Strathmore University
SU+ @ Strathmore University Library

Electronic Theses and Dissertations

2019

Investment preferences over the individual lifecycle: a case of private universities in Kenya

Joyce Karanja
Strathmore Business School (SBS)
Strathmore University

Follow this and additional works at https://su-plus.strathmore.edu/handle/11071/6747

Recommended Citation

Karanja, J. N. (2019). *Investment preferences over the individual lifecycle: A case of private universities in Kenya* (Thesis, Strathmore University). Retrieved from http://su-plus.strathmore.edu/handle/11071/6747

This Thesis - Open Access is brought to you for free and open access by DSpace @Strathmore University. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of DSpace @Strathmore University. For more information, please contact librarian@strathmore.edu

Investment Preferences over the Individual Lifecycle: A case of Private Universities in Kenya

Karanja Joyce Nyairera

Submitted in partial fulfillment of the requirements for the Degree of Master of Commerce at Strathmore University

Strathmore Business School

Strathmore University

Nairobi, Kenya

JUNE 2019

This thesis is available for Library use on the understanding that it is copyright material and that no quotation from the thesis may be published without proper acknowledgement

DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

© No part of this thesis may be reproduced without the permission of the author and Strathmore University.

Joyce Nyairera Karanja

Signature ……..

Date……..

Approval

The thesis of Joyce Nyairera Karanja was reviewed and approved by:

Dr. Freshia Mugo-Waweru,

Senior lecturer, Strathmore University Business School

Strathmore University

Dr. George Njenga,

Dean, Strathmore University Business School,

Strathmore University

Professor Ruth Kiraka,

Dean, School of Graduate Studies

Strathmore University

ABSTRACT

This research sought to investigate the investment behavior of individuals over the lifecycle. It had three objectives; to investigate the investment preferences over the lifecycle, to investigate factors influencing the investor's investment decision and to investigate investment assets per the investor life cycle. The research used both qualitative and quantitative methods through used of questionnaires and interviews to understand the investor's behavior. The target population was the faculty, student and administrative staff of private universities. Data analysis was carried using chi tests, correlational and regression analysis and correlational analysis. The findings showed for ages below 25 years the main goals were education of self, build up savings and meet basic needs. The investment assets held by this group were saving accounts. In the age group between 25-40 years the main goals were planning for retirement, meet basic needs and build up savings. The financial assets held by this group were saving accounts, real estate and debt instruments. In the age between 41-60 years the main goals were planning for retirement, build up savings, meet basic needs and education of family. The investment holding included saving accounts, derivative and debt instruments. In the age above 61 years, the main goals were planning for retirement and current income generation. The asset holding was stocks and land. This showed that to some extent the asset allocation was consistent with the guidelines of the Lifecycle investing theory. The findings showed that older people held stocks than younger people and that planning for retirement cut across all the ages. The findings also showed that younger people invest more in saving accounts than older people. The major factors that influenced an investor's decision were ease of access of the investment asset, risk factors associated with the investment and the amount of income available for investing. In addition, the main factors that the suppliers of investment assets considered were the investment goals of the individual and the amount of income available for investment.

TABLE OF CONTENTS

VT OMNES VNVM SINT

LIST OF FIGURES

LIST OF TABLES

VT OMNES VNVM SINT

DEFINITION OF TERMS

Asset allocation: This is an investment portfolio technique that aims to balance different types of risks and create diversification (Rajendran, 2015)

Individual life cycle: This is the journey of an individual through the sequential stages of life from birth to death through childhood, adolescence, adult life and old age (Duvall and Hill, 1948) .

VT OMNES VNVM SINT

ACKNOWLEDGEMENT

I thank the Almighty God for His strength, wisdom and knowledge throughout the thesis period. Secondly I am grateful to my parents Mr. and Mrs. James Karanja and my sister Peninah for their sacrifices, support and prayers that were very instrumental in the completion of this thesis.

This work would also not have been a success without the tremendous and valuable guidance from my supervisor Dr Freshia Waweru whose guidance, valuable input and insight I treasure.

I am also grateful to my colleagues and friends for their great input. Their criticism and corrections were of great importance in writing this document. I would also like to thank the entire management and faculty for awarding me this opportunity to undertake my study

CHAPTER ONE

INTRODUCTION

1.1 Background

When it comes to personal investments, an investor needs to decide on the optimal investment portfolio that will enable them achieve their financial goal. This process is known as asset allocation and it involves making a choice from various asset classes e.g. saving accounts, fixed asset securities, real estate, land, and equities. The investor's financial goals can be long term or short term therefore choosing an optimal investment portfolio of paramount in all his/her life cycle stages. The process of asset allocation involves making a decision under risk and uncertainty (Santacruz, 2014). The original thinking of asset allocation through the concept of diversification of investments was the Modern Portfolio Theory by Markowitz.

In the selection process of a portfolio (Markowitz, 1952) states that the optimal portfolio is the one that maximizes expected return and minimizes the risk or variance. This means that one has to diversify by owning a variety of different assets which in turn will lower the risk. This method has limitations in that one has to make predictions about the expected return which cannot be 100% accurate and also risks such as systematic risk is not handled (Wallengren & Sigurdson, 2017). Sharpe (2007) added onto the Markowitz theory stating that the investor chooses his portfolio to maximize utility and analyzes this against the risk which is measured through standard deviation, probability, semi variance, expected loss.

The Markowitz theory has its assumptions which include the element that investors have unlimited access to capital and investors consider one period of investment. This is contrary to the real world since every investor has credit limits and therefore an investor will allocate their resources according to their specific needs (Mangram, 2013). Traditionally, investors would allocate their resources according to the investors risk tolerance, without considering their investment horizon. The assumptions of the Markowitz theory lead to the development by financial economists of the model of life-cycle investing. Now, investors can allocate their resources according to their individual life cycle known as the age-based investing (Viceira, 2007).

Life cycle investing is a multi-period model that uses hedging and insuring as well as precautionary saving and diversification as core strategies (Hogan, 2007). The different stages of an individual's lifecycle can be analyzed by considering various variables such as age, marital status, income levels and child's presence. The short term and long term goals of an investor are also important in the asset allocation process. For example a short term goal for an investor could be purchase of a house or a motor vehicle whereas the long term goal would be financial independence (Rajendran, 2015).

According to (Rajendran, 2015; Reilly & Brown, 2011) there are three phases in an individual investor life cycle. The first is the accumulation phase where the individual is in their early to middle years of their working career which is between twenty five to forty years. Some goals of an individual at this stage are planning for retirement, children education, buying a house or car. Examples of financial products at this stage include pension funds, education funds, and real estate (Bodie, 2003).

The second stage is consolidation phase where the individual is past the midpoint of their careers that is between forty and sixty years. The third is the spending or gifting phase which begins when the individual retires which is after sixty years. The lifecycle products under this stage include escalating annuities, which are designed to provide a guaranteed minimum standard of living such that the retiree can gradually increase their consumption if the stock market performs well without affecting their standard of living (Bodie, 2003). The other investment product is bundled risk annuities where a life annuity is combined with long-term care insurance which enables the investor to have readily access to cash if need be (Bodie, 2003).

While undertaking life cycle investing decisions, an individual must consider the person's appetite and attitude towards risk (Rajendran, 2015). This would mean that a person who is near the retirement age would prefer to invest in assets such as a fixed deposits due to the low risk elements (Malkiel, 1999). In the study of the financial behavior of US households (Schooley & Worden, 1999) concluded that individuals investment decisions are influenced by the time horizon and risk appetite. The research showed that individuals with longer time horizons took up risky investments thus held a higher percentage in equity.

An individual investor is assumed to be rational and maximize his/her return by evaluating the investment choice on the basis of risk and return (Mutswenje & Jagongo, 2014; Wallengren & Sigurdson, 2017b). Therefore, it is assumed that the investment decisions made by an individual investor will be in line with the individual investor lifecycle. These investment decisions should consider age, financial status, future plans, risk tolerance and needs (Rajendran, 2015). This thus means that there should be a difference in the type of financial asset an individual holds over their lifecycle.

In life cycle investing a person's total wealth is calculated as sum of their current wealth and the present value of their human capital that is what their labor will earn during their lifetime. This means that the individual's financial health is measured by their lifetime consumption and not their wealth. Therefore from a life-cycle investing point of view, preparing for retirement thus requires investing savings in safe investments to the extent that is appropriate for one's personal circumstances and insuring or otherwise addressing the risk of catastrophic losses (Bovenberg, Koijen, Nijman, & Teulings, 2007; Hogan, 2007). For typical investors in their 20s through their 40 should allocate about 90% of their financial portfolio to stocks. From 40 to retirement, the stock allocation should decrease steadily to about 50% or 60% and after retirement it may decrease by 2% per year for at least five years after retirement (Reichenstein & Jennings, 2007).

Scientific studies of financial behavior have showed that people will consistently make certain mistakes in investment decisions because of inadequate financial or investment knowledge, poor judgment, impulses, personal or religious beliefs and biased statistics (Bodie, 2003). Sometimes investors will have the necessary information or knowledge to make an informed investment decisions however elements like emotions, moods, feelings, fantasies will influence these decisions (Statman, Fisher, & Anginer, 2008). In other researches, demographic factors such as academic education, income level, investment knowledge and investment experience have a significant effect on the investors behavior (Muhammad Nauman Sadiq, 2014). In their research (Kimeu, Anyango, & Rotich, 2016) found that the investment decisions by investors in the Nairobi Securities Exchange are positively influenced by behavioral factors including prospect herding, heuristic and rationality.

Investment among students in higher education show that majority of them are risk averse and that goals such as starting a business are not important. Financial knowledge in addition does not

affect the risk appetite (Huzdik, Béres, & Németh, 2014). Amongst university staff, investment is seen more in savings and current accounts and less in mutual trusts, stocks market. Furthermore, financial knowledge is seen to have an impact on financial decisions (Wangeci Mwathi, 2017). University staff does not consider the presence of children or the employment period while making an investment decision. Factors that mostly influence investors are their knowledge in investment, their age, income level and their education level (Bayar, Sezgin, Öztürk, & Şaşmaz, 2017).

1.2 Research problem

Financial advisors often rely of lifecycle investing where they advise their clients to reduce their holding in stocks as they grow older. Therefore, for typical investors who are between 20-40 years should allocate about 90% of their financial portfolio to stocks. From 40 to retirement, the stock allocation should decrease steadily to about 50% or 60% and after retirement it may decrease by 2% per year for at least five years after retirement (Reichenstein & Jennings, 2007). The question thus is does the individual follow this advice and actually rebalance his/her investment as they grow older.

Studies by (Basten, Fagereng, & Telle, 2016; Fagereng, Gottlieb, & Guiso, 2017) show that there was an adjustment in the asset holding where individuals reduced their holding in risky assets and increased holding in safer assets like bonds as they grew older. The reason for this is that in the years of retirement the source of income for a person who was employed is cut of and therefore the individual has to replace their portfolio to less risky assets.

The theory that stock holding reduces as one ages because the investment horizon reduces with age is challenged by the findings in (Dow, 2009) which show that investment horizon is not closely related to age. The research also highlights that as one ages, they will acquire financial knowledge thus the increase in stock holding. The concept of life cycle investing that shows that younger people are risk takers as opposed to older people is not necessarily true due to the element of limited resources (Wang & Hanna, 1998). Different researches have shown that there are differences in the investment asset preference in different age cohorts. This however has not been consistent with lifecycle hypothesis where older people are seen to have more stock holding and less of bonds as compared to younger people (Poterba & Samwick, 1997).

A study done to investigate how Kenyans are prepared for retirement showed that younger people ages 21-40 were risk averse thus held more land and real estate as compared to stocks (WallStreet, 2018). The assumption in the lifecycle that income follows gradual growth overtime is not always true for example in the case of entrepreneurs and income from lottery or betting winnings which might influence the investment preference of an individual.

Lifecycle investing assumes that the individual investor acts in a rational manner by focusing on factors such as age, financial status and future plans. Contrary to this, other research findings show that individual investors do not act in a rational manner (Chandra & Kumar, 2011). Some investors will focus on the features of the asset such as past performance, price changes, economic and political factors and opinions of friends and colleagues while other factors such as family member opinions, gut feeling on the economy and religious beliefs will have little influence on the investment decision of an individual (Aryan Hellas, 2005; Ponnamperuma, 2013; Wendo, 2015).

Studies on the lifecycle theory reflect practices where some investors are consistent with the theory while others are not consistent. The lifecycle theory should be a guide to investors on how to transfer resources over their different stages in life incorporating the different goals and needs in each stage. This then enables the investors and the financial advisors to make an investment decision in a more logical and rigorous manner (Bodie, Treussard, & Willen, 2007). Through lifecycle investing the problem that individuals might not be making proper investment decisions to enable them have adequate income during retirement without affecting their standard of living is addressed (Viceira, 2007). This research aimed to investigate an individual's investment behavior along the life cycle and investment preference. It also sought to understand the factors that influence the individual in making an investment decision.

1.3 Research objectives

1.3.1 General objective

The main research objective of the study was to investigate the asset allocation behavior of individuals over the life cycle.

1.3.2 Specific objectives

The other objectives were:

1. To investigate the investment preferences over the individual life cycle
2. To investigate factors influencing the investor's investment decision making
3. To investigate the investment assets per the investor life cycle

1.4 Research questions

The research was guided by the following questions;

1. What are the investment preferences over the individual lifecycle?
2. Which factors influence the investor's decision making?
3. Are there investment assets in line with the investor lifecycle theory?

1.5 Significance of the study

1.5.1 Individual investor

This study would be beneficial to the investor in understanding the importance of the individual investment lifecycle. Individuals are increasingly being required to be actively make their own investment decisions, including the investment of for their retirement needs among securities to ensure that they have sufficient income to sustain them in retirement (Schooley & Worden, 1999). Understanding ones individual investment curve considering the time horizons, investment goals and risk tolerance will enable an investor make a rational investment decision.

1.5.2 Financial institutions

The result of the study would help financial managers when formulating the investment policy statement documents with the individual as they will have more insight on the key investment goals and preferences in every stage in the lifecycle.

The findings would help financial institutions to develop procedures of how to create a long life relationship with the individual to their investment needs solved in one roof. That is through transition with the individual in the various life stages.

In addition the findings of the study would help policy makers in government institutions such as the Central Bank, NSE and others concerned with the financial sector and building an investment culture to design informed awareness and educational programmes.

1.5.3 Academicians

The study would give more insight on the investment preferences of individual investors especially those in a university setting. Majority of research has looked at the investment behavior of staff and students independently and the findings of this research will add to that knowledge. The recommendations for future research would lead to more study thus extending the understanding the investor's behavior over their lifecycle and other factors that may influence this behavior.

1.6 Scope of the study

The study focused on determining the investment preferences or asset allocation over the life cycle stages. The study also aimed at investigating whether there are investment assets per each life cycle stage. The study focused on the investment preferences of the faculty, students and administrative staff of private universities in Kenya. Private Universities were selected because they have fewer students and staff as compared to Public Universities. This was relevant given the time constraint of collecting data and getting the response rate would be higher. The other respondents were from the insurance and investment companies who are the providers of the investment products.

VT OMNES VNVM SINT

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature regarding the individual lifecycle and investment preferences. It begins with review on theories that explain the investment choices of individuals. The chapter then reviews empirical evidence on individual's investment behavior globally and in Kenya. The chapter ends with conclusions drawn from literature review and a presentation of the conceptual framework of the study variables.

2.2 Theoretical review

This research was anchored on four theories which best explain the investment decision making characteristics of individuals. The theories included Markowitz portfolio theory, prospect theory, heuristic theory and life cycle investing theory. The Markowitz theory explains the behavior of a rational investor who makes his decision through analysis of risk and returns. Prospect and heuristic theory explains the behavior of an investor who is not rational. The lifecycle theory explains the investment behavior of an individual through the different age stages.

2.2.1 Markowitz portfolio theory

In this theory Harry Markowitz shows that portfolio formation involves evaluation of the expected return and the risk of the individual assets and their interrelationship. One rule in this theory is that the investor should maximize the discounted value of future returns while minimizing the variance which is the measure of risk (Levišauskait, 2010; Markowitz, 1952; Wallengren & Sigurdson, 2017). Therefore the efficient allocation portfolio is one that has the highest return to its risk and has the lowest risk to its expected return (Wallengren & Sigurdson, 2017). This theory emphasis that individual assets should not be considered in isolation and through a set of portfolios the efficient frontier is formulated.

The Markowitz portfolio theory assumptions which tend to be limitations to practical application include; one that the investors consider only the mean and variance that is the risk associated with the portfolio and concludes that investors can base their investment decisions on only these variables. The second and third being expected return is normally distributed and risk is

measured by the variance of expected returns. The fourth is that investors consider only one period of investment and the fifth that investors have a quadratic utility function. This theory informs this study by explaining the element of an individual acting in a rational manner through evaluation of risk and return.

2.2.2 Prospect theory

This is a theory of decision making under conditions of risk where the decisions are based on judgments (Kahneman and Tversky, 1979). It is a descriptive model used to explain real world behavior through elements of psychology and economics. The three cognitive biases for the cognitive law in the condition of investor risks include representative bias, availability bias and anchoring effect. Under representative bias people often describe the new business through the similar old things. For example for a new choice B, someone can think of the similar old choice A and will compare the similarity of B and A thus properties of B are determined (Wan, 2018). In availability bias people tend to pay attention to easily accessible information and often ignore the other information influencing the decision making process. In anchoring effect people will pay too much attention to confirmed results giving them higher weights (Wan, 2018).

Prospect theory shows how the individual makes investment decisions based on the perception of one's mind. This theory proposes that an individual is influenced positively by positive elements and negatively by negative factors. For example if one is presented with an option based on potential gains and another in possible losses the individual will choose the one with potential gains. It shows that an individual maybe willing to take more risk than experience losses. Another element in prospect theory is regret aversion. Regret is a negative emotion that one experiences after making a wrong choice or decision (Pious, 1993). For example in a situation where the stock is decreasing in value, an investor will refuse to sell it in order not to feel regret and end up selling one that is increasing in value. The other element is mental accounting which involves people separating their money into separate accounts without using logic. For example an investor may end up having saving accounts that earns no interest and at the same time hold an interest accruing credit card (Shiller, 2000).

Expected utility theory implies that investors hold well diversified portfolios through computation of weighted average of all possible outcomes however this may not represent the best portfolio. Investors ignore covariance between security returns and choose stochastically

dominated portfolios that lie below the efficient frontier. They also combine safe and risky assets in their portfolios such as insurance and lottery tickets (Copur, 2015). This theory helped in understanding and examination of the behavioral factors influencing the investment decision.

2.2.3 Heuristic theory

Decision making environs are usually complex and uncertain and as such people tend to use mental shortcuts known as heuristic to reduce the decision making time. There are heuristic driven biases which include overconfidence, excessive optimism, representativeness, availability and anchoring and adjustments (Stewart, Shefrin, & Shefrin, 2000). The element of anchoring and adjustment comes into play when the investor has to estimate an unknown value or magnitude. This occurs where there are previous estimates or perceptions and future decisions will be inclined to the initial perceptions. To estimate the value of an asset an investor will consider the original value and base the new value on the prior one (Copur, 2015).

Anchoring bias is not ideal in making decisions as it does not consider the current situation. For example in the stock market the investor will tend to consider the historical price and then adjust this with any new information they get which may be inadequate. In anchoring, individuals will tend to focus on current behavior without looking at the future implication of this decision. In the circumstances where better information is not available one can really on the anchor (previous price) though caution is needed (Shiller, 2000).

Overconfidence is where the investors tend to be bold about their knowledge of a value of asset and more often than not they tend to overestimate the value (Copur, 2015). Overconfidence is prevalent in those investors who have prior high returns and as a result of this end up trading. This therefore leads to increase in trading volume and a loss reduces overconfidence level thus the volume traded. This means that an investor will be inclined to invest in assets of previous high returns.

In optimism, the investor tends to overestimate or underestimate the expected mean returns of the risky asset. This means that the optimistic investor is more sensitive towards positive market news and will only incorporate good news in their investment decision making process (Copur, 2015). Optimism/pessimism is a very influential bias and as such is responsible for setting the mood in financial markets. It is driven by past returns that have an impact on return expectations, risk tolerance and risk perception of investors (Copur, 2015). The study looked at circumstances

where an individual may not be rational and relay on behavioral factors thus the theory is used to define these factors.

2.2.4 Life cycle investing theory

Life cycle investing is a development from the Markowitz mean-variance theory by Paul Samuelson and Robert Merton(Hogan, 2007). The concept of life-cycle hypothesis was also developed by Franco Modigliani (Ando & Modigliani, 1963). Lifecycle investing is a multi-period model which uses hedging and insuring coupled with precautionary saving and diversification. Its main measure of financial well-being is lifetime consumption and not wealth and thus the current value of one's knowledge, competence and ability to work (human capital) is important in defining the investor's personal wealth (Hogan, 2007). This model helps in asset allocation where the investor should invest in less liquid assets at a younger age than when old. Given the characteristics of old age; one would want to hold assets that can be converted easily into cash in the event of financial need (Poterba & Samwick, 1997)

According to (Rajendran, 2015; Reilly & Brown, 2011) there are three phases in an individual investor life cycle. The first is the accumulation phase where the individual is in their early heading to the middle years of their working career which is between twenty five to forty years. The main priorities include accumulating savings for a new home, college expenses and the products in this phase are occupational funds, education plans, and real estate (Bodie, 2003).

The second stage is consolidation phase where the individual is past the midpoint of their careers that is between forty and sixty years. The third is the spending or gifting phase which begins when the individual retires which is after sixty years. The lifecycle products under this stage include escalating annuities, which are designed to provide a guaranteed minimum standard of living such that the individual can increase their consumption when the stock market performs well holding their standard of living constant (Bodie, 2003).

One of the concepts of life cycle model is that assets are used to transfer money across the various life stages incorporating the different life changes and not a way of transferring resources across time. This means that the investor will be willing to accommodate more risk in good times i.e. during employment than in bad times that is during joblessness (retirement). The theory therefore suggests that an investor should invest in risker assets in younger years than in old age (Bodie et al., 2007).

2.3 Empirical review

2.3.1 Investing along the life cycle model

The lifecycle model posits a hump shaped pattern where one accumulates assets during their working years and reduce holding of those assets during their retirement years. Under lifecycle investing, an investor should invest in high risk assets in the younger years and less risky in the older years (Schooley & Worden, 1999). This is due to the concept of time diversification where in the long run assets that yielded poor returns will be offset with those that yielded high returns. Another reason behind this theory where younger people choose to accept higher risk is that they have longer time horizon and are able to adjust or compensate for the risk by adjusting consumption and work lifestyles (Schooley & Worden, 1999). For example if an investment yields returns below its expected returns in an early investment period, the young investor can reduce consumption or increase work to still achieve the investment goal.

In a research by (Basten et al., 2016) showed that the people increased saving and shifted towards less risker assets in the years near unemployment and reduced savings after unemployment. In the years of retirement the source of income if one was employed is cut of and therefore the individual has to replace their portfolio with less risky assets. While understanding why older investors are less willing to take financial risks (Brooks, Sangiorgi, Hillenbrand, & Money, 2018) concluded that risk tolerance declines at an increasing rate with age.

A research by Xiao (1996) on effects of family income and lifecycle stages on financial asset ownership is in agreement with (Schooley & Worden, 1999). The research showed that older people were expected to hold less of saving accounts than younger people and invest more in bonds, stocks and trusts. The research concludes that household age, marital status, employment status and child's presence are significant in predicting the ownership of financial assets. Similar to (Schooley & Worden, 1999; Xiao, 1996), research findings by (Mwiya, 2008) on the individual life cycle and investment preferences in Lusaka showed that there was a relationship between age and the holding of investments. The findings showed that older people were more likely to consider safety, profitability and predictability of income on each investment alternative before investing.

In examining the life-cycle behavior of investors among the Norwegian households, (Fagereng et al., 2017) found that investment behavior of individuals were consistent with the lifecycle hypothesis where household were seen to participate in the stock market in their earlier years. Labor income is risky due its uncertainties however it is less risky than equities and thus is viewed as a close substitute for a risk-free asset. The presence of labor income tends to increase the demand for stocks especially in the early years (Cocco, Gomes, & Maenhout, 2005). There was evidence of a rebalance of asset holding where as people grew older, there was a decline in capitalized value of labor. To compensate for this households reduce their holding of risky financial assets and increase bond-like wealth. This is similar in the findings by (Kraft, 2011) where there was low stock holding in retirement.

While studying the optimal housing, consumption and investment decisions over the life cycle (Kraft, 2011) concluded that there are sudden changes in investments at retirement. This is because at retirement there is no longer income from employment as compared to the prior gradual growth in income experienced in working years before retirement. This volatility causes the investment in housing to drop both before and in retirement.

In their study on household portfolio allocation over the lifecycle, (Poterba & Samwick, 1997) found out that the concept of the hump shaped pattern is not the same across all assets. Their research showed that financial assets declined as households aged and increased at advanced ages. Investment in real estate and equity conformed to the life cycle theory while for owner occupied housing there was no evident decline in its ownership at older ages. These findings are also similar to (Ameriks & Zeldes, 2004) where they observed that stock holding increased as individuals grew older where the young individuals tend to have no or minimal have stock holdings but as they get older their participation in stock market increases. They also found that stock holdings increased with education and income levels.

According to (Poterba & Samwick, 1997) the standard life cycle model does not distinguish between various types of assets. The humped shaped for stock investment may not apply for all investors such as entrepreneurs whose human capital is risky (Bodie, 2003). For example they state that financial assets decline as household age and begin to increase at advanced ages. Investment in real estate and equity in privately held business display the hump shaped and for owner occupied housing there is no evidence of decline in its ownership.

In lifecycle investing, a person's total wealth is the sum of their current financial wealth and the present value of their labor capital over their lifetime (Hogan, 2007) and thus labor income and its risk is a key element in lifecycle investing (Cocco et al., 2005). As the level and risk of labor income change so does the portfolio choice of an investor changes. Labor income acts as a substitute for risk free asset holding, this is so because at younger ages when the labor income is high or where the individual can put in more hours due to the physical energy the investment in risky assets such as stock market is higher. As one ages the labor income reduces as so does that proportion in the stock holdings (Cocco et al., 2005; Gomes, Kotlikoff, & Viceira, 2008).

The basic rule of life cycle investing where the investor reduces the proportion of risky assets as he ages is not consistent in all studies. A research done by (Wang & Hanna, 1998) on whether risk tolerance decreases with age showed that the investment in risky assets increased as people aged. In their research younger people appeared to be more risk averse because they could be able to accommodate the short term losses from investment due to the limited amount of income available for investment. This finding contrasts the lifecycle theory of decrease in risk tolerance as one age.

Lifecycle investing assumes labor income is exogenous to the individual however individuals with flexible labor supply can afford to hold risker portfolios because that can adjust to negative asset returns both by changing their consumption and labor supply(Campbell & Feldstein, 2001). These findings were similar to those of (Dow, 2009) in his study on age, investing horizon and asset allocation. The study showed that investment period is not closely connected to age indicating that younger investors were not necessarily saving for retirement but for other needs and thus had shorter investment. The study also states that experience and education also play a major role in asset allocation.

2.3.2 Factors influencing the investor's investment decision making

2.3.2.1 Financial/accounting and Common information

Financial information conveys measurable information of financial nature about a business to the investors. They communicate the profitability and financial position of a business (Patrick I, Tavershima, & Eje, 2017). In their study on the effect of financial information on investment decision making by shareholders of banks in Nigeria (Patrick I et al., 2017) found that dividend per share was significant in the decision making process of an individual. In contrary, a study on

financial statements content and investment decisions, found that profitability, dividend and earning per share do not affect the decision of an investor(Osuala, 2012).

In a survey of factors influencing investment decision in the NSE (Mutswenje & Jagongo, 2014) found that the most important factors influencing individual investment were reputation of the firm, firms status in industry, expected profit and loss of the company, balance sheet and cash flow statements, past performance of firms stock, economic status and expected divided by investor. In their research (Kimeu et al., 2016) investigated the behavioral factors influencing investment decisions among individual investors in the NSE and found that investment decisions are positively influenced by behavioral factors including prospect herding, heuristic and rationality.

Macroeconomic uncertainties as measured by the inflation and political risk have a negative effect on investment rates (Ndiwulu & Manzongani, 2011). Element of political instability where there are no violent protest will give a positive impact to investment. Where the political instability has violet protests this has a negative impact to investments. A constitutional government policy change promotes investments whereas an unconstitutional change demotivates investment (Le, 2004). In Brazil, individuals who were in their early adulthood during the high inflation period were less willing to have saving accounts than those who experienced this inflation shock in other periods of their lives (Fajardo & Dantas, 2013).

2.3.2.2 Consultation

The investors normally depend mainly on the pieces of advice obtained from brokers to make their investment decisions. Peers and family members have a significant influence on the investment choice of an individual (Bursztyn, Ederer, Ferman, & Yuchtman, 2012; Hellström & Zetterdahl, 2013). In the Colombian market, the factors such as social status, religious beliefs, notion of get rich quickly and opinion of the family members did not affect the individual Colombian stock investor (Ponnamperuma, 2013). Similar to this in the UAE financial markets, the opinions of family members, religious beliefs and individuals intuitions had no influence in the investment decision (Aryan Hellas, 2005). In addition to these findings in the Taiwan market, (Lee, Wang, Kao, Chen, & Zhu, 2010) found that gender, age, marital status, education, career and income level had no influence in investors decision.

2.3.2.4 Personal financial needs

Personal financial needs such as risk, amount of income and ease of access of investments also influence the investment decision of an individual. In the Malaysian stock market overconfidence, conservation and availability bias had significant impacts on investor's decision while the behavior of majority of the investors had no significant impact on the individual (Bakar & Yi, 2016). In India, (Sultana, 2010) found that for the individual investor despite having high income, well education and in employment, the key contributing factor for an investment decision was the risk appetite of the individual investor. In the UAE financial markets the least influencing factors of investment behavior were expected losses in other local investments, level of risk and the expected losses in international financial markets (Aryan Hellas, 2005)

In their study (Musundi, 2014) concluded that high percentage of real estate investors considered financial concepts such returns, investment risk, investment portfolio management and trends in interest rates at a great extent. A survey conducted on financial security in retirement concluded that information on investing and savings is important in helping individuals plan for retirement and that financial institutions should create platforms and policies to sensitize individuals on this effective investing. (WallStreet, 2018)

Factors affecting individuals in efficient asset allocation to secure their life after retirement include 'current income, health, number of dependents and literacy levels' (WallStreet, 2018). While investigating the factors influencing financial behavior among accounting students in Bali (Herawati, Candiasa, Yadnyana, & Suharsono, 2018) concluded that the individual ability of financial management, knowledge on investment and their social economic status influenced their investment behavior.

2.3.2.5 Self and Firm image

The main factors influencing the individual investors in the UAE financial markets were expected corporate earnings, get rich quick notion, stock marketability, past performance of the firm's stock, government holdings and the creation of organized financial markets (Aryan Hellas, 2005). Additional factors that influence the investment decision include macroeconomic forces, market selection and investor expectations as analyzed in a study on investment behavior in the Taiwan stock market (Lee et al., 2010).

The firm or company image also plays a part in the investment decision of an individual. In the Colombo stock exchange (Ponnamperuma, 2013) found that company stability was the most influencing factor for individual investor. The other factors included past performance of the share, share price change and economic and political factors.

Demographic factors play a role in the investment decision making process of an individual. In Pakistan a study on effect of demographic factors on behavior of investors (Muhammad Nauman Sadiq, 2014) found out that education, income level, investment knowledge and investment experience majorly affected the investment decisions. Some demographic factors that had no influence included gender, marital status, occupation and family size.

2.3.3 Tailor made investment assets per the investor life cycle

Investment companies have come up with life-cycle, life-stage or target-date funds that provide a mechanism to automatically reduce the proportion of the portfolio held in equities as the investor ages (Ameriks & Zeldes, 2004). These funds are meant to simplify investment decisions through automated rebalancing of assets factoring in the risk and goals of the investor. They are based on the idea of age based investing where one allocates a larger share of their funds to stock when they are young due to the long time horizons and decrease this as they approach retirement (Viceira, 2007). For example one saving for retirement would select funds targeted for the date of their expected retirement year and those savings for their children's education would select funds targeted for the dates the children will need money for school (Brien, Cross, Dunn, Pharris, & Panis, 2010; Schooley & Worden, 1999).

Possible lifecycle products would be lifetime inflation-indexed annuity with a guaranteed floor and some participation in market appreciation; another would be an inflation indexed annuity with long term care insurance such as bundled risk annuities (Bodie, 2003; Hogan, 2007) . Examples life cycle products at the accumulation phase include occupational funds, college account and real estate account. At the retirement phase one would select funds that have a mix of stocks, bonds and money market instruments also known as bundled risk annuities. In this stage escalating annuities are also investment options as they factor in the element of inflation where the income you get from the annuity follows a gradual growth. Such products allows retires to gradually increase their consumption if the stock market performs well without changing the standard of living to which they have become accustomed (Bodie, 2003).

In lifecycle funds there is automatic rebalance of the investments underlying funds to keep the overall portfolio composition in line with the pre-specified asset target mix until the target maturity date of the fund (Viceira, 2007). Investment companies that are offering lifecycle funds include Fidelity Investment which offers mutual funds (Freedom Funds), each having a target year (e.g. 2010,2020,2030), The Vanguard Group (Target Retirement Funds) and Barclay's Global Investors (LifePath Funds) (Ameriks & Zeldes, 2004).

2.4 Research gap

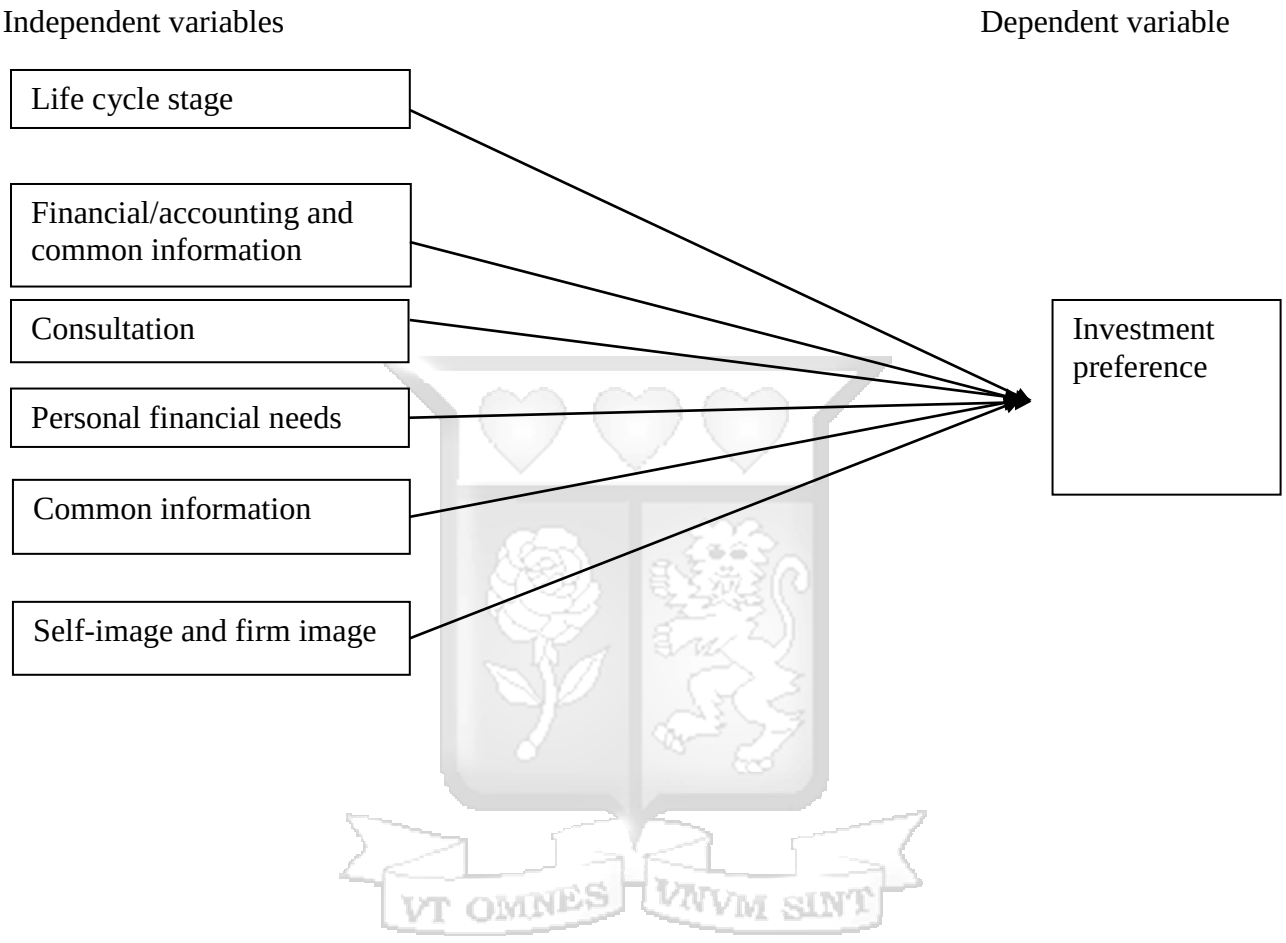
The life cycle hypothesis developed by (Ando & Modigliani, 1963) presumes that individuals plan their spending over their lifetimes taking into account their future income. This results in a hump shaped pattern where wealth accumulation is low during youth age due to low income and in old age due to retirement and high during middle age. Several studies have been consistent with this hypothesis (Cocco et al., 2005; Gomes et al., 2008; Mwiya, 2012; Schooley & Worden, 1999; Xiao, 1996) who have shown that holding of risky assets reduces as one grows older (Basten et al., 2016; Fagereng et al., 2017). Other studies have been partially consistent with the hypothesis such as (Ameriks & Zeldes, 2004; Poterba & Samwick, 1997), however there are some that show that this theory doesn't apply practically (Dow, 2009; Wang & Hanna, 1998). There are factors that influence the investor's decisions making which include the dividends and return on investment, past performance of the companies which are categorized as accounting information. Other factors include opinions of family and friends as well as the investment advisor. The others include personal financial needs, political and economic conditions, self-image and firm image (Bakar & Yi, 2016; Le, 2004; Lee et al., 2010; Patrick I et al., 2017; Ponnamperuma, 2013). There are some life cycle investment products that have been developed to ease the investment process of an individual which include occupational funds, college account, real estate account, bundled risk annuities and escalating annuities. The life cycle theory aims to help the investor to logically and rigorously transfer his resources over different times.

2.5 Conceptual framework

There are different investment preferences over the lifecycle and factors that influence the investment by an individual. The life cycle characteristics of individual include an eight stage model developed by (Duvall and Hill, 1948) however for this research the eight stages have been

compressed into beginning, expanding, contacting and retirement stage. Behavioural factors that may influence the investors behavior and decision making have also been highlighted.

Figure 2.1: Conceptual Framework



VT OMNES VNVM SINT

2.5.1 Operationalization of Variables

Factor determinant	Variable	Operational definition	Measurement
Life cycle stage	Age	The age groups considered were those as prescribed by (Ando & Modigliani, 1963; Bodie et al., 2007; Rajendran, 2015) which are: accumulation (20-40 years), consolidation (40-60 years) and gifting/spending (60 years and above)	Likert scale
	Individual goals		
Accounting/ financial information	Dividend	Dividend received from firm by stockholders. Deciding on the amount of dividends to pay is key(Sharpe et al, 2009)	Likert scale
	Earnings	Earning are the return on security that an investors anticipates to receive(Sharpe et al, 2009)	Likert scale
	Annual report-other information	These provide financial information on performance of a firm such as profit and loss, balance sheet, cash flow statements to investors(Sharpe et al, 2009)	Likert scale
Consultation	Family members	Includes advise from brokers, friends, family(Sharpe et al.,2009)	Likert scale
	Financial institution		
	Friends		
Common information	Available public information	The internet, newspapers and other available information important to an investor(Merikas et al., 2000)	Likert scale
	Economic status	Inflation rates, taxation, , currency exchange control, business cycles(Merikas et al., 2000)	Likert scale
	Political status	Political climate, stability and policies (Merikas et al., 2000)	Likert scale
Personal financial needs	Risk	This depends on the risk appetite of the investor and the income for investment. It also include the ease of access of the investment in terms of transactional costs(Markowitz, 1952)	Likert scale
	Easy access		
	Income level		
Self-image	Existing knowledge	This is the appearance of the company profile to the public through factors such as religious beliefs, social status(Merikas et al., 2000)	Likert scale
	Social status		
	Religious beliefs		
	Get rich quickly		
Firm image	Nature of business	This included the values of the firm, firm status in the industry, company stability(Merikas et al., 2000)	Likert scale
	Firm status		
	Value of firm		
	Company stability		
Dependent variable			
Individual investor investment preference		This will include real estate, stock, bonds, pension(Davidow, 2014)	Likert scale

2.6 Chapter summary

The chapter begins by highlighting and discussing the relevant theories that underpin the research. The Markowitz portfolio theory, prospect theory, heuristic theory and life cycle investing theory have been discussed to shed more light on the individual investment asset allocation behavior. The chapter has also included empirical analysis of the variables that may influence an individual's investment choice. The chapter has concluded by presenting a conceptual framework in a diagrammatic form.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter covered the following aspects; research philosophy, research design, population and sampling, data collection, data analysis, research quality and ethical consideration. A research design is a programme to guide the researcher in collecting, analyzing and interpreting observed facts.

3.2 Research philosophy

Research philosophy deals with the source, nature and development of knowledge that is ways in which data about a phenomenon should be collected, analyzed and used (Bajpai, 2011). The research philosophy reflects the author's important assumptions and these assumptions serve as base for the research strategy (Saunders et al., 2009; Yin, 2009). This research adopted a positivism research philosophy.

3.3 Research design

According to Kothari (2004) research design refers to the program of activities that guide the investigator in the process of collecting, analyzing and interpreting observations. This study adopted a descriptive research design which helped the researcher in describing the behavioral factors that influence individual investment decisions. The research design involved gathering data that described events and then organizing, tabulating, depicting and describing data. This design helped in collecting qualitative information of participants to provide a great depth of elaborate understanding of the topic under study.

3.4 Population and sampling

The population under this study was the faculty, students and administrative of private universities in Kenya and the investment and insurance companies in Kenya. The age bracket of the population was not known and thus selection of the faculty and students was to ensure all age brackets are captured. There were a total of 30 private universities in Kenya, 55 insurance and 21 investment companies (see appendix for list of private universities, insurance and investment companies). According to Saunders, et al., (2009), simple random sampling involves the

researcher randomly selecting the sample from the sampling frame using a computer or an online random number generator. The population frame in this study was 30 private universities. Mugenda and Mugenda (2003), say that a sample size between 10% and 30% is considered adequate. Therefore, a sample of 17% of the population was picked. Thus five universities out of the 30 were selected randomly. The five universities that were selected were Daystar University, United States International University, KCA University, Catholic University of Eastern Africa and Strathmore University.

Information on the number of administrative staff, faculty and students was obtained from the respective universities. The table below highlights the number of faulty, students and administrative staff of the selected universities.

Table 3.1: Study population

University	Faculty	Administration	Students	Total
Strathmore University	286	140	5300	5,726
Daystar University	150	74	5500	5,724
United States International University	350	172	7000	7,522
KCA University	300	147	15000	15,447
Catholic University of Eastern Africa	450	220	6000	6,670
				41,089

The sample size is statistically determined based on the population size at a confidence level of 95% and significance level of 5%. The model for calculating the sample size is as follows;

$$\text{`n}= \frac{0.5*N*Z^2}{(\partial^2*(N-1))+(0.5*Z^2)}$$

Where:

‘n= sample size

N= population of private universities

∂=precision level

Z= percent confidence level

‘n= $\frac{0.5*(41{,}089)*1.96^2}{0.05^2*(41{,}089-1)+(0.5*1.96^2)}$=384

Therefore the sample size was 384 staff and students in the private universities

To get the sample size for the third objective, a sample size was determined on the population of insurance and investment companies at a confidence level of 90% and significance level of 10%. The respondents to the interview questions were the sales representatives of the respective companies.

‘n= $\frac{0.1*78*1.65^2}{0.1^2*(78-1)+(0.25*1.65^2)}$= 36

Therefore the sample size was 36 investment and insurance companies

3.5 Data collection

The study used both primary and secondary data. Primary data was needed to achieve representation in the sample for categories of age, marital status, income levels and gender. Primary data was collected from the sample of 384 respondents through questionnaires. The questionnaires were administered to individual investors. Questionnaires were the best tool to collect the data because the data required was from a large number of people, they are not susceptive to bias and they have a high chance of response rate as compared to interviews which could also be a means of collecting this data. This kind of data was used because it’s authoritative and you get information from the actual individuals who are involved in the investment decision making. The researcher used data that was collected by use of structured questionnaires which were administered to the individual persons by five assistants who were identified in each university.

For the third objective on tailor made investment assets per the investor life cycle, the researcher used personnel interview. This tool was useful as for gaining insight and context on the objective. The researcher would visit or make telephone calls to the sampled companies and conduct the interview. Secondary data refers to the already written and documented information sourced from books, publications, journals and other sources. This data was used for literature review, theoretical and conceptual framework and methodology.

3.6 Data analysis

The data was analyzed using both qualitative and quantitative methods. Each answer for each question in the questionnaire was assigned a code. The coded data was the fed into the Statistical Package for Social Sciences (SPSS) for analysis. Descriptive statistics encompassing frequencies, averages, modes and cross tabulations was used for analyzing the data.

To achieve objective one, Chi-square tests and Pearson correlation analysis were used. Chi-square tests for associations were performed to check for the relationship between the dependent variable and the independent variable. To achieve objective two, the model used was logistic regression analysis after the assumptions of the model were passed. The assumptions are that the dependent variable should be dichotomous in nature. Descriptive statistics were carried out to describe the sample using mean, standard and frequencies.

Using these variables, a logistic regression model was run. The model is as shown below

$$\ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 \times Accounting\ information + \beta_2 \times Consultation + \beta_3 \times Common\ information + \beta_4 \times Personal\ financial\ needs + \beta_5 \times Self\ image + \beta_6 \times Firms\ image$$

Where p is the probability of event occurring e.g. investing in a certain investment, $\frac{p}{1-p}$ *is the odds ratio*

The key variables of interest are:

Dependent variable: Whether a respondent has a certain investment or nor (holding certain investment is indicated by investment = 1).

Independent variable: Factors influencing the investment decisions

3.7 Data validity and reliability

Validity refers to how well the data collected and analysis of the research capture the reality being studied (Yin, 1994). For this research validity refers to the possibility of generalizing the findings among the sampled individual investors to a more broadly defined population. A chi square test was used to test the goodness of fit.

In addition, pretesting of the questionnaire was carried out on a small group of respondents to get an idea of how they react to the instrument before the final version was created (Kumar, 2010). This enabled the researcher to fine tune the questionnaire for objectivity and efficiency of the process.

Reliability demonstrates that the operations of a study can be repeated with the same outcome (Yin, 1994). A reliability test was performed to check for internal consistency of the questions asked to the respondents. Cronbach alpha was used to measure reliability of measures for a construct. Reliability defines the extent to which measures for same construct or latent are related. The alpha lies between 0 & 1. The analysis of the coefficients is where; $\alpha > 0.9$, Excellent, $\alpha > 0.8$, Good, $\alpha > 0.7$, Acceptable, $\alpha > 0.6$, Questionable, $\alpha > 0.5$, Poor and $\alpha < 0.5$, Unacceptable. A higher alpha denotes a good internal consistency of the measures.

3.8 Ethical consideration

Any research done promotes knowledge and truth and therefore should stick to ethical norms (Shamoo & Resnick (2003), as a result the researcher intends to conduct this research in a candid and objective manner. Data collected was restricted for academic purposes and respondent confidentiality was enhanced by keeping their identity anonymous throughout the research. No respondent was coerced into giving feedback and anything was unclear was explained at the point of data collection.

VT OMNES VNVM SINT

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results and findings of the study on the individual investor and the investment preferences. Section 4.5 details the investor's individual goals at given age group and level of importance of that goal. Section 4.6 shows an analysis of the various factors that influence an investor's choice of investment. Section 4.7 details the various lifecycle products provided by investments and insurance firms.

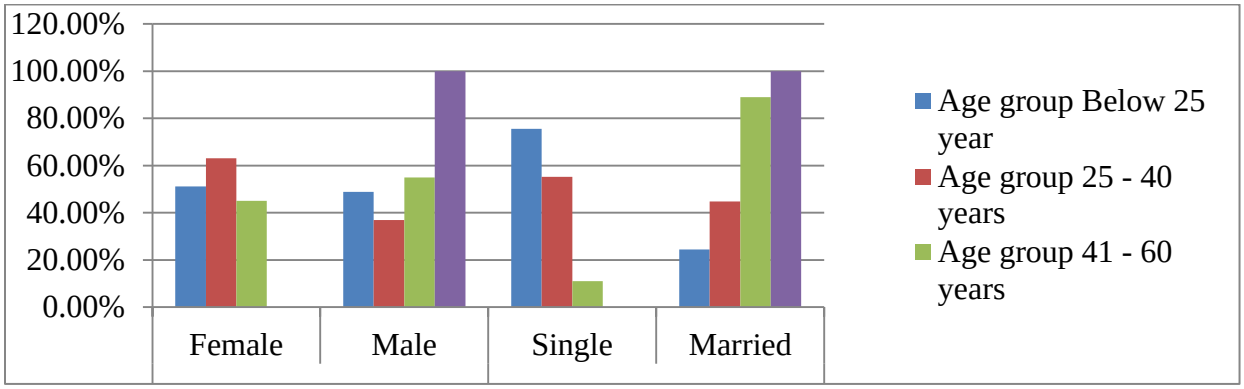
4.2 Response rate

For this study the target population was the faculty staff, administrative staff and students of private universities in Kenya. Out of the 384 questionnaires that were distributed to respondents, 383 questionnaires were successfully selected for analysis. This represented 99% of the target sample. A response rate considered for research is of 70% and above (Saunders et al.2009). The assistants used to assist with the data collection were either students or staff members of the Universities and due to familiarity with the respondents the response rate was high. The total response rate for females was 49.5% while that of male was 50.5%.

4.3 Demographic information

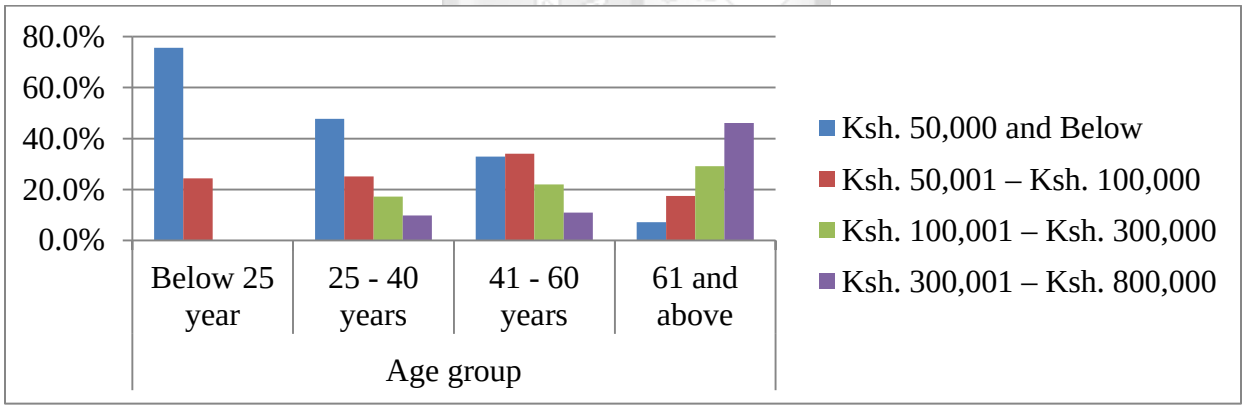
This section shows the age, gender, marital status and income level of the respondents. Majority of the respondents at 52.9 % were aged between 25-40 years. Respondents below 25 years were 10.7%, those at 41-60 years were 23.7% and those above 61 years were 12.8%. The female respondents were 49.5% while the male respondents were 50.5%. Majority of the respondents were married at 60.2% while the main source of income was employment income. Respondents that did not have children or no child over 18 years at home represented 41.7%. It was important to show the demographic per the age in order to understand the various age characteristics.

Figure 4. 1 Gender and marital status



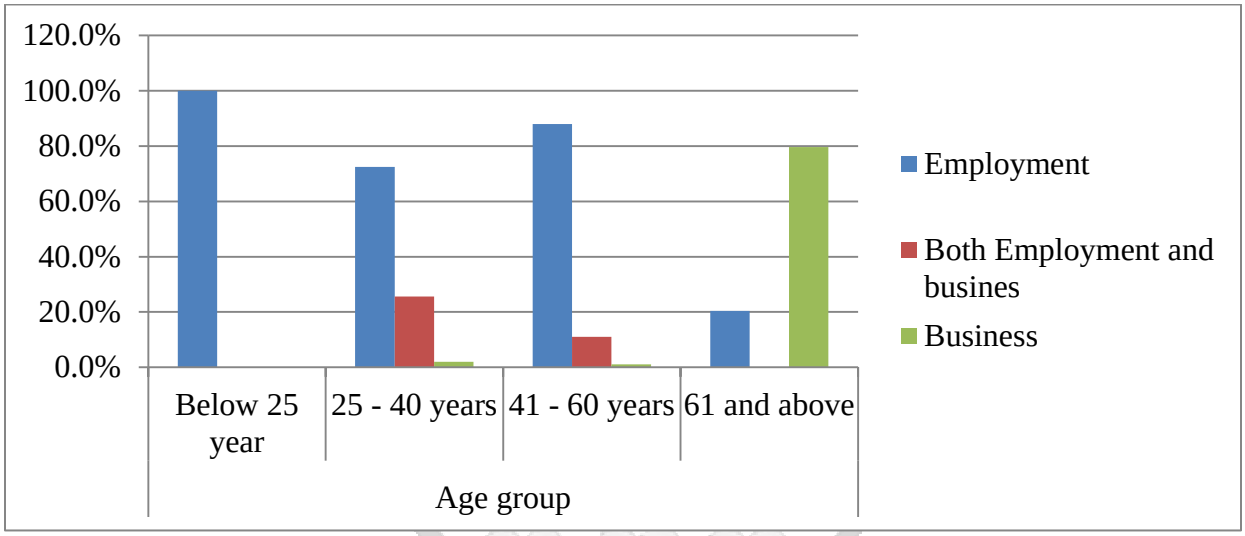
In the age group of below 25, there was an equal distribution of respondents between female and male. Majority of the respondents in this group were single. In the next age group between 25-40 years majority of the respondents were female and there was a close balance between the single and the married. In the age group between 41-60 years, majority of the respondents were male and majority were married. For the group of 61 years and above, all were male and were married.

Figure 4. 2 Respondents net income level



From the table above, ages below 25 years were in the lower income brackets. In the next age group of 25-40 years there was a distribution across the various levels of income. Majority of which were at KES 100,000 and below. In the age group of 41-60 years the levels of income had a near equal distribution across the various income levels. Ages 61 and above had their income levels at the higher bracket levels.

Figure 4. 3 Respondent's sources of income



In the ages below 25 their main source of income was employment income, in the next age of 25-40 years the sources of income are both employment and business. For ages 41-60 the sources of income are both employment and business with employment being high. In the ages between 61 and above the sources of income are also employment and business with business been the highest.

4.4 Factors influencing investors decision making data reliability

The objective aimed at investigating the factors that influence an investor's decision making. It was important given that the respondents were presented with questionnaires. Test of reliability was conducted to check how consistent the data was and whether it was valid in terms of constructs validity, convergent and divergent. This was necessary in order to prevent possibility of asking leading questions to the respondents.

4.4.1 Reliability tests

A set of questions were asked to the respondents relating to which factors influenced them to make a certain investment decisions. In this work, Cronbach's Alpha coefficient was used to measure internal consistency because the tool had multiple Likert Scale questions and this formulation would determine if these scales are reliable.

Cronbach alpha was used to measure reliability of measures for a construct. Reliability defines the extent to which measures for same construct or latent are related. The alpha lies between 0 &

1. The rule of thumb for the coefficients; $\alpha > 0.9$, Excellent, $\alpha > 0.8$, Good, $\alpha > 0.7$, Acceptable, $\alpha > 0.6$, Questionable, $\alpha > 0.5$, Poor and $\alpha < 0.5$, Unacceptable. A higher alpha denotes a good internal consistency of the measures. From the table below all the variables were acceptable as reliable except self-image. Although this variable was not reliable, it was significant in the model and assisted in achieving the objective.

Table 4. 1: Tests on reliability

Reliability Statistics			
Variable	Cronbach's Alpha	N of Items	Reliable
Accounting information	0.667	4	Yes
Consultation	0.630	2	Yes
Common Information	0.643	2	Yes
Personal financial needs	0.703	3	Yes
Self-Image	0.511	2	Yes
Firm image	0.653	2	Yes

4.5 Investment preferences along the lifecycle

The first objective was to examine the investment preferences along the lifecycle. The individual investor lifecycle shows the individuals investment behavior over the different ages of their life. It shows that the individual will have specific goals in each age and will then align their investments to these goals, for example if someone's goal is to plan for retirement then they would invest in pension funds. It also shows that older people will be more conservative with risk than younger people and will hold less risky assets.

The objective aimed to determine whether there was a consistent investment preference as per the guidelines of the individual investor lifecycle hypothesis. The guiding variables in the lifecycle that were used were the individuals goals and investments currently held per age. Firstly descriptive tests were done through mean, median and standard deviation. Tests of skewness and kurtosis were done to determine whether the data modeled a normal distribution. A set of questions representing different goals of an individual were presented to the respondents and they were in turn requested to express their degree of agreement on a Likert scale where 1

was very important, 2 was important, 3 was moderate important, 4 was slightly important and 5 was not important. The table below summarizes descriptive statics.

Table 4.2: Descriptive statistics

	Mean	Std. Deviation	Skewness	Kurtosis
	Statistic	Statistic	Statistic	Statistic
Planning for retirement	1.53	1.101	2.261	4.043
Current income generation	1.96	1.142	1.333	1.069
Education of self	2.97	1.890	0.052	-1.910
Education of family	2.48	1.659	0.671	-1.278
Meet basic needs	1.69	0.970	1.717	2.911
Take vacation	3.90	1.293	-0.615	-1.314
Help out my family members	2.90	1.225	0.160	-0.843
Buy/build a home	2.61	1.536	0.394	-1.359
Pay off student loans	3.75	1.673	-0.742	-1.267
Build my savings	1.54	1.068	2.384	4.945
Leave some money/property to family members	3.27	1.327	-0.009	-1.257
Start my own business	2.55	1.398	0.392	-1.120
Start a family	3.21	1.713	-0.213	-1.714
Put some money for emergencies	2.21	1.216	0.981	0.202
Enjoy a hobby	3.78	1.426	-0.621	-1.257

From the table goals for planning for retirement, current income generation, meet basic needs, build up savings had means of (1.53, 1.96, 1.69, 1.54) respectively. This means that these goals were considered to be very important. The goals for education of self, education of family, help out family members, start business, put money for emergencies had means of (2.97, 2.48, 2.90, 2.61, 2.55, 2.21) respectively. This means that the goals were considered to be important. The goals for take vacation, pay off student loans, leave money for family members, start a family and enjoy a hobby had means of (3.90, 3.75, 3.27, 3.21, 3.78) respectively. This means that these goals were moderately important to the respondents. Skewness and kurtosis are used to give insights into the shape of the distribution. A perfectly symmetrical dataset will have a skewness of 0 thus a normal distribution. The value for kurtosis for normal distribution is equal to 3. From the table above the goals to educate self, to help out family members, to build/buy a home, to leave some property to family members, to start a business and to start families were fairly symmetrical. The goals moderately skewed were current income generation, education of family,

meet basic needs, take vacation, pay off student's loans, put some money for emergencies and enjoy a hobby. Planning for retirement and build up savings were highly skewed. The data set in general does not give a normal distribution pattern.

Inferential statistics were carried out using non parametric tests that is the chi-square and Pearson's correlation to determine the correlational effect of the different investor's behavior and age bracket. Since both independent and dependent variables are categorical variables, a cross tabulation, Chi-square tests for associations were performed to check for the relationship between the various investment goals and the age brackets. The table above gives a summary of the chi square tests.

Table 4. 3: Chi square tests summary

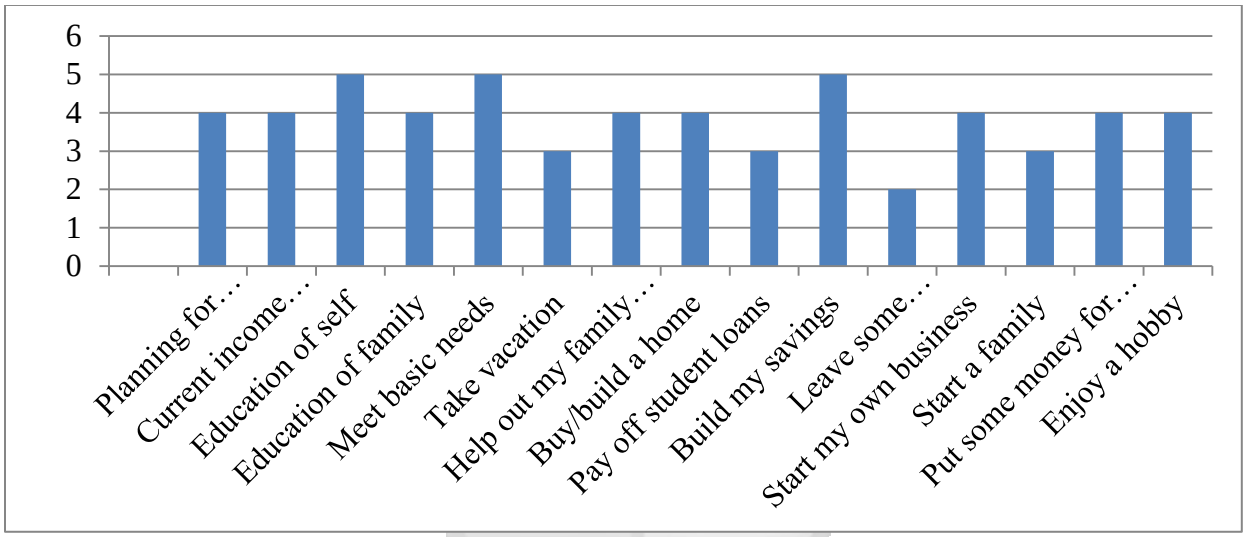
Individual Goals	Value	df	Asymptotic Significance (2-sided)	Pearson's R	Approximate Significance
Planning for retirement	150.097[a]	12	0.000	0.101	.051[c]
Current income generation	114.644[a]	12	0.000	0.143	.006[c]
Education of self	162.306[a]	12	0.000	0.403	0.000
Education of family	224.550[a]	12	0.000	0.189	0.000
Meet basic needs	198.384[a]	12	0.000	0.341	0.000
Take vacation	113.534[a]	12	0.000	0.433	0.000
Help out my family members	240.075[a]	12	0.000	0.427	0.000
Buy/build a home	280.324[a]	12	0.000	0.387	0.000
Pay off student loans	73.202[a]	12	0.000	0.291	0.000
Build my savings	283.476[a]	9	0.000	0.623	0.000
Leave some money/property to family members	68.838[a]	12	0.000	-0.014	.791[c]
Start my own business	463.850[a]	12	0.000	0.468	0.000
Start a family	171.204[a]	12	0.000	0.409	0.000
Put some money for emergencies	283.806[a]	12	0.000	0.377	0.000
Enjoy a hobby	173.802[a]	12	0.000	0.345	0.000

From the table, it's evident that there is dependence for all investment goals and the age bracket. This dependence is statistically significant at 5% level of significant. Further testing for the correlation between the independent variables and the dependent variable (age bracket) was undertaken to determine the relationship between them and the extent of the correlation. Since the p value for each was < 0.05 except leave some money/property to family members, all the independent variables had a statistically significant relationship with the dependent variable.

Build my savings had a highly positive correlation with the age bracket. All the other independent variables had a moderately positive correlation with dependent variable.

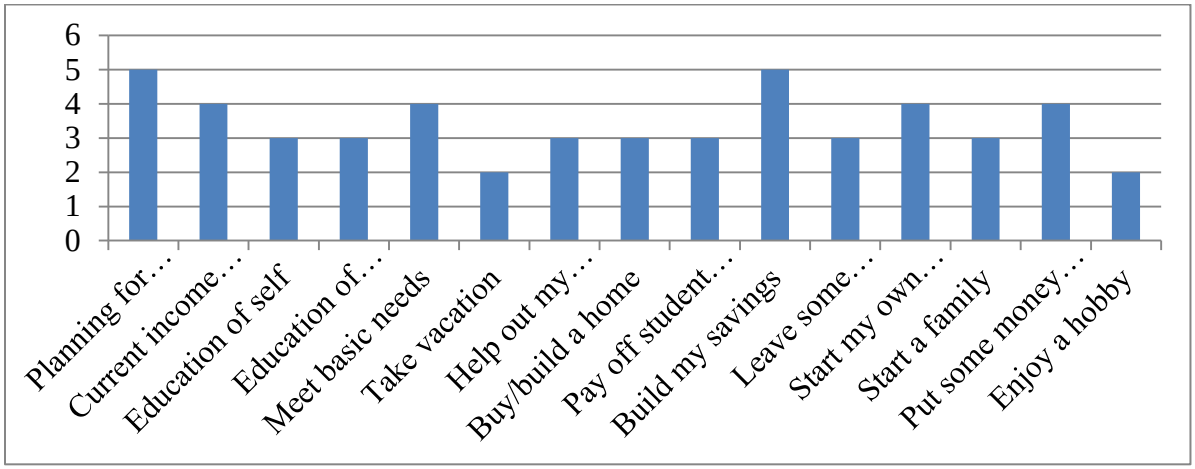
A cross tabulation was carried out to provide more insights about the relationship between the independent variables and age groups. The analysis represents the ranking of several goals i.e. as 5 being very important, 4 being important, 3 being moderate, 2 being slightly important and 1 being not important.

Table 4. 4: Investment goal importance at below 25 years



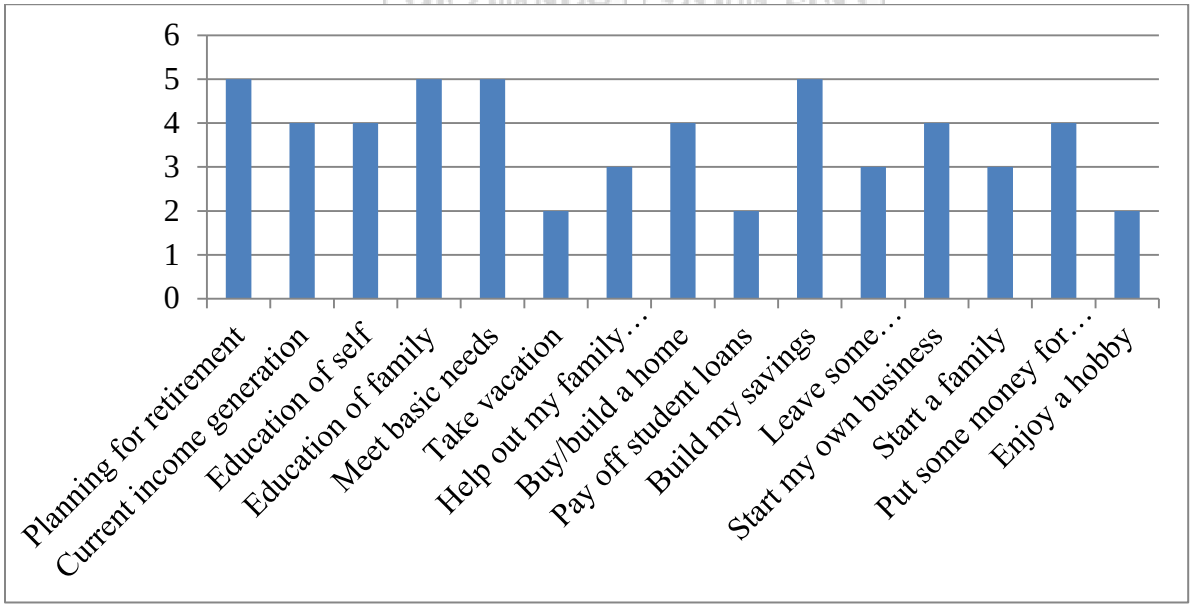
This group rated retirement as important, current income generation was important, education of self was very important with the majority respondents. Education of family and meeting basic needs was considered very important. Taking a vacation was important while helping out family members was moderately important. Building a home or buying a home was very important while paying off students loans had an equal balance in important and not important. At this age starting a family was slightly important and putting some money for emergencies. Leaving money/ property to family members was ranked as not important. This shows that the key goals that individual at this age are concerned about are education of self, building up savings and meeting basic needs.

Table 4. 5: Investment goal importance at 25-40 years



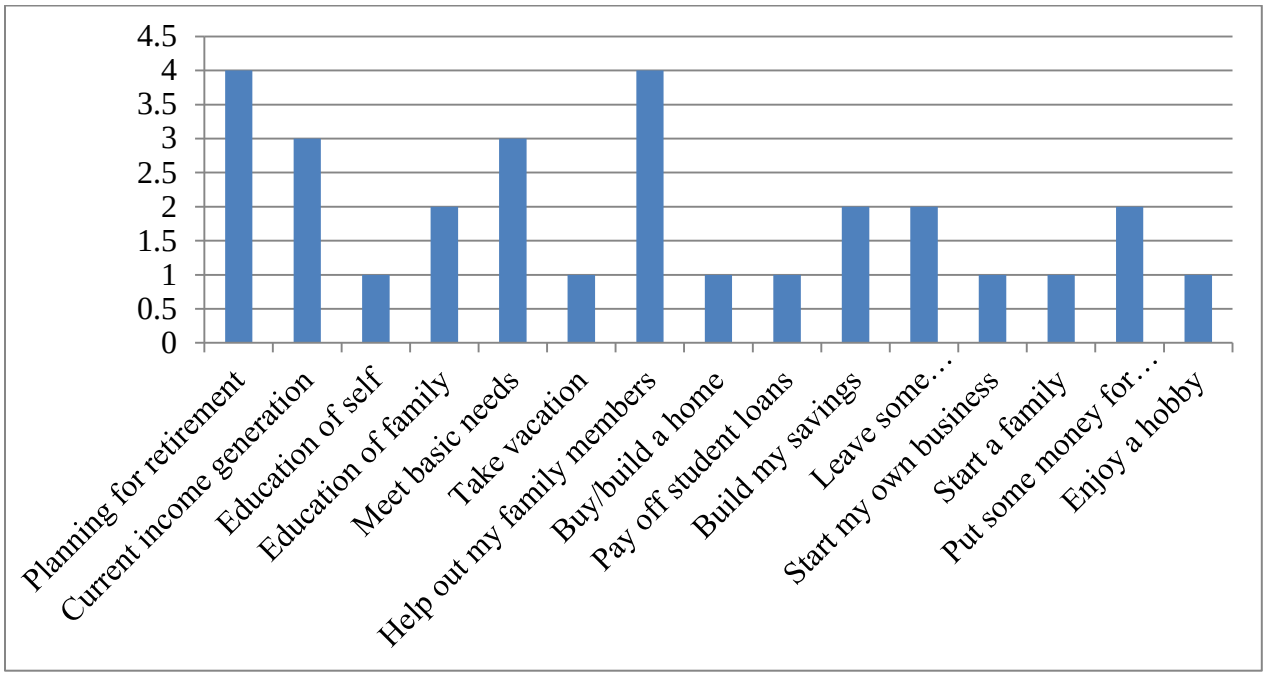
In this group planning for retirement, current income generation, education of self, education of family and meet basic needs were considered to be very important. Helping out family members and leave money/ property to family members was moderately important. The goals to put some money for emergencies, build/buy a home, build up savings, start a business and start family were rated as very important. Goals that were not important were enjoy a hobby, pay off student loans, take vacation and education of self. The key goals of an individual at this age are planning for retirement, meet basic needs, build up savings, education of family and current income generation.

Table 4. 6: Investment goal importance at 41-60 years



In this age group planning for retirement, education of family, education of self, meet basic needs, buy/build a home is considered to be very important. Putting some money for emergencies, helping out family members and leaving money/property to family members is considered as important but not very important. Taking a vacation, paying off students debts and starting a family are considered to be not important. Enjoying a hobby shows an equal ranking distribution as important, slightly important and not important. The key goals in this age are planning for retirement, building up savings, meet basic needs and education of family.

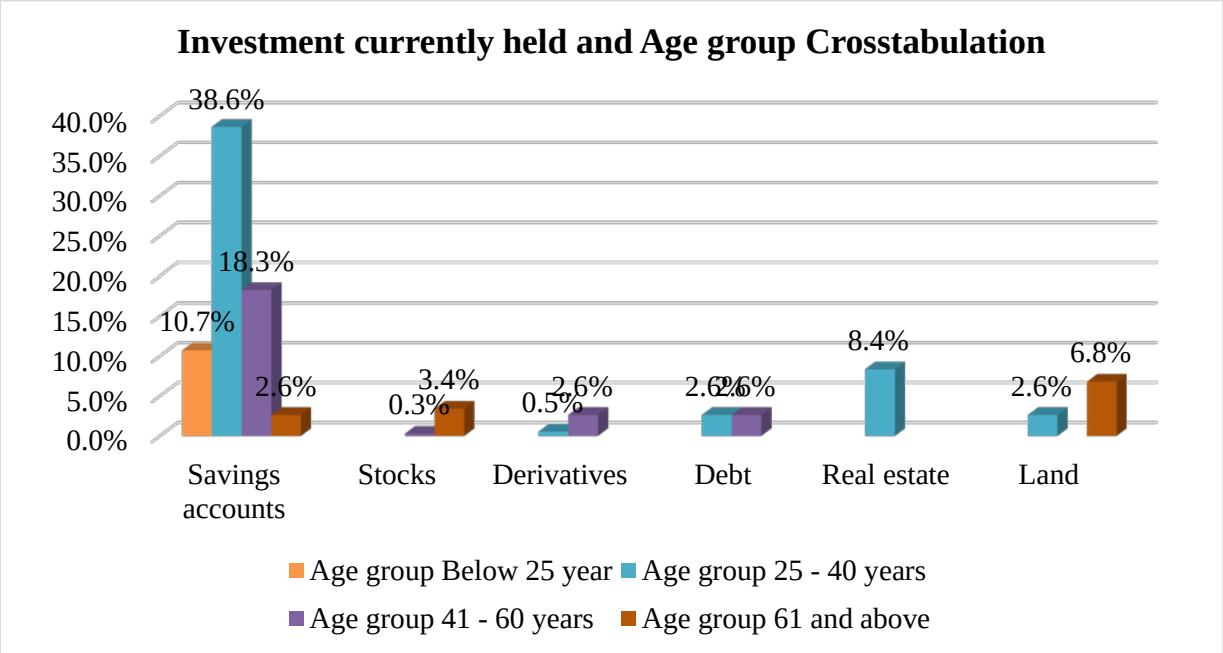
Table 4. 7: Investment goal importance at years 61 and above



At this age group, planning for retirement and current income generation are considered to be important. Meeting basic needs cut across the different ranks as very important, important and not important. Education of self, family, take vacation, help out family members, build/buy a home, pay off student loans, start a business, start a family and enjoy a hobby were ranked as not important.

The lifecycle theory suggests certain assets holding in each age category. That is in younger years one should hold riskier assets and as one grows older the holding shifts to less risky assets. An analysis was further done to establish the assets held by individuals at the various ages.

Figure 4.4: Investment currently held and Age group Cross tabulation



From the chart above majority of the respondents were between 25- 40 years. The majority of people who held savings accounts were between 25-40 years. For stocks majority were ages 61 and above and for real estate were ages between 25-40 years. Debt had equal holding by age groups between 25-40 years and between 41-60 years.

4.6 Factors influencing the investor's investment decision making

The second objective was to investigate the factors that influence the individual's investment decision making. The respondents were asked several questions under each of the following factors that influence their behavior; accounting and common information, consolation, personal financial needs, firm and self-image. First descriptive tests were done through mean, median and standard deviation to give an adequate description of the factors with relation to making investment decisions. Tests of skewness and kurtosis were done to determine whether the data modeled a normal distribution.

A set of questions representing different aspects of accounting information, consultation, common information, personal financial needs, self-image and firm image were presented to the respondents and they were in turn requested to express their degree of agreement on a Likert scale where 1 was never, 2 was sometimes, 3 was neutral, 4 was often and 5 was always.

Table 4.8: Descriptive statistics

	N	Mean	Median	Std. Deviation	Skewness	Kurtosis
	Valid					
Accounting information	383	3.30	3.00	0.960	-0.180	-0.495
Consultation	383	2.58	2.00	0.839	0.371	-0.750
Common Information	383	3.10	3.00	0.987	0.644	-0.561
Personal financial needs	383	3.76	4.00	1.094	-0.518	-0.587
Self-Image	383	1.98	2.00	0.922	0.439	-0.914
Firm image	383	3.44	4.00	1.034	-0.313	-0.672

As shown in table above, the overall mean for accounting information was 3.3 while the standard deviation was 0.96 and is fairly symmetrical with skewness of -0.18. This implied that the respondents were neutral on whether they used accounting information when making investment decisions. From the table above, the overall mean for consultation was 2.58 while the standard deviation was 0.839 and is fairly symmetrical with a skewness of 0.371. This implied that the respondents sometimes used consultation when making investment decisions. The average response for common information was 3.10 with a standard deviation of 0.987 and is moderately symmetrical with a skewness of 0.644. This implies that the respondents were neutral on whether they used common information when making investment decisions. The average response for personal financial needs was 3.76 with a standard deviation of 1.094 and is fairly symmetrical with a skewness of -0.518. This implies that the respondents often used personal financial needs when making investment decisions. The average response for self-image was 1.98 with a standard deviation of 0.922 and is fairly symmetrical with a skewness of 0.439. This implies that the respondents never used self-image when making investment decisions and lastly the average response for firm image was 3.44 with a standard deviation of 1.034 and moderately symmetrical with a skewness of 1.034. This implies that the respondents were neutral on whether they used firms' image when making investment decisions.

Secondly, a logistic regression was performed for each investment held and an omnibus test of the model was also performed to confirm that the model was statistically significant. A logistic regression method was used because the dependent variable was a binary variable. The dependent variable was extracted from investments currently held. A categorical variable was generated for each investment held and the model was used to determine which factors influenced the investor to invest in that investment. Only saving accounts, stocks, debt, real

estate and land were significant in the logistic models hence the following models provides the effects of the independent variables on these investment decisions. These factors were analyzed as below;

Table 4. 9: Model summary

Omnibus Tests of Model Coefficients-Savings accounts

		Chi-square	df	Sig.	Nagelkerke R Square
Step 1	Step	75.778	6	0.000	0.314
	Block	75.778	6	0.000	
	Model	75.778	6	0.000	

Omnibus Tests of Model Coefficients-Land

		Chi-square	df	Sig.
Step 1	Step	30.556	6	0.000
	Block	30.556	6	0.000
	Model	30.556	6	0.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	189.599[a]	0.097	0.186

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

Omnibus Tests of Model Coefficients-real estate

		Chi-square	df	Sig.
Step 1	Step	21.583	6	0.001
	Block	21.583	6	0.001
	Model	21.583	6	0.001

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	135.723[a]	0.069	0.170

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Omnibus Tests of Model Coefficients-Stocks

		Chi-square	df	Sig.
Step 1	Step	80.238	6	0.000
	Block	80.238	6	0.000
	Model	80.238	6	0.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	66.720[a]	0.235	0.606

a. Estimation terminated at iteration number 12 because parameter estimates changed by less than .001.

The Nagelkerke's R^2 suggested that the model for saving accounts explains roughly 31.4% of the variation in the outcome. The chi-square was highly significant (*chi-square=75.778, df =6, p<.05*) so the model was significant to explain the how the factors influence the investment in saving accounts. The Nagelkerke's R^2 for land suggested that the model explains roughly 18.6% of the variation in the outcome. The chi-square was highly significant (*chi-square=30.556, df =6, p<.05*) so the model was significant to explain the how the factors influence the investment in land. The Nagelkerke's R^2 for real estate suggested that the model explains roughly 17% of the variation in the outcome. The chi-square was highly significant (*chi-square=21.583, df =6, p<.05*) so the model was significant to explain the how the factors influence the investment in real estate.

The Nagelkerke's R^2 for debt suggested that the model explains roughly 60.6% of the variation in the outcome. Here the chi-square was highly significant (*chi-square=80.238, df =6, p<.05*) so the model was significant to explain the how the factors influence the investment in debt. The Nagelkerke's R^2 for stocks suggested that the model explains roughly 31.4% of the variation in the outcome. Here the chi-square was highly significant (*chi-square=75.778, df =6, p<.05*) so model is significant to explain the how the factors influence the investment in stocks.

Table 4. 10: Factors influencing investment decision in saving accounts

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Accounting information	-0.932	0.335	7.759	1	0.005	0.394
	Consultation	-1.226	0.229	28.613	1	0.000	0.293
	Common Information	0.280	0.199	1.979	1	0.160	1.323
	Personal financial needs	-0.096	0.245	0.155	1	0.694	0.908
	Self-Image	-0.877	0.166	27.954	1	0.000	0.416
	Firm image	1.589	0.336	22.314	1	0.000	4.897
	Constant	1.299	0.173	56.312	1	0.000	3.666
a. Variable(s) entered on step 1: Accounting information, Consultation, Common Information, Personal financial needs, Self-Image, Firm image.							

From the table above, the results for accounting information, consultation, self and firm image are statistically significant. Accounting information is negative and significant (*Wald=7.759, df*

=1, p<.05) indicating that increasing accounting information is associated with decreased odds of investing in saving accounts. This means that for the likelihood of investing in savings decreases by 0.394 times. Consultation and self- image are negative and significant (*Wald=28.613, df =1, p<.05*) (*Wald=27.954, df =1, p<.05*) indicating that increasing consultation and self-image leads to the decreased odds of investing in savings by 0.293 and 0.416 times respectively. Firm image is positive and significant (*Wald=22.314, df =1, p<.05*) indicating that increase in firm image increases the odds of investing in savings by 4.897 times after controlling for the other factors in the model. From the table factors that were not significant in investing in saving accounts were common information and personal financial needs.

Table 4. 11: **Factors influencing investment decision on investment in land**

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Accounting information	-0.010	0.426	0.001	1	0.980	0.990
	Consultation	1.714	0.414	17.156	1	0.000	5.553
	Common Information	0.537	0.323	2.769	1	0.096	1.711
	Personal financial needs	-0.831	0.398	4.352	1	0.037	0.436
	Self-Image	-0.348	0.216	2.593	1	0.107	0.706
	Firm image	-1.400	0.434	10.397	1	0.001	0.247
	Constant	-2.969	0.371	63.886	1	0.000	0.051
a. Variable(s) entered on step 1: Accounting information, Consultation, Common Information, Personal financial needs, Self-Image, Firm image.							

From the table above, the results for consultation, personal financial needs and firm image are statistically significant. Consultation is positive and significant (*Wald=17.156, df =1, p<.05*) indicating that increasing consultation is associated with increased odds of investing in land. The Exp(B) column (the Odds Ratio) showed that those who consult are five (5.553) times more likely than those who don't consult to invest in land. Personal financial needs was negative and significant (Wald = 4.352, df = 1, p< 0.05). This means that for every one unit increase in a personal financial needs, the likelihood of investing in land decreases (by .436 times), after controlling for the other factors in the model. Firm image was negative and significant (Wald =

10.397, df = 1, p< 0.05). This means that for every one unit increase in a firms image, the likelihood of investing in land decreases (by .247 times), after controlling for the other factors in the model. From the table factors that were not significant in investing in land were accounting information, common information and self-image.

Table 4. 12: Factors influencing investment decision on investment in real estate

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Accounting information	-0.427	0.496	0.742	1	0.389	0.653
	Consultation	0.205	0.347	0.348	1	0.555	1.227
	Common Information	0.335	0.270	1.541	1	0.215	1.398
	Personal financial needs	-0.296	0.418	0.503	1	0.478	0.744
	Self-Image	0.561	0.267	4.420	1	0.036	1.752
	Firm image	1.196	0.695	2.961	1	0.085	3.305
	Constant	-2.981	0.327	83.241	1	0.000	0.051
a. Variable(s) entered on step 1: Accounting information, Consultation, Common Information, Personal financial needs, Self-Image, Firm image.							

From the table above, the results for only self-image are statistically significant. Self-image is positive and significant (*Wald=4.420, df =1, p<.05*) indicating that increasing self-image is associated with increased odds of investing in real estate. The Exp(B) column (the Odds Ratio) show that those who use self-image are slightly 2 (1.752) times more likely than those who don't use self-image to invest in real estate. We find that accounting information, consultation, common information, personal financial needs, firm imagine were not significant in choosing real estate. This means that there could be other factors that influence one to invest in real estate other than the ones listed above.

Table 4. 13 Factors influencing investment decision on investment in debt

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Accounting information	1.672	1.387	1.452	1	0.228	5.323
	Consultation	0.315	1.875	0.028	1	0.866	1.370
	Common Information	-11.595	5.628	4.245	1	0.039	0.000
	Personal financial needs	11.629	5.016	5.375	1	0.020	112350.856
	Self-Image	3.687	1.304	7.991	1	0.005	39.907
	Firm image	-10.029	4.673	4.605	1	0.032	0.000
	Constant	-13.423	5.512	5.930	1	0.015	0.000
a. Variable(s) entered on step 1: Accounting information, Consultation, Common Information, Personal financial needs, Self-Image, Firm image.							

From the table above, the results for common information, personal financial needs, self-image and firm image are statistically significant. Common information is negative and significant (Wald = 4.245, df = 1, $p < 0.05$). This means that for every one unit increase in a common information, the likelihood of investing in debts decreases (by .0.00 times), after controlling for the other factors in the model. Personal financial needs is positive and significant (Wald = 5.375, df = 1, $p < 0.05$). This means that for every one unit increase in personal financial needs, the likelihood of investing in debts increases (by 112350.586 times), after controlling for the other factors in the model. Self-image is positive and significant (Wald = 7.991, df = 1, $p < 0.05$). This means that for every one unit increase in self-image, the likelihood of investing in debts increases (by 39.9 times), after controlling for the other factors in the model. Firm image is negative and significant (Wald = 4.605, df = 1, $p < 0.05$). This means that for every one unit increase in a firms image, the likelihood of investing in debt decreases (by .000 times), after controlling for the other factors in the model. Factors that were not significant were accounting information and consultation.

Table 4.14: Factors influencing investment decision on investment in stocks

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Accounting information	-0.932	0.335	7.759	1	0.005	0.394
	Consultation	-1.226	0.229	28.613	1	0.000	0.293
	Common Information	0.280	0.199	1.979	1	0.160	1.323
	Personal financial needs	-0.096	0.245	0.155	1	0.694	0.908
	Self-Image	-0.877	0.166	27.954	1	0.000	0.416
	Firm image	1.589	0.336	22.314	1	0.000	4.897
	Constant	1.299	0.173	56.312	1	0.000	3.666
a. Variable(s) entered on step 1: Accounting information, Consultation, Common Information, Personal financial needs, Self-Image, Firm image.							

From the table above, the results for accounting information, consultation, self-image and firm image are statistically significant. Accounting information is negative and significant (Wald = 7.759, df = 1, $p < 0.05$). This means that for every one unit increase in accounting information, the likelihood of investing in stocks decreases (by .394 times), after controlling for the other factors in the model. Consultation is negative and significant (Wald = 28.613, df = 1, $p < 0.05$). This means that for every one unit increase in consultation, the likelihood of investing in stocks decreases (by 0.293 times), after controlling for the other factors in the model. Self-image is negative and significant (Wald = 27.954, df = 1, $p < 0.05$). This means that for every one unit increase in self-image, the likelihood of investing in stocks decreases (by 0.416 times), after controlling for the other factors in the model. Firm image is positive and significant (Wald = 22.314, df = 1, $p < 0.05$). This means that for every one unit increase in a firms image, the likelihood of investing in stock increases (by 4.897 times), after controlling for the other factors in the model. We find that common information and personal financial needs were not significant. A summary of all the significant factors are as below:

Table 4. 15: Summary of significant factors influencing investment preference

	INVESTMENT ASSET(Y)				
FACTORS (X)	Saving accounts	Land	Real estate	Debt	Stocks
Accounting information	✓				✓
Consultation	✓	✓☑			✓
Common Information				✓	
Personal financial needs		✓		✓☑	
Self-Image	✓		✓☑	✓☑	✓
Firm image	✓☑	✓		✓	✓☑
KEY					
✓☑	Significant and positive(meaning a unit increase in X caused an increase in Y)				
✓	Significant and negative(meaning a unit increase in X caused a decrease in Y)				

The significant factors that influenced the likelihood of investment in saving accounts were accounting information that is the annual financial reports, dividends received by investors and past performance of company's stock. Consultation, self and firm image that is family and friends influence, firm status and company stability influenced investment in saving accounts. The political and economic status did not influence the choice of investment in saving accounts.

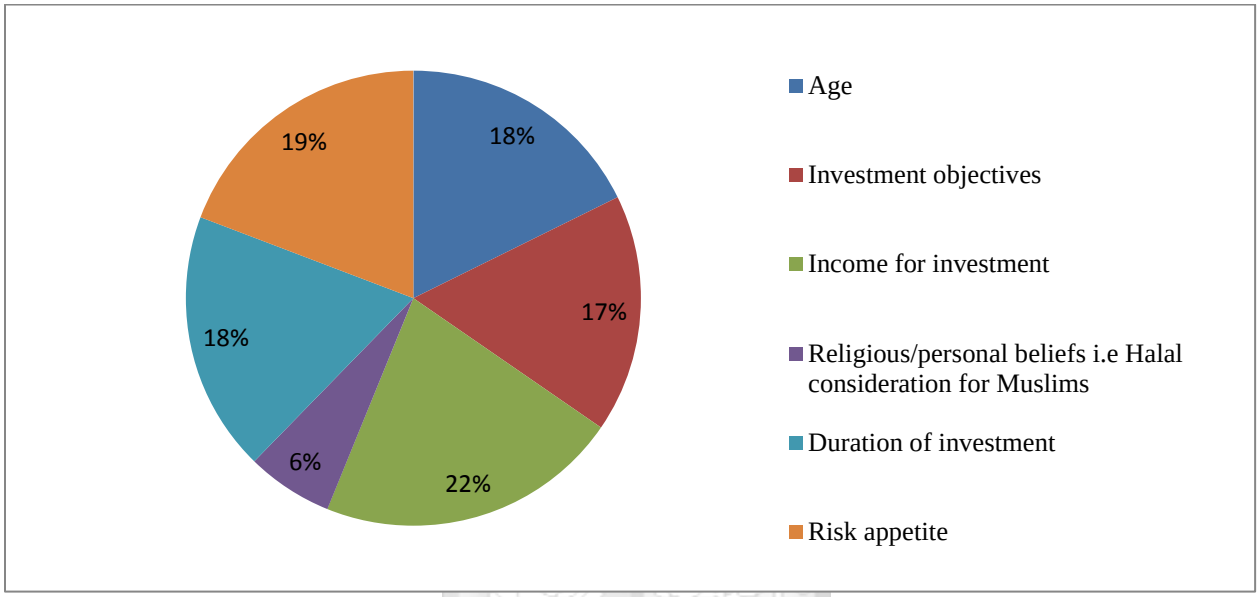
The likelihood to invest in land was influenced by consultation and personal financial needs that is the amount of income available for investment. Investment in debt was influenced by personal financial needs and self-image while investment in stocks was influenced by accounting information, consultation, firm and self-image image. It was evident that investment preferences were being influenced by different factors. Some factors were not significant to influence the investment preference in some assets which meant that there would be other factors that influence the investment choice of an individual.

4.7 Investment assets per the investor life cycle offered by financial institutions

This objective aimed at looking at the supply side of the investment assets. It aimed at investigating whether financial institutions offer investments as per the stage in the lifecycle and which are the assets offered. To achieve these objective interviews were conducted targeting the sales representatives of the various investment and insurance companies. Several questions were

asked to the respondents to assist in achieving the objective. The first question was the factors considered before advising a client on an investment asset.

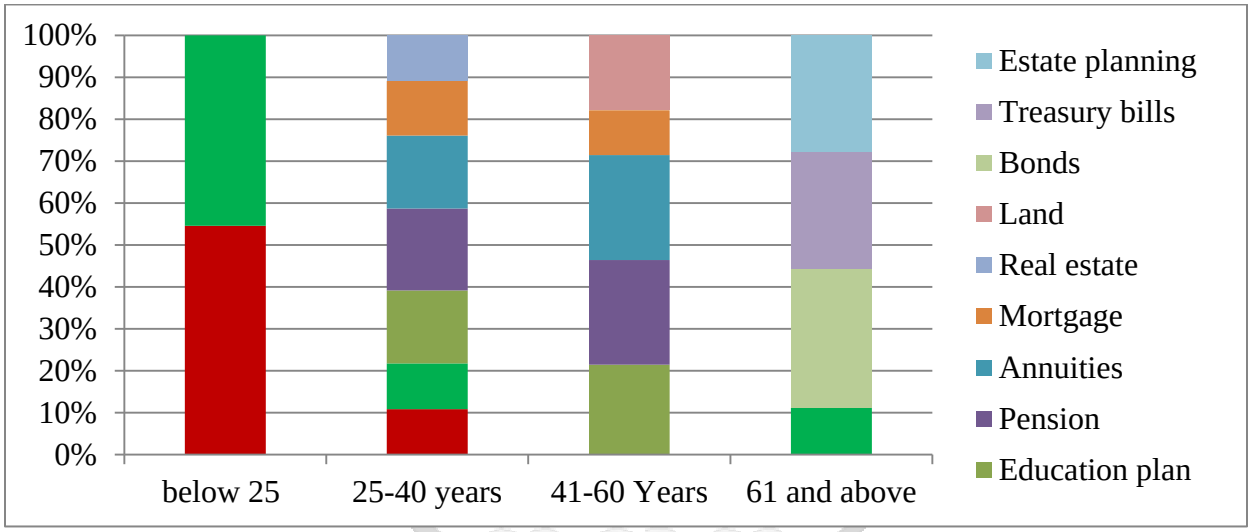
Figure 4. 5: Factors considered while advising an investor



The factors that the investment and insurance companies consider before advising a client on an investment portfolio are age, risk appetite, disposal income, duration of investment and objective of the investor. While advising the investor it was assumed that the individual is already aware of his short term and long term goals. The factor that had the highest response was income available for investment. The most common question asked by the companies to the investors is how much are they willing to invest?

Further the respondents were asked to mention the investments assets that they recommend for each age. The key guiding principle was not necessary the age but the main characteristics of the individual at a particular age. For example someone who fit an education plan was one who had young children and concerned about their education and one who has a long term horizon. A person who fit a retirement plan was one who is 35-55 years, is concerned about retirement and has a long term horizon.

Table 4.16: Recommended Investment assets per age bracket



In the early years of below 25 years, this individual is expected to have minimal funds for investment. Therefore at this stage the recommended allocation is in saving accounts and stocks. The minimum shares one can buy are 100 shares and therefore an individual with limited funds of investment can easily purchase these. At the age between 25-40 years, this is considered as the accumulation phase. This represents the early working years of the individual and also where financial and life goals begin to be formulated. This is the stage where people start having families and think about buying a house. At this age the financial institutions advised the holding of saving accounts, annuities, real estate, mortgage, pension and educational plans.

The age between 41-60 years also known as the consolidation phase represents the later working years. This is a crucial stage because the individual needs to know how much money they need to make it comfortably through retirement. Here the individual also begins to think of other sources of income. Financial institutions advised the holding of the following assets, pension, land, real estate, and education policy. The last age group is years 61 and above also known as spending phase. At this stage individuals think of distribution of wealth. In the spending phase the available products include estate planning and bonds. There are assets that cut across two phases such as education plan, pension, annuities and mortgage. Educational plans and pensions are offered more to the younger people.

4.8 Conclusion

This chapter shows data analysis to meet the research objective which was to investigate the investment preferences of individuals over the lifecycle. The objective was achieved first through descriptive analysis and secondly through correlation and regression analysis. Through descriptive analysis the study examined mean and standard deviation. Through correlation and regression the study analyzed the relationships that exist between the independent and dependent variables. The findings showed that there was a positive correlation between the independent variables being the individual investor goals and the dependent variable (the age brackets).

Logistic regression was done to analyze the factors that influenced the investment decisions of an individual. The results showed that consultation, personal financial needs, firm image were significant investment in land while self-image was significant to investment in real estate. Common information, personal financial needs, self and firm image were significant in investment debt holding. In investing in stocks, accounting information, consultation, self and image were significant.

The results from the interviews showed that there were different products offered by the insurance and investment companies per the specific age. Recommendation of the majority is investment in more risky assets such as stocks and investment in education plans due to the need of provision of education. In old age recommended assets are bonds which have low risk and estate planning for wealth transfer needs.

VT OMNES VNVM SINT

CHAPTER 5

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

This chapter presents a summary of discussions and conclusions of research findings, recommendations and suggestions for future research. It also highlights the major limitations of the study and proposes areas of further research. The overall objective of the research was to investigate the asset allocation of individuals over the life cycle. This was broken down to three objectives which were to investigate the investment preferences over the lifecycle. The second was to investigate factors influencing the investor's investment decision making. The third was to investigate the investment assets per the investor lifecycle.

The background provided a detailed analysis of the investment preferences of individuals highlighting the inconsistencies in each life cycle. It was clear that elements of the lifecycle have no influence on the investment preferences of university staff and students. The study uses positivism approach and descriptive research design. The targeted population was the staff and students of private universities. Data was collected using questionnaires and interviews and analyzed through correlational analysis and logistic regression.

5.2. Discussion of the findings

This section discusses the findings of the study under each study objective.

5.2.1 Investment preferences over the individual lifecycle

This objective aimed to investigate the investment preferences of individuals over the lifecycle. To achieve this objective it was important to understand the characters and various goals in different age groups. The first age set was individuals below the age of 25 years. It is expected that at this age individuals are in the early stages of the lifecycle and thus have little income. Majority of the respondents were single and had an equal distribution in gender. In the income scale they ranked as the lowest earners with their major source of income being employment. The key goals under this group were education of self, building up savings and meeting basic needs. The key asset holding was saving accounts.

The next age was between 25-40 years, which is also known as the accumulation phase. This group had majority of the respondents as females and there was an equal distribution between those who were married and the single. Their income level was distributed across the various levels and their source of income was both business and employment income. The goals highlighted as very important in this group were planning for retirement, meet basic needs build up savings, education of family, current income generation and build a home. The not important goals were education of self, take vacation, pay of student loans, and enjoy a hobby. The assets that were being held by this group were saving accounts, real estate and debt instruments. This was consistent with the findings by (Xiao, 1996) in his study on effects of family income and lifecycle stages on financial asset where he concluded that younger people had a substantially high chance of owning saving plans. Higher investment in savings accounts at the accumulation phase was similar to the findings by (Basten et al., 2016) while studying the saving and portfolio allocation before and after job loss in Norway.

The age between 41-60 years representing the consolidation phase had majority of respondents as married and male. The income cut across all the income levels and the source of income being both employment and business with majority from employment income. The key goals in this age were planning for retirement, build up savings, meet basic needs and education of family which was similar to research by (Shah, Zanwar, & Deshmukh, 2011). The objectives that were not important were; take vacation, pay off student loans, start a family and enjoy a hobby. This shows that at this stage the individual's behavior conforms to the investor lifecycle theory to a great extent as seen in (Rajendran, 2015).The key assets held were saving accounts and debt.

The last age was 61 years and above, also known as the spending phase. In this age the majority of respondents were married and male. The income was distributed across all the income levels with majority falling on the higher bracket. The sources of income were both employment and business. The main goals under this age were planning for retirement and current income generation. The not important objectives were to start a family, enjoy a hobby, building a home, education of self and family. This concludes that this stage conforms to the investor lifecycle theory. Under this stage the result of the research showed that the assets held were stocks and land. A study by (Ameriks & Zeldes, 2004) on how household portfolio shares vary with age concluded that stock holding was present in all ages. Similar findings on stock holding by older

people were found by (Poterba & Samwick, 1997) while studying the portfolio allocation over the lifecycle by households in the United Sates. The findings on stock was consistent to the findings by (Ameriks & Zeldes, 2004) while studying how household portfolio vary with age whose conclusions were that older people held less stocks.

In conclusion, the goals of the individuals were consistent with the lifecycle hypothesis. Planning for retirement cut across all the different age categories. Asset allocation on the other hand was not consistent with lifecycle theory for all the assets where we find that stock holding was held mainly by individuals in the spending phase.

5.2.2 Factors influencing the investor's investment decision making

The research also sought to investigate factors that influenced the invest choice of an investor. The research showed that investors were neutral to the annual reports of companies, dividends received and the return on investment when making an investment decision. The investors will sometimes consider friends and family member's opinion while making an investment decision and will also sometimes consult an investment advisor. The investors were neutral to the influence of public available information such as internet and newspapers, economic and political stability of the country while making their investment decision.

The ease of access of the investment, risk factors and amount of income available of investment often influenced the decision of the investor. This was similar to the findings by (Musundi, 2014) whose research focused on effects of financial literacy on personal investment decisions in real estate in Nairobi. The factors that never influence the investors decision were the religious beliefs, social status, get rich quickly and existing knowledge of the investment. This was similar to findings by (Ponnamperuma, 2013) on the factors influencing investor behavior in the Colombo stock exchange. This was also the case in the study by (Aryan Hellas, 2005) on factors influencing individual investor behavior in the UAE financial markets. The investors were neutral to the firm status in the industry and company stability while making the investment decision.

The research further showed that for the assets currently held by the individual such land; friends and family member's opinion and investment advisor was positive and significant to the selection of land. Public available information, economic and political stability was positive and

significant when it came to taking debt. Firms status and company stability also influence the debt uptake by an investor. Investors who had stocks considered the firms status and company stability as significant while making the investment decision which was similar to the finding by (Mutswenje & Jagongo, 2014) on the factors influencing investment decisions for investors at the Nairobi Securities Exchange (NSE).

5.2.3 Tailor made investment assets per the investor lifecycle

The objective aimed to find out whether there are tailor made investment assets per the investor lifecycle. The research showed that the main factor considered by an investment advisor while advising an investor was the amount of funds available for investment. The second factor was the objective or the investment needs of the investor. The assets at 61 years and above include bonds, treasury bills and estate planning, at age 41-60 years the recommended assets were education plans, annuities and land. At age 25-40 years the recommended assets were saving accounts, education plans, annuities and mortgage.

The investment institutions consider that the needs of the investor will be in line with the stage in which the individual is in the individual investor life cycle. Therefore, if one wants to secure their children's education they will be advised to take up an education plan, if they want to buy a house they will be advised to invest in mortgage and if they want to secure their retirement they will be advised on a pension plan. Planning for retirement and educational plans are examples of target date funds as seen by (Brien et al., 2010) while studying target date funds and retirement savings.

5.3 Recommendations

The recommendations from the study are that individuals should consciously plan their investments over their life in line with their goals that is both financially and psychologically. This implies saving and investing more during their most productive stages of work so that they have enough money in their later years when human capital is diminished. It is also important to take note of the investment asset held such that it meets the specific goals in each age category.

In the study financial institutions have highlighted the key investment assets per age group however the users of these assets show some contradictory behavior. For example stocks are recommend for younger people but the majority holders are the older people. Therefore financial

institutions should spend more time in marketing efforts to increase the level of understanding in the market about the products they offer for each stage in the lifecycle. Institutions should be aware that the individuals do know their short term and long term goals however there are other factors that may influence their decision making such as religious beliefs and opinions of friends and family. Since they are better placed to give sound advice on investment they should assist the individual to make a rational and informed decision.

It is important for the providers of financial assets to consider the factors that influence the investor. They then need to change the policies that communicate the value of these assets. For example for someone who wants to invest in land, they would consider their friends and family's opinions than they would the political or economic conditions. If the investment company wants the investor to invest in stocks they will have documents that communicate about the firm image that is the firm status, stability and nature of business.

Areas for further research would be doing a longitudinal study using panel data where a specific group of individuals is selected and studied over the various stages of the life cycle. It would also be important to find out the investors preferences along the lifecycle with unlimited labor supply.

5.4 Limitations of the study

One of the drawbacks of the research was the speed of data collection because of the pressure of financial resources and time. It was impossible to conduct personal interviews by the researcher of all the respondents thus questionnaires were used. The weakness of this approach was that there might have been some respondents who might want more clarification of the questions and thus the answers given were not comprehensive.

There are other factors that affect the investor decision making other than the elements of the individual life cycle which might have not been captured such as the level of income and the education level of the investor. Another limitation is that the asset allocation process is assumed as an independent process while in reality this decision may occur simultaneously with the decision of holding another asset. For example an investor may put money to bonds and stocks at the same time.

5.5 Conclusion

The study aimed at investigating whether individuals follow the guidelines of lifecycle investing. It achieved this by evaluating the investment goals of individuals and their investment preferences. Each age cohort had different goals depending on the age however the consistent goal across all ages was retirement. This means that financial and insurance companies should pay more attention to products for retirement in all ages. In the investment preference it is not a guarantee that an individual will invest be recommended principles due to various factors.

In investigating the factors that influence the investment decision of an individual, the ease of access of investment asset, risk factors associated with the asset and the amount of income available for investment are key influencers on the decision of the investor. The least influencers are religious beliefs, social status, get rich quickly concept and existing knowledge of the investment. The financial institutions will mostly consider the amount of income available for investment and the goal of the investor. There are some assets designed for various stages in the lifecycle according to the goals of the individual such as educational policies and pension funds.

VT OMNES VNVM SINT

References

Ameriks, J., & Zeldes, S. (2004). *How do household portfolio shares vary with age?*

Ando, A., & Modigliani, F. (1963). The" life cycle" hypothesis of saving: Aggregate implications and tests. *The American Economic Review*, *53*(1), 55–84.

Aryan Hellas. (2005). *Factors Influencing Individual Investor Behavior:An Empirirical study of the UAE Financial Markets*.

Bajpai, N. (2011). *Business Research Methods*. Pearson Education India.

Bakar, S., & Yi, A. N. C. (2016). The Impact of Psychological Factors on Investors' Decision Making in Malaysian Stock Market: A Case of Klang Valley and Pahang. *Procedia Economics and Finance*, *35*, 319–328. https://doi.org/10.1016/S2212-5671(16)00040-X

Basten, C., Fagereng, A., & Telle, K. (2016). Saving and Portfolio Allocation Before and After Job Loss. *Journal of Money, Credit and Banking*, *48*(2–3), 293–324. https://doi.org/10.1111/jmcb.12301

Bayar, M. Y., Sezgin, H. F., Öztürk, Ö. F., & Şaşmaz, M. Ü. (2017). *Impact of Financial Literacy on Personal Savings: A Research on Usak University Staff*. (6), 19.

Bodie, Z. (2003a). Thoughts on the future: Life-cycle investing in theory and practice. *Financial Analysts Journal*, *59*(1), 24–29.

Bodie, Z. (2003b). Thoughts on the future: Life-cycle investing in theory and practice. *Financial Analysts Journal*, *59*(1), 24–29.

Bodie, Z., Treussard, J., & Willen, P. (2007). *The theory of life-cycle saving and investing*.

Bovenberg, L., Koijen, R., Nijman, T., & Teulings, C. (2007). Saving and Investing Over the Life Cycle and the Role of Collective Pension Funds. *De Economist*, *155*(4), 347–415. https://doi.org/10.1007/s10645-007-9070-1

Brien, M. J., Cross, P. J., Dunn, T. A., Pharris, J. A., & Panis, C. W. A. (2010). *A study by Deloitte Financial Advisory Services LLP in conjunction with Advanced Analytical Consulting Group Inc. for the U.S. Department of Labor, Employee Benefits Security Administration.* 20.

Brooks, C., Sangiorgi, I., Hillenbrand, C., & Money, K. (2018). Why are older investors less willing to take financial risks? *International Review of Financial Analysis, 56*, 52–72. https://doi.org/10.1016/j.irfa.2017.12.008

Bursztyn, L., Ederer, F., Ferman, B., & Yuchtman, N. (2012). *Understanding Peer Effects in Financial Decisions: Evidence from a Field Experiment*. 65.

Campbell, J. Y., & Feldstein, M. (2001). *Risk Aspects of Investment-Based Social Security Reform*. https://doi.org/10.7208/chicago/9780226092560.001.0001

Chandra, A., & Kumar, R. (2011). *Determinants of individual investor behaviour: An orthogonal linear transformation approach*. Retrieved from https://mpra.ub.uni-muenchen.de/29722

Cocco, J. F., Gomes, F. J., & Maenhout, P. J. (2005). Consumption and Portfolio Choice over the Life Cycle. *Review of Financial Studies*, *18*(2), 491–533. https://doi.org/10.1093/rfs/hhi017

Copur, Z. (Ed.). (2015). *Handbook of Research on Behavioral Finance and Investment Strategies: Decision Making in the Financial Industry*. https://doi.org/10.4018/978-1-4666-7484-4

Davidow, A. B. (2014). *A Modern Approach to Asset Allocation and Portfolio Construction*. 40.

Dow, J. P. (2009). Age, investing horizon and asset allocation. *Journal of Economics and Finance*, *33*(4), 422.

Fagereng, A., Gottlieb, C., & Guiso, L. (2017). Asset Market Participation and Portfolio Choice over the Life-Cycle: Asset Market Participation and Portfolio Choice over the Life-Cycle. *The Journal of Finance*, *72*(2), 705–750. https://doi.org/10.1111/jofi.12484

Fajardo, J., & Dantas, M. (2013). The Impact of Past Hyperinflation on Current Investment Behavior. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2281441

Gomes, F. J., Kotlikoff, L. J., & Viceira, L. M. (2008). *Optimal life-cycle investing with flexible labor supply: A welfare analysis of life-cycle funds*. National Bureau of Economic Research.

Hellström, J., & Zetterdahl, E. (2013). *Loved Ones Matter: Family Effects and Stock Market Participation*. 39.

Herawati, N. T., Candiasa, I. M., Yadnyana, I. K., & Suharsono, N. (2018). Factors That Influence Financial Behavior Among Accounting Students in Bali. *International Journal of Business Administration*, *9*(3), 30–38. https://doi.org/10.5430/ijba.v9n3p30

Hogan, P. H. (2007). Life-Cycle Investing Is Rolling Our Way. *Journal of Financial Planning*, *20*(5). Retrieved from http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=10403981&AN=24957346&h=gkDPmbLbEFc9u73%2FOKDoJPLNvsvgA39BBvEJetht9h%2FwUb2Q2zT6ANJFodMYPp5bFQ%2FUTe2mYktnJGy%2F7r9Nnw%3D%3D&crl=c

Huzdik, K., Béres, D., & Németh, E. (2014). *An Empirical Study of Financial Literacy versus Risk Tolerance Among Higher Education Students*. 444–456.

Kimeu, C., Anyango, W., & Rotich, G. (2016). Behavioural Factors influencing Investment Decisions among individual investors in Nairobi Securities Exchange. *Strategic Journal of Business & Change Management*, *3*(4), 1244–1258.

Kraft, H. (2011). *Optimal Housing, Consumption, and Investment Decisions over the Life Cycle*. 18.

Le, Q. V. (2004). Political and economic determinants of private investment. *Journal of International Development*, *16*(4), 589–604. https://doi.org/10.1002/jid.1109

Lee, Y.-J., Wang, G.-L., Kao, K.-S., Chen, C.-Y., & Zhu, F.-P. (2010). The investment behavior, decision factors and their effects toward investment performance in the Taiwan stock market. *Journal of Global Business Management*, *6*(2), 1–12.

Levišauskait, K. (2010). Investment Analysis and Portfolio Management. *Leonardo Da Vinci Programme Project*.

Malkiel, B. G. (1999). *A random walk down Wall Street: including a life-cycle guide to personal investing*. New York: Norton.

Mangram, M. E. (2013). *A simplified perspective of the Markowitz portfolio theory*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2147880

Markowitz, H. (1952). Portfolio selection. *The Journal of Finance*, *7*(1), 77–91.

Muhammad Nauman Sadiq, H. M. I. (2014). The Effect of Demographic Factors on the Behaviour of Investors during the Choice of Investments: Evidence from Twin Cities of Pakistan. Retrieved November 17, 2017, from https://journalofbusiness.org/index.php/GJMBR/article/view/1405/1312

Musundi, K. (2014). *The Effects of Financial Literacy on Personal Investment Decisions in Real Estate in Nairobi County*.

Mutswenje, V. S., & Jagongo, A. (2014). *A Survey of the Factors Influencing Investment Decisions: The Case of Individual Investors at the NSE*. *4*. Retrieved from http://www.ku.ac.ke/schools/business/images/stories/research/survey_of_factors_nsc.pdf

Mwiya, B. (2008). *The Individual Life Cycle and Investment preferences:A case study of Lusaka*.

Mwiya, B. K. (2012). *The individual life cycle and investment preferences: a case study of Lusaka* (PhD Thesis). Master of Business Administration (MBA); 2008.

Ndiwulu, X. B., & Manzongani, J.-P. M. (2011). *Uncertainty and Investment Behaviour in the Democratic Republic of Congo*. 30.

Osuala, A. E. (2012). Financial statement content and investment decisions –A study of selected firms. . . *ISSN*, 6.

Patrick I, Dr. Z., Tavershima, A., & Eje, E. B. (2017). Effect of Financial Information on Investment Decision Making By Shareholders of Banks in Nigeria. *IOSR Journal of Economics and Finance*, *08*(03), 20–31. https://doi.org/10.9790/5933-0803032031

Ponnamperuma, C. (2013). *Factors Influencing Investor Behaviour:The Case of Colombo Stock Exchange*. University of Sri Jayewardenepura.

Poterba, J. M., & Samwick, A. A. (1997). *Household portfolio allocation over the life cycle*. Retrieved from National Bureau of economic research website: http://www.nber.org/papers/w6185

Rajendran, M. M. A. (2015). Asset Allocation of Portfolio Management. *Journal of Research in Business, Economics and Management*, *2*(1), 40–45.

Reichenstein, W., & Jennings, W. (2007, January). AAII: The American Association of Individual Investors. Retrieved from http://www.aaii.com/financial-planning/article/human-capital-and-the-theory-of-life-cycle-investing

Reilly, F. K., & Brown, K. C. (2011). *Investment analysis and portfolio management*. Retrieved from http://books.google.com/books?hl=en&lr=&id=CfB-qTXqRWEC&oi=fnd&pg=PR4&dq=%22mattress+or+bury+it+in+the+backyard+until+some+future+time+when+consumption+desires%22+%22who+give+up+immediate+possession+of+savings+(that+is,+defer+consumption)+expect%22+&ots=UHcyhlj79O&sig=o6CpIwQihmx-GkOtbQM4-PmwLAw

Santacruz, L. (2014). Asset Allocation: Analysis of Theory and Practice in the Australian Investment Management Industry. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2482173

Schooley, D. K., & Worden, D. D. (1999). Investors' asset allocations versus life-cycle funds. *Financial Analysts Journal*, *55*(5), 37–43.

Shah, V., Zanwar, P., & Deshmukh, P. (2011). Stages in Life Cycle and Investment Pattern of Rural Investors–A Case Study. *BVIMR Management Edge*, *4*(2), 48–59.

Sharpe, W. F. (2007). Expected utility asset allocation. *Financial Analysts Journal*, *63*(5), 18–30.

Shiller, R. J. (2000). *Irrational exuberance*. Princeton, NJ: Princeton University Press.

Statman, M., Fisher, K., & Anginer, D. (2008). Affect in a behavioral asset pricing model. *Financial Analysts Journal*, *64*(2), 1–96.

Stewart, G. L., Shefrin, H., & Shefrin, M. L. B. C. in F. H. (2000). *Beyond Greed and Fear: Understanding Behavioral Finance and the Psychology of Investing*. Oxford University Press, USA.

Sultana, S. T. (2010). An empirical study of Indian individual investors' behavior. *Global Journal of Finance and Management*, *2*(1), 19–33.

Viceira, L. M. (2007). *Life-cycle funds*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=988362

Wallengren, E., & Sigurdson, R. S. (2017a). *Markowitz portfolio theory*. Retrieved from http://www.math.chalmers.se/Stat/Grundutb/CTH/mve220/1617/redingprojects16-17/Markowitz_portfolio_theory.pdf

Wallengren, E., & Sigurdson, R. S. (2017b). *Markowitz portfolio theory*. Retrieved from http://www.math.chalmers.se/Stat/Grundutb/CTH/mve220/1617/redingprojects16-17/Markowitz_portfolio_theory.pdf

WallStreet, K. (2018a, January 26). 86% of Kenya's working population uncertain of financial security in retirement – Report. Retrieved February 7, 2018, from Kenyan Wallstreet website: http://kenyanwallstreet.com/86-kenyas-working-population-uncertain-financial-security-retirement-report

WallStreet, K. (2018b, January 29). 62.8% of Kenyans prefer investment in land & real estate – Survey. Retrieved February 7, 2018, from Kenyan Wallstreet website: http://kenyanwallstreet.com/62-8-kenyans-prefer-investment-land-real-estate-survey

Wan, W. (2018). *Prospect theory and investment decision behavior: A review*. https://doi.org/10.25236/etsocs.2018.24

Wang, H., & Hanna, S. D. (1998). *Does Risk Tolerance Decrease with Age?* (SSRN Scholarly Paper No. ID 95489). Retrieved from Social Science Research Network website: https://papers.ssrn.com/abstract=95489

Wangeci Mwathi, A. (2017). Effects of Financial Literacy on Personal Financial Decisions among Egerton University Employees, Nakuru County, Kenya. *International Journal of*

Economics, Finance and Management Sciences, *5*(3), 173. https://doi.org/10.11648/j.ijefm.20170503.16

Wendo, C. (2015). *Factors Influrncing Individual Investors' participation in The Nairobi Securities Market.* United States International University.

Xiao, J. J. (1996). Effects of family income and life cycle stages on financial asset ownership. *Journal of Financial Counseling and Planning*, *7*, 21–30.

Appendix 1: Introductory Letter

Title of Research: The Individual Life Cycle and Investment Preferences

Dear Participant,

I invite you to participate in the above titled research. I am currently enrolled in the Masters of Commerce Program at Strathmore University School of Management and Commerce and I am in the process of writing my Master's Thesis, in partial fulfillment of the requirement of MCOM degree.

Your participation in this research project is completely voluntary. There are no known risks to participation beyond those encountered in everyday life. Your responses will remain confidential and anonymous. Data from this research will be kept under lock and key and reported only as a collective combined total. No one other than the researcher will know your individual answers to this questionnaire.

Thank you for your assistance in this important endeavor.

Sincerely yours,

Joyce Karanja

Student researcher

Appendix II: Questionnaire

Instructions: Kindly take a few minutes to respond to this questionnaire

Information supplied is purely for academic research purposes and will be treated with utmost confidentiality

PART 1: Background information

1. What is your gender

☐ Female ☐ Male

2. Please indicate your age range

☐ Below 25 Years ☐ 41- 60 Years
☐ 25-40 Years ☐ 61 and above

3. Marital status

☐ Single ☐ Divorced
☐ Married ☐ Widowed

4. Which of the following best describes the level of your education

☐ Below diploma ☐ Master's degree
☐ Diploma ☐ Doctorate degree
☐ Bachelor's degree

5. Child presence

☐ No child or no child over 18 at home

With child aged:

☐ 0-2 ☐ 3-5
☐ 6-11 ☐ 12-17
☐ 18 and above

6. Sources of income

☐ Employment ☐ Both employment and business ☐ Business
☐ Other_____

7. Which of the following best describes the level of your monthly net income?

☐ Ksh. 50,000 and Below
☐ Ksh. 50,001 – Ksh. 100,000
☐ Ksh. 100,001 – Ksh. 300,000
☐ Ksh. 300,001 – Ksh. 800,000
☐ Above Ksh. 800,000

PART 2: Individual investment

1. Investments currently held

☐ Savings accounts ☐ Bonds/treasury bills

☐ Stocks ☐ Debt

☐ Derivatives ☐ Real estate

☐ Pension funds ☐ Land

☐ Other_____

2. Reason for investing in the above

☐ Low risk ☐ Predictable income

☐ High profitability ☐ can easily sell to get cash

☐ Other _____

3. Please rank each investment goal to its importance to you

	Investment goal	Very important	Important	Moderate important	Slightly important	Not important
1	Planning for retirement					
2	Current income generation					
3	Education of self					
4	Education of family					
5	Meet basic needs					
6	Take vacation					
7	Help out my family members					
8	Buy/build a home					
9	Pay off student loans					
10	Build my savings					
11	Leave some money/property to family members					
12	Start my own business					
13	Start a family					
14	Put some money for emergencies					
15	Enjoy a hobby					
16	Other:					

4. Please mark as the appropriate response to indicate your views about the statements given below;

	Statement	Never	Sometimes	Neutral	Often	Always
	Accounting information					
1	My investment decisions are influenced by annual reports of companies					
2	Dividends received from the company influence my investment decision					
3	The return on investment influence my investment decision					
4	Past performance of the company influence my investment decision					
	Consultation					
5	I consider friends opinions before taking an investment					
6	My investment decisions are influenced by the opinions of my family members					
7	My investment decisions are influenced by my investment advisor					
	Common information					
8	My investment decisions are influenced by public available information e.g internet, newspapers					
9	Economic condition of the country influence my investment decision					
10	Political stability influence my investment decision					
	Personal financial needs					
11	Easy access of the investment influence my decision					
12	Risk factors involved influence my investment decision					
13	The amount of income I have influence my investment decision					
	Self-image					
14	My investment decisions are influenced by my religious beliefs					
15	I choose an investment to get social status					
16	I invest to get rich quickly					

17	My existing knowledge of the investment affect my decision					
	Firm image					
18	A firms status in the industry influence my investment					
19	Company stability influence my investment decision					
20	The nature of business activities carried out by the company influence my investment decision					

Thank you for your time and participation

Appendix III: Interview questions

1) What factors do you consider before advising a client on an investment portfolio
2) If age is part of the answer above;
   What products/investment portfolio do you recommend for each age?
3) Do you have tailor made life cycle products?
4) If yes, kindly list them

Appendix IV: List of private universities in Kenya

1	Adventist University of Africa
2	Africa International University
3	Africa Nazarene University
4	Aga Khan University
5	Catholic University Of Eastern Africa
6	Daystar University
7	East African University
8	GENCO University
9	Great Lakes University
10	GRETSA University
11	International Leadership University
12	Kabarak University
13	KCA University
14	Kiriri Women's University of Science and Technology
15	Kenya Methodist University
16	Lukenya University
17	Mount Kenya University
18	Pan Africa Christian University
19	Pioneer International University
20	RAF International University
21	Riara University
22	Scott Christian University
23	St Paul's University College
24	Strathmore University
25	The Management University of Africa
26	The Presbyterian University of EA
27	Umma University
28	United States International University – Africa
29	University of Eastern Africa – Baraton
30	Zetech University

Source (Kenya Education Network, 2018)

Appendix V: List of authorized investment companies

	Name
1	Dyer & Blair Investment Bank Ltd
2	Francis Drummond & Company Ltd
3	Ngenye Kariuki & Co. Ltd
4	Suntra Investment Bank Ltd
5	Old Mutual Securities Ltd
6	SBG Securities Ltd
7	Kingdom Securities Ltd
8	AIB Capital Ltd
9	ABC Capital Ltd
10	Sterling Capital Ltd
11	ApexAfrica Capital Ltd
12	Faida Investment Bank Ltd
13	NIC Securities Ltd
14	Standard Investment Bank Ltd
15	Kestrel Capital (EA) Ltd
16	African Alliance Securities
17	Renaissance Capital (Kenya) Ltd
18	Genghis Capital
19	CCBA Capital Limited
20	Equity Investment Bank Limited
21	KCB Capital
22	Barclays Financial Services Limited
23	Securities Africa Kenya Limited

Source (NSE database, 2017)

VT OMNES VNVM SINT

Appendix VI: List of authorized insurance companies

	Name
1	AAR Insurance Company Limited
2	Africa Merchant Assurance Company Limited
3	AIG Kenya Insurance Company Limited
4	Allianz Insurance Company of Kenya Limited
5	APA Insurance Limited
6	APA Life Assurance Company Limited
7	Barclays Life Assurance Kenya Limited
8	Britam General Insurance Company (K) Limited
9	Britam Life Assurance Company (K) Limited
10	Cannon Assurance Company Limited
11	Capex Life Asssurance Company Limited
12	CIC General Insurance Company Limited
13	CIC Life Assurance Company Limited
14	Continental Reinsurance Limited (Kenya)
15	Corporate Insurance Company Limited
16	Directline Assurance Company Limited
17	East Africa Reinsurance Company Limited
18	Fidelity Shield Insurance Company Limited
19	First Assurance Company Limited
20	GA Insurance Limited
21	GA Life Assurance Limited
22	Geminia Insurance Co. Limited
23	ICEA Lion General Insurance Company Limited
24	ICEA LION Life Assurance Company Limited
25	Intra Africa Assurance Company Limited
26	Invesco Assurance Company Limited
27	Kenindia Assurance Company Limited
28	Kenya Orient Insurance Limited
29	Kenya Orient Life Assurance Limited
30	Kenya Reinsurance Corporation Limited
31	Liberty Life Assurance Kenya Limited
32	Madison Insurance Company Kenya Limited
33	Mayfair Insurance Company Limited
34	Metropolitan Cannon Life Assurance Limited
35	Occidental Insurance Company Limited
36	Old Mutual Assurance Company Limited
37	Pacis Insurance Company Limited
38	Phoenix of East Africa Assurance Co. Limited
39	Pioneer General Insurance Company Limited
40	Pioneer Assurance Company Limited
41	Prudential Life Assurance Company Limited
42	Resolution Insurance Company Limited

	Name
43	Saham Assurance Company Kenya Limited
44	Sanlam General Insurance Company Limited
45	Sanlam Life Assurance Company Limited
46	Takaful Insurance of Africa Limited
47	Tausi Assurance Company Limited
48	The Heritage Insurance Company Limited
49	The Jubilee Insurance Company of Kenya Limited
50	The Kenyan Alliance Insurance Company Limited
51	The Monarch Insurance Company Limited
52	Trident Insurance Company Limited
53	UAP Insurance Company Limited
54	UAP Life Assurance Company Limited
55	Xplico Insurance Company Limited

Source: Insurance Regulatory Authority database, 2017)

VT OMNES VNVM SINT