelphia, Lippincott Williams & Wilkins.
- Price Water Coopers (2016). Africa Asset Management 2020 - Report by PwC examining the asset management industry across 12 African countries (Algeria, Angola, Botswana, Egypt, Ghana, Kenya, Mauritius, Morocco, Namibia, Nigeria, South Africa, and Tunisia). Accessed on June 7, 2017 from: <http://www.savca.co.za/wp-content/uploads/2016/03/Brief-on-Pension-Funds-in-Botswana-Kenya-Namibia-and-Nigeria-New-avenues-for-funding-private-equity-final.pdf>
- Raddatz, C. & Schmukler, S. (2008). *Pension funds and capital market development. How much bang for the buck?* The World Bank, Development Research Group, Macroeconomics and Growth Team.
- Raichura, S. (2008). *Analytical review of the pension system in Kenya. Nairobi*.
- Rebigier-Bilozor, M. & Wisniewski, R. (2012). The impact of macroeconomic factors on residential property prices indices in Europe. *XLI Incontro di Studio del Ce.S.E.T*, 149-166.
- Rocha, R. & Thorburn, C. (2007). *Developing Annuities Markets*. Washington, DC: The World Bank.
- Roldos, J. E. (2008). "Pension Reform, Investment Restrictions, and Capital Markets." IMF Policy Discussion Paper PDP/04/4. Washington, DC: International Monetary Fund.

- Rono, L.J. (2009). An Evaluation of Factors Influencing Pension Managers' Investment Decisions in Kenya. *The International Business & Economics Research Journal*, 8(10), 81-99.
- Rono, L.J., Bitok, J.K. & Asamoah, G.N. (2010). Impact of Retirement Benefit Act (RBA) on Investment Returns to Pension Funds in Kenya. *International Business & Economics Research Journal*, 9 (4), 51.
- Rudolf, H. & Rocha, R. (2009). Enabling Condition for Second Pillars on Pension Systems. *Policy Research Working Paper 4890*. Washington, DC: The World Bank.
- Sampson, R.C. (2007). R&D Alliances and Firm Performance: The Impact of Technological Diversity and Alliance Organization on Innovation. *The Academy of Management Journal*, 50 (2), 364-386.
- Saunders, M., Lewis, P., & Thornhill, A. (2003). *Research method for business students (3rd edition)*. New York: Prentice Hall.
- Sharma, M., & Gupta, S. (2011). Role of Subjective Norm in Investment Decision Making of Casual Investors. *Indian Journal of Finance*, 5(11), 39 – 46.
- Stewart, F., & Yermo, J. (2009). *Pension in Africa*. OECD Publishing. [Online] Available on July 18, 2013 from: www.oecd.org/dataoecd/41/6/42052117.pdf
- Thalmann, P. (2006). *Triggers for housing development*. Ecole Polytechnique Federale de Lausanne, station 16 CH 1015.
- Tirole, J. (2006). *The Theory of Corporate Finance*. Princeton University Press
- United Republic of Tanzania (URT) (2012). *The social security schemes investment guidelines*. Dar es Salaam: Bank of Tanzania.
- Veld, C., & Veld-Merkoulova, Y. V. (2008). The Risk Perceptions of Individual Investors. *Journal of Economic Psychology*, 29(2), 226-252.
- Wisma W. & Jurs, S. (2005). *Research Methods in Education (8th Edition)*. New York: Pearson.
- Yermo, J. (2009). *Pensions in Africa. OECD Working Papers on Insurance and Private Pensions*. OECD publishing, 30.