

**EFFECTS OF FINANCIAL LITERACY ON PERSONAL INVESTMENTS
DECISIONS AMONG BANKERS IN KENYA**

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DECLARATION

This Project is my original work and has not been presented for a degree in any other University.

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DEDICATION

I dedicate this project to God and to my loving family. My wonderful mother, my precious siblings and to my special friends. Without their unwavering belief in me I would not have made it this far. I am forever indebted to them.

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LIST OF ABBREVIATIONS

CBK: Central Bank of Kenya

CMA: Capital Markets Authority

KBA: Kenya Bankers Association

NTV: Nation Television

ABSTRACT

There has always been the assumption that people working in the bank are knowledgeable on financial matters as they work in a financial institution. However, not everyone who works in the bank has background in finance as per the research findings. Further, financial literacy is key in people working in the bank to manage their resources to secure a future for themselves. The study objective was to understand the effect financial literacy and its utilization it in their personal investment decisions. Data collection was done through a descriptive study that entailed the issuance of questionnaires. The target population was bankers in Kenya and a sample was selected through the simple stratified random sampling. The study was done through the application of primary data through structured questionnaires. Out of 210 questionnaires issued, 183 were responded to indicating a good response rate. The research findings indicate that there is a positive relationship between financial literacy and levels of investments by bankers in Kenya. Other control variables including the risk appetite, the availability of capital and the growth opportunity have been seen to have an impact on the levels of investment. It is evident that people understand the importance of engaging in financial literacy classes. The findings of the study were that financial literacy informs the choice of investment by the bankers with most of the bankers shying away from risky investments. The bankers are seen to highly take up insurance due to understanding the importance of being covered for the future. The significant variable to the study was future growth opportunities implying that investment choices are highly related to the availability of opportunities to grow ones investment. The other variables financial literacy, risk profile and investment capital though having a positive relationship with investment decisions proved less significant. The study therefore highly recommends continuous education on various areas of investment and conducting of further studies into this areas.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Financial literacy is an issue of interest to the economists, scholars, policy makers, government agencies and practitioners (Harnisch, 2010). Financial management is part and parcel of day to day life. Everyone needs to know how to budget, track and manage expenses, pay bills and make spending and investment decisions based on our needs and priorities. These fundamental financial skills help people to live within their economic means, remain in control of their financial lives and guide them in making investment decisions. The society today has seen the evolution of many factors that require customers actively engage in the financial market if they are to make sound financial decisions. The evolution of technology, innovations and increased competition, have led to an increase in investment products in the industry by many service providers. The need for financial literacy is further fueled by consumer needs including high borrowing interest rates, low levels of savings and the need to manage debt (Jackson and Sherrie, 2010). Jurg and Jeremy (2000) further support the notion that financial literacy is fundamental in the face of increased debt to consumers, and an increase in levels of bankruptcy.

Financial problems have been seen to be a cause of low productivity and stress in places of work. Garman et al (1996) in a study indicated that employees in the United States incurred stress due to poor financial behaviors. Bankers in the society today are expected to possess financial knowledge given that they are working in a finance related area. However, the situation is not so on the ground with bankers falling into huge debts that are sending them into bankruptcy. Their working in the bank is not an indication of the financial knowledge they gained in the past as many get banking jobs without having acquired a business degree. Further, bankers work in an environment where they have ease of access to different kinds of loans including mortgages for homes, car loan and

education loans. Without proper knowledge, they end up taking up loans that they are unable to cater for landing them into financial crisis. It is as a result of such problems that companies are adopting strategies to arm their employees with financial management skills (Brown et al, 1993).

In the recent past, Kenya bankers association has partnered with the media houses such as NTV Kenya to give financial lessons to the small and medium enterprises in an attempt to arm them with the financial skills and better their financial decision making process (Ngigi, 2016). This has been triggered by the revelation that an average person is financially illiterate even at the highest levels of education because the Kenyan education system is not tailored to meet the financial needs of an individual including persons working in the banking industry. Financial literacy is limited not only at undergraduate level but also at graduate levels (Eugenia, 2010). The programme is aimed at enhancing the capacity of the small and medium enterprise operators and assisting them to access more funds from the banking industry. This development coupled by the lack of the literature on how financial literacy affects the personal investment decisions amongst the bankers in Kenya triggered the need for a study which motivated this research undertaking.

The link between literacy in finance on personal investment decisions among bankers in Kenya is informed by the following theories: Exchange theory, Goal setting theory and Expectancy theory of motivation. According to the exchange theory, financial literacy of an individual depends on the mode of exchange of the knowledge, the level of interaction and the type of information and how it is obtained and has an influence on how an individual makes his/her investment decisions. Goal setting theory argues that financial goals of an individual coupled with perception of the cost-benefit of financial literacy are more likely to determine how well an individual makes investment choices and performs related tasks. On the other hand, Expectancy theory of Motivation opines

that the individual expectations on the perceived specific actions determine his/her behavior which ultimately influences his/her performance in a given area (Tolman 1932 and Lewin 1938).

1.1.1 Financial Literacy

Financial literacy refers to the set of financial skills, knowledge, financial behavior, attitudes and financial know-how which allows a person to make informed financial choices considering all financial resources at his/her disposal. Financial literacy boosts confidence of an individual through specialized trainings and improves decision making processes of an individual in relation to financial management (Agarwal *et al.*, 2009). It is a good yardstick for measuring the capability of an individual to comprehend and utilize various financial products and concepts in sourcing of finances, evaluation of financial risk associated with each finance source, identification of profitable opportunities, managing personal finances and making the right financial decision in the light of the prevailing economic circumstances in order to enhance ones' financial wellbeing. Financial literacy improves the capability of an individual to manage his/her finances by making the appropriate financial decisions while putting into consideration variation in economic conditions and major life events (Nye *et al.*, 2013).

According to Huston (2010), financial literacy entails the application of the financial knowledge in making spend and save decisions in order to secure the financial goal as much as possible. Financial literacy enhances financial success of an individual through instilling financial knowledge which facilitates quick understanding of the way financial institutions and the financial system works, promotes protection and enlighten individuals on the ways to avoids financial crime. Lack of adequate financial knowledge has adverse effects on the individual wellbeing, money management ability and ultimately attainment of the financial goals. The operations of the money market are compromised when the market participants do not possess the appropriate skills to

manage the finances at their disposal effectively in creating more wealth. Informed consumers help in creating a more competitive and efficient market system. The informed consumers usually demand financial products which are in line with both their short and long-term financial needs while at the same time, the suppliers of funds compete with each other to create financial products that are best suited to meet the financial needs of those who demand funds from them for investments (Monticone& Chiara, 2010).

1.1.2 Personal Investment Decisions

According to Mbaluka (2008), personal investment decision is defined as individual choice on how to currently commit funds with an expectation to earn a future cash flow. Kuhberger *et al.*, (2002), also define investment as an exchange of current funds for future benefits. Individual investment decision is influenced by many factors, such as individual perception needs, return needs and risk tolerance. Personal investment decision perception is that individuals have the ability to allocate resources that are limited to existing opportunities through capital budgeting. The making of sound decisions would result in making investments by allocating resources through the process of predicting future cash flows by soundly determining the size of the investment and the timing (Hodge, 2000).

The importance of sound personal investment decisions is fundamental as it has an impact on the day to day quality of life of people in the society. People are taking a keen interest in their investing decisions through the services of financial planners where they lack adequate knowledge. It is key to note that it is lack of financial knowledge that leads to poor investment decisions. Kenyan banks have started to offer investment education to its employees because employee personal finances cause an effect on overall performance of the banks. Personal investment decisions among bankers in Kenya varies from one individual to another depending on personal financial literacy. Investors

have a tendency of making investment decisions based on their expected utilities because they are lucid and knowledgeable (Reilly & Brown, 2006).

Rooij et al., (2007) indicated that people with minimal financial literacy have the tendency to seek investing advice from other persons who may also not be knowledgeable in the field. Ultimately, this results in poor decision making.

1.1.3 Financial Literacy and Personal Investment Decisions

Financial illiteracy and its subsequent lack of financial know-how, provide fertile environment for costly mistakes in making investment decisions. Low financial literacy combined with lack of or limited information affects one's ability to maintain savings as a way of securing savings for retirement life. Inability to make sound financial decisions leads to making of mistakes including poor portfolio mix, investing less than one should, and a tendency to sell securities that should be held while buying securities that could result in a loss (Calvet et al., 2009). Households that have been seen to possess financial knowledge are better planners for retirement and invest in securities that yield adequate returns for sustainability compared to individuals that do not plan.

Possessing financial knowledge has the ability to influence the choice of securities. Understanding an individual's financial situation leads to a situation where people can plan their saving, have the ability to manage debt and strategically make investment decisions that are beneficial to their families. Financial literacy provides excellent opportunity for individuals to understand the benefits of managing their financial resources responsibly and facilitate making of good investment decisions in order to profitably utilize the services of financial bodies. Financial literacy empowers an individual in knowing where to go for the financial help, how to optimally utilize the available financial resources in wealth creation and how to make the right investment

choices in light of the prevailing economic conditions. Financial education is often connected to debt and investment literacy (Braunstein *et al.*, 2002).

1.1.4 Bankers in Kenya

Bankers refer to the individuals who carry out the business of banking. The bankers in Kenya belong to the wider spectrum of the banking industry which is regulated by the Central Bank of Kenya (CBK).

The banking industry employs approximately to 37,250 bankers with diversity in education, age and personal backgrounds. The employees of the bank form the basis for the culture of the organization which is the key factor that influences the performance of the bank. Banks require a culture that ensures that quality services are given to clients and this can only be achieved if employees are motivated and not stressed by their financial situation. It is fundamental that banks consistently recruit, train and develop the skills of their employees to ensure they maintain the provision of quality service.

Banks in Kenya are group in an association known as Kenya bankers association (KBA). The vision of KBA with regards to bankers is to ensure the members are equipped with financial literacy. The skills are key in creating an environment where employees are able to critically think about the decisions they take both within the office and outside the office (Ngigi, 2016). KBA calls for a culture where people in the banking sector are able to take responsibility for their actions because the consequences of the decisions taken have an impact on other people in the society and it is thus key to ensure personal financial success. When bankers gain financial knowledge they have the ability to collectively face challenges presented in the diverse and interconnected world.

1.2 Research Problem

Financial literacy plays a pivotal role in influencing the investment choices of any investor and maximization of returns (Ferguson, 2002). Despite this, considerable debate has continued over the nature of the relationship between financial literacy and investment decisions with no conclusion. It is through financial literacy that people are able to make informed investment decisions on an everyday basis. People get to a place where they understand financial landscape, understand financial risk and make well informed decisions to avoid financial pitfalls. It is an unfortunate situation that people are unaware of basic financial concepts all over the world that are crucial for understanding the dynamics of making money, spending it, saving and investing (Were, 2015).

Willis (2010) made an argument in his study that there exists no relationship between literacy in finance and investing decisions. He further asserted financial education programs bear no empirical evidence of enhancing financial literacy needed for investment decisions. His argument goes further into highlighting that the market place is constantly evolving and therefore gaining financial knowledge would add no benefit to an individual. The constant changes in products offered in the market, services available and changes in individual situations would render the cost of acquiring financial knowledge useless. On the contrary Lusardi *et al.*, (2008) highlights that education on financial knowledge should be continued through mixed programs and should not be hated based on poor performance by some students. Financial literacy has the ability to come in handy for certain groups of people especially those that have no much wealth. This does not mean that the market could operate without vigilant regulations to assist investors in the face of market complexities and constant changes.

A study on the correlation between financial literacy and ability to participate in securities market by investors in Kenya showed that there exists a strong positive correlation (Muchiri, 2015). Further, knowledge on Micro-Finance Institutions (MFIs) provides clients with a platform to have control over decision making (Kailanya, 2014). A study in Meru showed that possession of financial knowledge by miraa farmers led to higher returns to the farmers in the region. Entrepreneurs with the ability to understand how to access funds, manage transaction costs and monitor performance were seen to have positive financial returns in Nairobi County (Sabana, 2014). There is however minimal studies on the impact that financial literacy has had on bankers in Kenya. The study is meant to fill this gap while addressing the question: What effect does financial literacy have on investment decisions among bankers in the Kenyan economy?

1.3 Research Objective

The main objective of the study is to establish the effects of financial literacy on personal investment decisions among bankers in Kenya.

1.4 Value of the Study

The research study will come in handy for scholars in the financial field by adding to the existing body of knowledge and could come in handy in identification of study gaps for further studies. The research will also benefits individual consumers of financial services by enlightening them on various financial services available to them and how to manage their financial facilities in creation of wealth.

The study will come in handy for policy makers in the government and especially the CBK and Capital Markets Authority (CMA). They will be guided on areas that are critical in enhancing financial literacy in a bid to encourage financial management that is key in the growth of the economy.

The research study will be of great importance to bankers by providing them with information input for strategizing on how to manage their incomes, expenditures, savings and investment in order to achieve financial success and wellbeing.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter on literature review looks into studies that have been done on the effects that financial literacy has had on personal investment decisions. The chapter further reviews theoretical and empirical studies relating to the field of study.

2.2 Theoretical Review

Theoretical review looks into theories that try to explain the relationship between literacy in finance and personal investment decisions. These theories includes: Goal setting theory, exchange theory and Expectancy theory of Motivation.

2.2.1 Goal Setting Theory

This theory was advanced by Locke (1986) and Locke and Latham (1990). According to this theory, individuals financial goals coupled with perception of the cost-benefit of financial literacy are more likely to determine how well an individual makes investment choices and perform related tasks. The theory is based on the belief that people that make goals consciously have the capability to achieve the results desired. Goals form the basis for people to perform tasks in a given manner as opposed to another. People that have the tendency to set challenging goals that are clear and well-defined have been seen to achieve higher yield than persons whose goals are vague and easy to achieve. The theory is based on the assumption that individuals are committed to the goals they set for themselves. The individuals must also have a system for getting feedback and have the capability to perform tasks that lead to achievement of results. The theory believes that financial literacy knowledge is more effective when people have the perception that they need to manage their finances for financial stability later in life to meet the goals of the individual (Locke 1986) and (Locke and Latham, 1990).

A study by Hilgert *et al.*, (2003) was done through creation of a Financial Practices Index based on the behavior of people in cash flow management and making of investment decisions. The results of the study indicated that there is a positive correlation between the scores of financial literacy and financial practices. It is an indication that possession of financial knowledge is related to financial practices chosen by individuals. The theory provides an indication that people possessing financial literacy have the ability to set good financial goals and consciously works towards their achievement.

2.2.2 Expectancy Theory of Motivation

The expectancy theory was brought forth by Vroom in 1964 who argued that people are motivated by the need to fulfill their expectations. The theory is made under the assumption that behavior exhibited by people is as a result of choice meant to maximize pleasure or minimize pain. The theory uses the notion of expectancy, instrumentality and valence. Vroom indicated that expectancy could lead to increased performance as people for example believe that if they work harder, then their livelihoods will be better. Instrumentality leads people to looking for tools to enable them accomplish their goals through an understanding of the relationship between performance and outcomes. Valence relates to the importance that people place upon the outcome (Mandel & Klein, 2007).

The theory presupposes that motivation in individuals is driven by a given behavior. Studies show that the motivation theory is an additive process as opposed to being multiplicative. It implies that the levels of motivation could still be significantly high even though the expectations for successful outcomes are small. People tend to exhibit a behavior showing that the outcomes are still good enough to satisfy their needs. Financial literacy has the ability to provide individuals with skills to enable them make key decisions in their lives. Thus the impact that financial knowledge classes

have on an individual are based on the expectations that one had and of the outcome. Thus, if people perceive financial literacy as having the ability to positively impact their future outcomes, they will have the motivation to take part in them (Mandel *et al.*, 2007).

The study is based on the theory of expectancy as the individuals under the study are persons expected to have some level of knowledge in finances. They are persons expected to apply the knowledge they have acquired over the years in their expenditure and planning for investments. They would base their motivation on the need for financial freedom and this would trickle down to a more motivated work force of bankers. The same notion is applied in finance indicating that if people apply financial knowledge, they will acquire better results through instrumentality which is the financial literacy

2.2.3 Exchange Theory

The theory was proposed by Robson and Ladner (2006), who used it to incorporate all dimensions of obtaining financial literacy knowledge. The theory argues that the procedures, the interactions, the interpersonal and information factors come together to determine the level of knowledge gained by an individual. Lusardi and Mitchell (2008) supports the theory through their research that indicated that the levels of literacy in finance attained is higher in people in working class and those in self-employment compared to those not in any work vocation. The difference in levels of knowledge is explained by the education programs offered in work places as well as interaction with colleagues with knowledge in finance. Thus the theory is based on the ability to continually exchange knowledge through relationships with people.

The theory emphasizes the understanding of power and the ability of information to spread out through power networks. Behavioral outcomes are particularly influenced through an exchange of emotions, confidence, promises and working as a team. Networks today are growing beyond the

concepts and operations of an organization. Thus though the theory provides a good starting point to gain knowledge, the future shows a situation where knowledge will continually be gained outside a laboratory setting (Lusardi and Mitchell, 2008).

According to this theory, financial literacy of an individual depends on the mode of exchange of the knowledge, the level of interaction and the type of information and how it is obtained and has an influence on how an individual makes his/her investment decisions.

2.3 Determinants of Investment Decisions

Financial literacy is an important factor in personal investors among bankers. However, there are other factors that influence personal investments decisions such as opportunities for growth in investments, risk profile, and availability of capital as will be discussed in this section.

2.3.1 Financial Literacy

Financial literacy means that people have the knowledge and ability to understand and interpret various finance areas including the ability to save, invest, make insurance decisions, partake in real estate, undertake capital budgeting and make retirement plans. Through financial literacy people understand financial products including stocks and bonds (Bell, 2009). Literacy in finance means that people get to a place where they are self-sufficient and have the ability to make decisions on their own to achieve stability in their financial status. People that are deemed to possess financial literacy have the ability to avoid unnecessary bad debts as well as avoiding being prey to financial predators who would lead people to being taken advantage of such as in terms of interest rates charged.

2.3.2 Investment Capital

Investment capital refers to the amount of money that an individual or the firm allocates for the furtherance of the business goals and objectives. It also refers to the amount of money which is put aside by an entity for the purchase of fixed or long term assets such as plant and machinery, motor vehicles and many others. The sources of investment capital includes: debt finance and equity finance, venture capital and angel capital. Investment Capital is one critical production factor alongside with the labor and other natural resources (Baker & Martin, 2011).

The decision to invest is the choice to utilize more capital in production of goods and services. Factors which influence firms' decision in the mix of capital, labor, and other natural resources certainly do affect the investment decision as well. It is often hypothesized that the higher investment capital will lead to the acquisition of more fixed assets and the vice versa. However, individual's level of the financial literacy plays a crucial role in determining the investment behavior (Baker & Martin, 2011).

2.3.3 Future Growth Opportunity

Future growth opportunity refers to the long-term payoffs an individual or a firm expects to achieve in their investment. It also refers to the growth of the investment. This may include taking aspects such as research in order to know what it took for similar enterprise to become a success in that investment. It also includes reviewing your investment goals review opportunities for future growth (Rappaport, 2014).

The input and output factors also have an effect on calculating the future growth opportunities when setting up an investment as it includes capital and labor. When labor outweighs the capital input the growth opportunities may not be fully realized. Therefore, the input and output factors should correlate positively to realize any future growth opportunity. Rappaport (2014) highlight

the need to be able to tell the attractiveness of the market in the future with regards to expected growth rates. There is a need for investors to have knowledge in products and differentiate them based on the levels of profitability received.

2.3.4 Investors Risk Profile

Investor's risk profile refers to the evaluation of an individual to willingly take risk and possible threats that investment could expose them to. Investors have different capabilities to take risk based on the sensitivity and previous experience. Investors that take up higher risk have been perceived to get a higher return. A risk is often measured in terms of its effect and the impact it will have. To develop a risk profile an investor should be willing to accept the volatility and the outcome that shall come with it. More often than not most investors lack the confidence to go and dare on a project because of the risk that will come with it for example whether it will be a success or not. Investors who want no risks should not invest in stock as it is a long term investment which is also dependent on fluctuation of market prices. Therefore, the returns may not meet the expectations (Hervé, 2017).

2.4 Empirical Review

Empirical review is meant to bring in an understanding of studies that have been done on the area both locally and internationally. The area will explore areas of the study explained by knowledge of other scholars.

2.4.1 International Studies

Mahdzanel *al.*, (2013), did an investigation to determine the role that financial literacy plays in people's savings habit in an emerging market. Through collection of data from 200 participants in Malaysia, they studied the variables of financial literacy, gender and children to establish which has the highest impact on investment decisions. The study showed that gender has a high

correlation to investment habits with women saving more than men in the society. The study suggested that in making decisions relating to provision of financial literacy knowledge considerations should be made based on the setting of the household. In another study Mahdzanel *al.*, (2013), indicated that there is no minimal relationship between levels of financial literacy and uptake of insurance. People were seen to be sensitive about life insecurities and that demanding life insurance irrespective of whether they had financial knowledge on it.

Bhushan (2013), through an empirical review on the levels of awareness of financial products and investment behaviors for people earning a salary in Himachal Pradesh. The study revealed that only 24% had put in money into pension funds implying that few people were proactively making retirement plans. The study however showed that 77% of the people had taken up life insurance thus supporting notion that people still take up life insurance whether they understand it or not. 39% of the respondents had taken up a provident fund. The study concluded that people have some level of awareness on traditional financial products but have not taken the time to familiarize themselves with new and innovative products. Respondents in the study showed a high propensity towards taking part in traditional and safe investments and there is a need to create a platform for people to learn on newer products coming into the market.

Mohamed E, *el al.*, (2013), in a research to survey levels of financial literacy in United Arab Emirates (UAE) using one of the variables as personal debt. Through a research of 185 respondents and a multiple linear regression model, the results indicate that persons in UAE have low levels of financial literacy that indicated in other studies. Though the study indicated that there is no significant difference in terms of knowledge between men and women, people that showed to possess some form of financial literacy borrowed less using credit cards. People were seen to prefer to borrow from the bank, friends or family compared to using credit cards as they are deemed more

expensive. The study is an indication that financial literacy has an influence on investment decisions made.

KaurDhillon (2007), did an in-depth study on the effect of financial literacy on various aspects of individuals including the gender, and age difference in Delhi. The study applied statistical tools including t-test and chi-square and found that financial literacy levels is influenced by the streams that people had graduated from. Gender was seen to have minimal impact. The type of investor played little role in affecting the nature of investments chosen and the ability to manage finances. People in the region were seen to possess minimal financial knowledge. The study recommends that both the private and public sectors take up the role of improving levels of financial literacy.

2.4.2 Local Studies

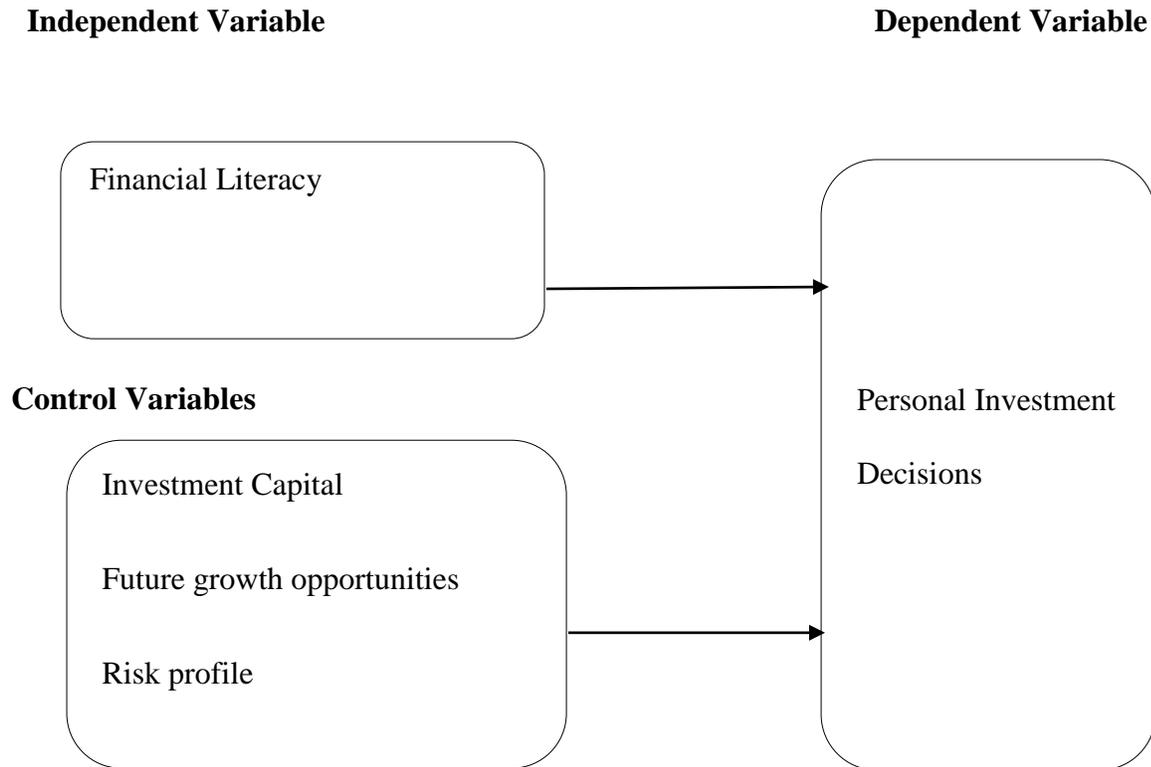
Amisi (2012), did a research thesis on the effect of financial literacy on investment decision making by pension fund managers in Kenya. The researcher used descriptive research design in collecting the data from the respondent. A structured questionnaire was used to collect data among 16 to the investment managers of pension funds registered under RBA. The investment consisted of closed questions. The likert scale questionnaire helped to standardize and quantify responses from the research. From the study it was found out that that fund managers need to be more financially literate in order to make best investment decisions.

Musundi (2014), did a research to establish the impact that financial literacy has on people in Nairobi County with a focus on real Estate investors. The study was done using descriptive research method with residents of Nairobi being the target population. Data collection was done through modified questionnaires that looked into demographic factors, personal investment decisions and finally the relationship between the two. The study that saw 115 out of 140

respondents concluded that the levels of financial literacy in real estate are lower than the desired levels yet it has a huge influence on the decisions that people take in their real estate choices.

Nyaga (2010), conducted a research paper to determine the relationship between leverage and the investment choices made by the companies listed on the Nairobi Securities Exchange. The study used empirical research by obtaining data from existing annual financial statements for a period of five years from 2005-2009. The study showed the relationship between levels of leverage and the amounts that companies are willing to spend on diversification efforts. The study showed that debt does not influence the money managers are willing to commit in the long term. It shows that little knowledge is available on how debt can be applied in business.

2.5 Conceptual Framework



The independent variables in this case financial literacy with the growth opportunity, investor risk profile and investment capital being the control variables. Financial literacy varies from one banker to another depending on various factors such as their levels of training and experience or even age, gender and marital status. Investment capital basically is the banker's income levels which vary from one person to another depending on their positions in the bank and or departments. This shall be measured by use of a Likert scale on responses of various statements that would expose an individual's level of financial literacy and give a view on their investment capital. The dependent variable in my study is the bankers' investment decision and how it is influenced directly by the independent variables. This will be measured by comparing the results of the data analysis in

regards to investment decisions against the results of the scores of the independent variables of the study.

Control Variables in this case will be growth opportunity, Investor risk profile, and investment capital as they are they are other factors in the relationship between financial literacy on personal investment decisions.

2.6 Summary of Literature Review

The chapter on literature review has brought out the empirical and theoretical aspects of the study. Some studies indicate there is an impact of financial literacy on investment decisions while others negate this perspective. Some scholars such as Willis (2010) opined that no relationship exists between financial literacy and the personal investment decisions while others scholars such as Mahdzanel *al.*, (2013, Bhushan (2013), Mohamed E, *el al.*, (2013), Vasantbhai, Sakaria, Sima (2013, KaurDhillon (2007), Amisi (2012), Musundi (2014) and the study conducted by Nyaga (2010) documented that a positive relationship exists between the levels of financial literacy and the investment decisions. Existence of these conflicting findings created the need for further study which motivated this research study

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The chapter on research methodology took a look at the methods that were applied in data collection, sampling, the research design and finally the data analysis. The methodology chapter was fundamental in ensuring that the research objectives were achieved and the impact that financial literacy has investment decision of bankers was determined.

3.2 Research Design

Research design involved the determination of the framework that was be applied in collecting data for the study and data analysis (Ghauri & Gronhaug 2005). The design applied ensured that the study was done rationally with minimum ambiguity. Descriptive research design was applied in the study and it provided an arena to describe the area of research, determine existing relationships and gave a guide on explaining the similarities between the data collected. The choice of the research design was guided by the need to collect data on various variables through detailed descriptions. Further, it ensured that the aim of the research that lies on exploring relationships was achieved.

3.3 Target Population

The population is the group of persons, objects or items that exhibit similar characteristics. The population was expected to meet the specifications of the research in a bid to answer the research question. The target for the study comprised of the 37,250 bankers working in the 42 banks in the Kenyan banking industry.

3.4 Sampling Design

Sampling is the process of selecting elements of the population that act as a representative for the study. The choice of sampling technique was selected due to the amount of time available and the large size of population was the simple stratified random sampling method. To avoid bias selection the questionnaire distribution covered all the different banks in Kenya with at least five questionnaires distributed to each bank. The study therefore collected data from 210 bankers selected randomly from the 42 banks in Kenya.

3.5 Data Collection

Data collection entailed gathering data that was to be used to answer the questions in the research. Data collection was done in a systematic manner to ensure that there was a clear understanding of the variables under the study that would be used to evaluate the final outcomes. Data collection could be done through secondary or primary methods. Secondary data collection entails the use of already existing information while primary entails collecting firsthand information. The study was done through the application of primary data through structured questionnaires. The questionnaires were dropped to the various respondents and collected at a later date. Five questionnaires were delivered to each of the 42 banks in Kenya and the respondents were to provide information on the issues of the research concern. The data collected was then subjected to statistical analysis.

3.6 Validity and Reliability

Reliability denotes that results can be consistent over time and always provide constant results. Meaning that when measurement is done on the identical data over time, the results will be alike. Validity means that the study correctly measures that which it is intended to measure. Validity was established in the research by getting primary information from respondents directly affected by the factors under the study.

Reliability was achieved by selecting similar measure items across a diverse population. The research was carried out over 210 employees from the banking employee population. The internal consistency of the data was measured by the Crombach's Alpha coefficient of 0.6-0.7 which is the acceptable rule of thumb however further research indicated that alpha 0.5 is moderately reliable. The rule of thumb indicates that reliability is acceptable within this range and an alpha of 0.8 or higher shows good reliability.

3.7 Data Analysis

The collected data was cleaned for completeness and consistency in preparation for analysis. The aim of performing data analysis was to determine the impact that financial literacy has on investment decisions of bankers. The analysis was done systematically through Statistical Package for Social Sciences (SPSS version 22). Analysis was then be done through the descriptive and inferential statistics. Data in the study was be organized in tables, charts, and spreadsheets to ensure the relationship between the variables in the study was established. Multiple regression analysis was used in this case in order to determine the influence of financial literacy on the personal investment decisions among the bankers in Kenya. The following regression model was used:

$$Y = a + B_1X_1+ B_2X_2+ B_3X_3+ B_4X_4 + e$$

Whereby

Y = Personal investment decisions which was measured by the quality of the investment choices

a= Constant

X₁ = Financial Literacy was measured by the knowledge on the financial matters

X₂ = Growth Opportunity was measured by anticipation of bankers

X₃ = Investor Risk Profile was measured by preference for risk

X₄ = Investment Capital was measured by importance of investment capital to bankers

X_2, X_3, X_4 are control variables to support the model

B_1, B_2, B_3 and B_4 are the regression coefficients. These helped in the generalization of the findings on the influence of financial literacy on the personal investment decisions among the bankers in Kenya

e = Error Term

The study was done through descriptive data analysis and used the mean and the standard deviation to determine the dispersion of the data in a study. Skewness was used as a measure of the availability of symmetry in data while kurtosis was used to measure whether the data in a study is heavy tailed or light tailed relative to normal distribution. Further correlation analysis was used to measure the degree and the direction of the linear association between coefficients of a study. The test of multicollinearity was used to establish whether the independent variables are correlated. Finally, Analysis of Variance (ANOVA) was done to test the difference between the means and to establish whether a significant relationship exists between the variables.

3.8 Test of Significance

The test of significance was used to determine whether there exists a significant relationship between financial literacy and personal investments. The study used standard deviation and t-test to establish the significance. Significance levels was done to a 95% significance level with “p” values of 0.05 and below being estimated as significant while those above 0.05 will be deemed as insignificant.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

The chapter on data analysis, results and discussions will aim to highlight the findings made on data collection that is meant to determine the effects of financial literacy on personal investment decision of bankers in Kenya. The chapter indicates the response rate, the validity of the data, correlation analysis and a discussion of the findings.

4.2 Response Rate

Data was collected through primary sources using questionnaires. A total of 210 questionnaires were issued to bankers in different banks in Kenya.

Table 1: Analysis of response rate

	Frequency	Percentage
Returned	183	87.14%
Not Returned	27	12.86%
Total	210	100%

Source: Author, 2017

The table above shows that a total of 183 questionnaires were filled and returned which represents 87.14% of the total population which is a good response rate to make an analysis of the topic.

Out of the total respondents 119 were female which was 65% of the total population is while the male response rate was 35%.

152 respondents were seen to undertake finance related courses which is 72.38% of the total population. 58 of the respondents were seen to have undertaken courses in other fields including human resources, administration, legal courses and information technology which is an indicator

that not everyone who works for the bank has necessarily taken part in finance and therefore possessing financial knowledge.

The number of years that the respondents showed 86% of the population has worked for a period of 10 years and below while 14% have worked for a period of more than 10 years.

It is key to note that of the total population that responded to the survey, 23% of the population which is 42 bankers had no savings plan other than that provided by the employer which is an indication that 77% had a personal savings plan aside from that provided by the employer. This is actually quite promising to note.

4.3 Data Validity

The study indicated that the internal consistency of the data will be measured by the Cronbach's Alpha coefficient of 0.6-0.7 which is the acceptable rule of thumb with further research showing that alpha 0.5 is moderately reliable. The rule of thumb indicates that reliability is acceptable within this range and an alpha of 0.8 or higher shows good reliability.

Table 2 : Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	
	Alpha	N of Items
.532	.587	4

Source: Author, 2017

The data in the study came up with a Cronbach's Alpha of 0.532 which indicates that the data collected can be moderately relied on in making a conclusion for the study. It shows that the items in the study are moderately closely related.

4.4 Descriptive Statistics

Descriptive statistics are a summary of the data that was collected. The section will give a summary of the data including the mean, the standard deviations, and coefficient of variation, kurtosis and skewness. The respondents in the study were requested to determine the level to which they agree with the statements indicated in the questionnaire through a Likert scale showing on a rate scale of 1 to 5 where 1= strongly disagree, 2= disagree, 3= undecided, 4= agree and 5 strongly agree

4.4.1 Mean and Standard Deviation

Table 3: Mean and Standard Deviation

	Mean	Std .Deviaton	N
Financial Literacy	38.76	5.377	183
Growth Opportunity	19.80	3.526	183
Investor Risk Profile	15.89	2.628	183
Investment Capital	12.39	2.061	183

Source: Author, 2017

The data collected indicated that an average of 38.76 were financially literate with a standard deviation of 5.377. It means that lower than 50% of the people expressed high levels of financial literacy with the numbers being lower in those expressing that there was growth opportunity for their investment. An average of 19 people expressed awareness of opportunities for growth of investment in the market with a standard deviation of 3.526. Further a lower number of bankers are risk takers with only an average of 15 people showing ability to take risk and 12 people basing their financial decisions on the capital available to them.

4.5 Coefficient of Variation

The coefficient of variation is a statistical measure showing the dispersion of data around the mean. A low coefficient of variation means that there is a low dispersion of the data around the mean. A low coefficient of variation shows that data can be replicated in another test. The closer the coefficient of correlation is to zero, the better it is as it shows consistency. In a study, the coefficient of variation of zero would be the most ideal.

Table 4: Coefficient of variation

	Financial Literacy	Growth Opportunity	Investor Risk Profile	Investment Capital
Financial Literacy	1.000			
Growth Opportunity	.261	1.000		
Investor Risk Profile	.246	.214	1.000	
Investment Capital	.353	.234	.265	1.000

Source: Author, 2017

The coefficient of variations in the study are all lower than 50%. The financial literacy and investment capital being 35% compared to 26% and 24% for investor risk profile and growth opportunity respectively. It means that the variables are a good estimate as they have a small dispersion from the mean.

4.5.1 Skewness and Kurtosis

Skewness measures the availability of symmetry in data or the lack of it. Data is considered to have symmetry when it has similarity on the right and the left in relation to the center point. Kurtosis measures whether the data in a study is heavy tailed or light tailed relative to normal distribution. The kurtosis levels between -2 to +2 are considered acceptable to prove the existence

of normal univariate distribution while a skewness of -1.96 to +1.96 is considered within the normal distribution (Trochim & Donnelly, 2006).

Table 5: Skewness and Kurtosis

	N	Min	Max	Mean	Std. Dev	Skewness	Kurtosis
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Financial Literacy	183	14	50	38.76	5.377	-.977	.180
Growth Opportunity	183	7	30	19.80	3.526	-.484	.180
Investor Risk Profile	183	7	25	15.89	2.628	-.037	.180
Investment Capital	183	5	17	12.39	2.061	-.632	.180

Source: Author, 2017

From the data in the study, it is evident that the skewness and the kurtosis for each variable in the data are within the acceptable levels and thus the data lies within a normal distribution.

4.6 Correlation Analysis and Multicollinearity

The Pearson’s correlation analysis is an indicator of the linear relationship between the variables in a study. A positive correlation coefficient indicates that the two variables move in a positive direction while a negative indicates that the items move in a negative direction against each other in study.

Table 6: Inter-Item Correlation Matrix

	Financial Literacy	Growth Opportunity	Investor Risk Profile	Investment Capital
Financial Literacy	1.000			
Growth Opportunity	.261	1.000		
Investor Risk Profile	.246	.214	1.000	
Investment Capital	.353	.234	.265	1.000

Source: Author, 2017

The study indicates that the variables in the study are positively correlated to each other as there was no negative sign in any of the variables.

Multicollinearity is determined by examining the Variance Inflation Factor (VIF) and levels of tolerance. A small tolerance indicates that the linear relationship between the variables is almost perfect and should not be added to the regression analysis. A low tolerance of 0.1 should be subjected to further investigation. VIF is a measure of the impact of collinearity among the variables indicated in the regression analysis. The VIF should always be greater than 1. No formal value of VIF has been determined to establish whether multicollinearity exists. However, values greater than 10 are considered to indicate the existence of multicollinearity.

Table 7: Coefficients^a

Model		Toleranc	VIF Multicollinearity
(Constant)	1.674		
Financial Literacy	-.039	.825	1.213
Growth Opportunity	.118	.893	1.120
Investor Risk Profile	-.020	.887	1.127
Investment Capital	.085	.827	1.209

Source: Author, 2017

The data in the study shows that the tolerance levels between all the variables exceed 0.1 and none should be excluded from the regression model. Further, the VIF in the model is greater than 1 in all the variables. It is an indicator that multicollinearity does not exist in the items under the study.

4.7 Regression Analysis

Questionnaires were issued to bankers to determine the effect that financial literacy has among the bankers in Kenya. The Likert scale was applied in the analysis of the questions to establish

whether there is a relationship between financial literacy and investment decisions with a focus on the levels to which investment brings growth to their capital, whether people understand risk and the utilization of capital by the bankers.

4.7.1 ANOVA

Analysis of Variance (ANOVA) is used to test the difference between two or more means in a statistical study. To determine whether there are statistical difference between the means, it is required that one compares the p value with the level of significance. When the P value is less than the level of significance, then we do not have grounds to reject the null hypothesis.

Ho: Financial literacy has no impact on personal investments decisions of bankers among bankers in Kenya

Ha: Financial literacy has an impact on personal investment decisions amongst bankers in Kenya

Table 8: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	37.044	4	9.261	3.304	0.012 ^b
Residual	498.891	178	2.803		
Total	535.934	182			

Source: Author, 2017

a. Dependent Variable: Personal investment decisions

b. Predictors: (Constant), Investment Capital, Growth Opportunity, Investor Risk Profile, Financial Literacy

The study was done at 5% significance level which is 0.05 and the P value in the study is 0.012. Thus the p value is less than the significance level and therefore we have grounds to reject the null hypothesis and say that financial literacy has an impact on investment decisions made by bankers.

Table 9: Regression Coefficients

Model	Unstandardized		Standardized		t	Sig.
	B	Std. Error	Beta	Std. Error		
(Constant)	1.674	1.1			1.431	.154
Financial Literacy	.039	.02	.121		-1.519	.131
Growth Opportunity	.118	.03	.242		3.161	.002
Investor Risk Profile	-.020	.05	-.031		-.399	.690
Investment Capital	.085	.06	.102		1.285	.200

Source: Author, 2017

From the table above, the established linear regression equation becomes:

$$Y = 1.674 + 0.039X_1 + 0.118X_2 - 0.020 X_3 + 0.085 X_4$$

Where:

Y = Personal investment decisions which will be measured by the quality of the investment choices

a= 1.674 shows the constant. It indicates that if the other variables in the study were held constant the level of investment decisions would be 1.674

X₁ = 0.039, It shows that there is a positive relationship between financial literacy and personal investment decisions in bankers

X₂ = 0.118, Growth Opportunity has a positive impact on personal investment decisions

X₃ = -0.020 Investor Risk Profile is negatively related to personal investment decisions among the bankers

$X_4 = 0.085$, Investment Capital is positively related to personal investment decisions among the bankers.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.263 ^a	.069	.048	1.674

Source: Author, 2017

a. Predictors: (Constant), Investment Capital, Growth Opportunity, Investor Risk Profile, Financial Literacy

From the model summary above, r^2 is at 0.069 .The model therefore indicates that 6.9 % of the variable has an impact on the level of investment decisions made by the bankers based on the levels of financial literacy. It indicates that 93.1% of the personal investment decisions are explained by other factors besides the level of financial literacy. These factors could include factors such as the other control variable of the study.

The level of significance between financial literacy and personal investment decisions is 0.130 which is not significant as it falls above the range of -0.05 to + 0.05. The significance level relationship between growth opportunity and investment decisions is significant at 0.002 which suggests that growth opportunity is a major determinant in the investment decisions made by bankers. Investment capital and investment decisions insignificant at 0.200 showing that it has minimal significance on investment decisions made by bankers. However the significance level relationship between risk profile and personal investment decisions was highly insignificant at 0.69. This may provide an avenue for further in depth research into the relationship between an investors risk profile and their investment choices.

4.8 Discussion of Research Findings

The research findings indicate that there is a positive relationship between financial literacy and levels of investments by bankers in Kenya however with minimal significance. Other control variables including the risk appetite, the availability of capital and the growth opportunity have been seen to have an impact on the levels of investment. People in the banking industry seem to understand the importance of investment and have knowledge relating to the growth of their investments, the risk they are taking in the market and the importance of utilizing the capital available to them. People seem to base their investment decisions mainly on their ability to generate more revenues other than on their levels of financial literacy.

The expectancy theory was brought forth by Vroom (1964) who argued that people are motivated by the need to fulfill their expectations. It means that people invest with the intention that their investments will grow and yield them an income to add to what they put in. The theory further stipulates that the motivation theory is an additive process as opposed to being multiplicative. It implies that the levels of motivation could still be significantly high even though the expectations for successful outcomes are small. The findings of the study show that there is a positive relationship between personal investment and growth with a high level of significance. People understand consciously or unconsciously that when they put in their money for investment it will grow and therefore they are motivated to invest.

The study further supports the goal setting as advanced by Locke (1986) and Locke and Latham (1990). According to this theory, individuals financial goals coupled with perception of the cost-benefit of financial literacy are more likely to determine how well an individual makes investment choices and perform related tasks. Bankers in the study have an appetite to see their investments grow and had a positive attitude that whatever funds they had set aside for investment purposes

had grown over the years. The theory provided an indication that people possessing financial literacy have the ability to set good financial goals and consciously work towards their achievement. People in the banking sector are positively working towards owning assets whether bought through investment or through taking loans from the bank. Bankers in the study are keen to purchase stocks, to buy land, take loans from the bank and buy or build houses as they understand that this will bring them higher value in the future due to growth opportunity.

The findings of the study show that there exists a negative relationship between personal investment decisions and risk profile though minimally. Bankers seem to be skeptical about taking high risks. Though high risk is associated with higher returns, they seem to shy away from it. They seem to prefer investing in areas that they have a better understanding as opposed to venturing into new areas such as taking part in bonds and treasury bills which they have little knowledge. Further, it appears that the bankers have a preference for short term investments compared to longer term investments as these are related with lower risk. The exchange theory presupposes that financial literacy of an individual depends on the mode of exchange of the knowledge, the level of interaction and the type of information and how it is obtained and has an influence on how an individual makes his/her investment decisions. It could explain the fact that the media and information exchange platforms have more information on areas such as investment in stocks compared to bonds and therefore people tend to lean to such areas. Further, the risk appetite could be explained by the fact that people generally want to make money quickly compared to waiting for longer periods of time to make a return.

Mahdzanel *al.*, (2013), the empirical studies indicated that there is no minimal relationship between levels of financial literacy and uptake of insurance. Our study supports the findings

because though the study showed positive correlation, the significance level of 0.131 shows minimal relationship between financial literacy and personal investment decisions.

Bhushan (2013), through an empirical review on the levels of awareness of financial products and investment behaviors for people earning a salary in Himachal Pradesh. Respondents in the study showed a high propensity towards taking part in traditional and safe investments and there is a need to create a platform for people to learn on newer products coming into the market. The findings of the study are supported by the study that indicates that people are skeptical on taking up risky investments.

Mohamed E, *et al.*, (2013), in a research to survey levels of financial literacy in United Arab Emirates (UAE) using one of the variables as personal debt. The study is an indication that financial literacy has an influence on investment decisions made. However, the respondents in the study showed that they do not rely on financial literacy in their financial investment decisions.

KaurDhillon (2007), did an in-depth study on the effect of financial literacy on various aspects of individuals including the gender, and age difference in Delhi. The study applied statistical tools including t-test and chi-square and found that financial literacy levels is influenced by the streams that people had graduated from. Gender was seen to have minimal impact. The sentiments are echoed in the study covered both men and women and gender had no impact in the investments taken up by the respondents.

Amisi (2012), did a research thesis on the effect of financial literacy on investment decision making by pension fund managers in Kenya. From the study it was found out that fund managers need to be more financially literate in order to make best investment decisions. The importance of

financial literacy classes was found to have minimal impact in our study as people have a higher focus on the ability of their investments to grow when choosing where to invest.

Nyaga (2010), conducted a research paper to determine the relationship between leverage and the investment choices made by the companies listed on the Nairobi Securities Exchange. The study showed that debt does not influence the money managers are willing to commit in the long term. It shows that little knowledge is available on how debt can be applied in business. In the study, the response on management of debt appears to be driven by personal choice as opposed to knowledge in financial literacy as respondents appeared unaware of whether to pay older debt first.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The aim of the study was to determine the effect of financial literacy on investment decisions by the bankers in Kenya. The final chapter of the study will highlight the summary of the findings which will be followed by an understanding of whether the objectives of the study were achieved. Finally, recommendations from the study and the limitations will be highlighted.

5.2 Summary of Findings

The objective of the study included to establish the effects of financial literacy on personal investment decision among the bankers in Kenya. The study was able to make an issue 210 questionnaires out of which 183 received a response. The response rate of 87.14% was deemed adequate to make an analysis of the impact that financial decisions have on investing decisions. Gender balance was achieved by ensuring both male and female respondents were reached out to, though the female respondents were higher. The investing decisions under the study included the ability of people to take part in investing decisions such as taking part in construction of homes, taking loans, taking part in insurance policies and purchasing bonds. Bankers are knowledgeable of investment platforms available to them and thus actively taking part in the market.

Bankers in the study were seen to have a good understanding of the financial market and the options available to them especially taking insurance policies. They understand the importance of investing out of every income that they receive and diversifying their investments. However, the basis for making personal investment decisions is based on other factors other than financial literacy. There is no significant relationship between financial literacy and personal investment decisions. Bankers portray a need for growth when making their financial decisions.

Further, the analysis indicates that bankers understand the capital that they have and thus invest according to their means. Bankers have a tendency to take loans and prefer to invest from money taken from debt from the bank. However, their payment schedule is not always standard with some bankers paying their new debt first and older debt later. Additionally, there is minimal significance between availability of capital and personal investment decisions.

Further analysis of the findings received from the questionnaires showed that people are actively seeking the services of their financial managers as they believe that this will improve their investing decisions. The bankers are also seen to acknowledge that attending financial literacy classes would improve their financial management classes. It is seen that people in the banking sector do not necessarily possess financial background as seen from the study that 28% of the population are working in the banking industry but could possess knowledge relating to law, administration, and information technology.

5.3 Conclusion

It is evident from the study that there is no significant effect of financial literacy on investment decisions made by bankers in Kenya. The ability of their investments to grow seems to be the most significant when bankers are making their personal investment decisions.

It is also evident from the results that most bankers are women. Many women in Kenya have veered into the banking field despite the long hours one has to put in due to the nature of the banking industry. However, the investment decisions are generally the same as women are equally taking part in investments in stocks, real estate and even insurance.

The expected result was at first that bankers being financially literate will most definitely rely on their literacy to make investment decisions however this was seen not to be the case. The study

proved that though financial literacy is significant in making these decisions, bankers do not rely on this but would rather use opportunities for growth in making their choices of investment.

Surprisingly, bankers have also proven themselves as quite risk averse despite having access to financial knowhow they prefer to engage in safer investments that may not yield high returns. They are also found to be highly reliant on facilities provided by their employers which though may be easily accessible still requires proper planning to avoid unnecessary debt.

The study therefore concludes the impact of financial literacy among bankers in Kenya is seen in their understanding of the need to grow their investment portfolios.

5.4 Recommendations

Bankers understand risk and selectively choose to take part in conservative investments. It means that bankers need to be educated on the importance of long term investments.

Further, bankers understand the need to take part in financial literacy classes as a platform to enhance their financial management skills. They seem to blindly make their financial decisions based on the belief that they will grow and bring them an income. Banks in relationship with the media needs to engage the bankers in opportunities where they learn financial management. It is also recommended that bankers engage in information sharing among themselves as it will open doors for others to learn what they know in financial knowledge as this enhances people ability to take part in risks. Banks need to acknowledge that not every employee that works in the bank has financial knowledge and therefore educate people aggressively on investment.

A trend that was observed is that people have savings but only 25% of the respondents had savings that could last them more than one year. It means that if people lost their jobs and could not get other jobs within a year, they could be rendered incapable of taking care of themselves and their

families. Banks need to actively engage people on the need to save for the future due to uncertainty. The banking industry has been experiencing job cuts due to interest rate capping and it is therefore fundamental that people put aside funds for a rainy day.

5.5 Limitations of the Study

A key limitation seen in the study is that it was limited to persons working in the banking sector only. There are myriads of persons in the economy who could also benefit from the study. The research population limits the findings to this particular group of people thus limiting the scope of the study.

Another limitation was the time imposed on data collection meaning that only a small population of bankers were reached to represent the entire banking sector. Further, the costs of data collection limited data collection to towns and banks within reach and persons within regions such as Garissa could not be reached for an interview.

Other limitations included the fact that respondents were uncomfortable giving honest personal information on their investments in the questionnaires and therefore giving responses that may not be entirely true or accurate.

Additionally, the population of 37,250 bankers was quite large in comparison with the sample of 210 with only 183 responses. Therefore a different sample selection may therefore yield different results.

The model of operationalizing the variables used was the SPSS system. A different model may therefore yield different results

There was also time constraint that could have pushed the respondents to answer questions without giving thought to them.

5.6 Suggestion for Further Studies

The research also focused on the bankers only. It is recommended that the study be further stretched to other sectors including the manufacturing industries, tourism sectors and transport sectors. It will ensure that financial literacy is not limited to persons working in the bank but the entire public. Financial management is a diverse field with multiple study areas. It is fundamental for the areas to be studied to ensure that the financial literacy classes given to the bankers are focused and not based on the assumption of a given sector.

Time limit led to the data being collected in a limited region and it is therefore suggested that studies be carried in other counties on a wider population to get results that are more inclusive.

Respondents in such studies need to be guaranteed of confidentiality of the data that is collected. It is important to include questions that are focused on the study and avoid questions that would be deemed personal such as age and salary.

The number of respondents in the study were many and thus posed a constraint on objectively collecting data. It is suggested that future studies be done based on a case study to ensure that the population sample has closer relationship in addition to just being bankers.

Running data via SPSS was a challenge as other methods could be applied. It is important that a standard method be established for questionnaires done in a Likert scale.

REFERENCES

- Baker, H., & Martin, G. (2011). *Capital structure & corporate financing decisions*. Hoboken, N.J.: John Wiley & Sons.
- Agarwal, S, Driscoll, J, Gabaix, X, Laibson, D. (2009). The age of reason: Financial decisions over the life-cycle with implications for regulation. *Brookings Papers on Economic Activity*, 51-117
- Amisi M (2012). The Effect of Financial Literacy on Investment Decision Making by Pension Fund Managers in Kenya, *Unpublished MSc Research Project*, University of Nairobi, Nairobi Kenya.
- Bell C, Gorin D, Hogarth JM (2009). Does financial education affect soldiers' financial behavior? *Networks Financ. Inst.*, Indian State Univ.;
- Bernstein, N. 1992, "Investment Education: A Winning Strategy for 401(k) Plans," *Corporate Controller*, (May/ June), 53-56.
- BhushanPuneet, MeduryYajulu, (2013). Financial Literacy and its Determinants, *International Journal of Engineering, Business and Enterprise Applications*, 4(2), 2013, 155-160.[3]
- Braunstein, Sandra and Carolyn Welch (2002) "Financial Literacy: An Overview of Practice, Research & Policy," *Federal Reserve Bulletin*, November 2002, <http://www.federalreserve.gov/pubs/bulletin/2002/1102lead.pdf> (accessed August 3, 2017)
- Brown, B. B., Mounts, N., Lamborn, S. D., & Steinberg, L. (1993). *Parenting practices and peer group affiliation in adolescence*. *Child Development*, 64, 467-482.
- CBK (2015). *Bank Supervision Annual Report*. <https://www.centralbank.go.ke/>
- Delafrooz N, LailyPaim (2011) Determinants of financial wellness among Malaysia workers. *African Journal of Business Management* 5 (24), 10092 -10100
- Eugenia, G. S. (2010). The Relationship between Personal Financial Literacy and Lending by Commercial banks In Kenya, *Unpublished MBA Research Project*, University Of Nairobi
- Ferguson, R., (2002). *Reflection on Financial Literacy, Remarks by Vice Chairman Before The National Council On Economic Education*. Washington, D.C.

- Garman, E. T., (1996, Winter). Employer-sponsored education programs and incentives to improve employees' financial lifestyles. *Employee Relations Today*, 63-72.
- Harnisch Thomas L. (2010) Boosting Financial Literacy in America: *A Role for State Colleges and Universities Perspectives journal of American association of state colleges and universities fall 2010*
- Hervé, F. (2017). Determinants of Individual Investment Decisions in Investment-Based Crowd funding
- Hilgert, M., Hogarth, J., & Beverly, S., (2003). Household Financial Management: the connection between knowledge and behavior. *Federal Reserve Bulletin* (89), 309-322.
- Hodge, F. D. (2000). Investors' Perceptions of Earnings Quality, Auditor Independence, and the Usefulness of Audited Financial Information, *Accounting Horizons*, 17, 16-24.
- Huston, S., (2010). Measuring financial literacy. *Journal of Consumer Affairs; summer 2010*, 44(2), 296-316
- Ibrahim, Mohamed E. and Fatima R. Alqaydi (2014). Financial Literacy, Personal Financial Attitude, and Forms of Personal Debt Among Residents of the United Arab Emirates, *International Journal of Economics and Finance*, 5 (7), 2013, 126-138.
- Jackson L. Blanton, Alicia Williams, and Sherrie L. W. Rhine, eds. (2010), *Changing Financial Markets and Community Development: Proceedings of a Federal Reserve System Community Affairs Research Conference*, 31-58
- Jurg K. Siegenthaler, and Jeremy Ward (2000), *Personal Finance and the Rush to Competence: Financial Literacy Education in the U.S*
- Kailanya, M. D. (2014). The Effect of Financial Literacy on Financial Returns of Miraa Farmers in Meru County, *Unpublished MBA Research Project, University Of Nairobi*
- Kariuki, J. K. (2012). Influence of Financial Literacy on Financial Decisions of Micro Finance Institution Clients in Embu County, *Unpublished MBA Research Project, University Of Nairobi*

- Kuhberger, A, Schulte-Mecklenbeck, M &Perner, J.(2002).„Framing decisions: Hypothetical and real“, *Organizational behavior and Human Decision Processes*, vol. 89, pp1162-1175.
- Lusardi, A. Keller, P and A. Keller (2008). New Ways to Make People Save: The Dartmouth Project, TIAA-CREF Institute, June
- Mahdzan, N.S. &Tabiani, S., (2013). The Impact of Financial Literacy on Individual Saving: An Exploratory Study in the Malaysian Context, *Transformations in Business and Economics*, 12(1(28)), 2013, 41-55.
- Mandel, L., & Klein, L., (2007). Motivation and Financial Literacy. *Financial Services Review* (16), 105-116
- Mbaluka, P. K. (2008). *Behavioral effects on individual decision making process using the prospect theory: A case of Investors at NSE*. (Unpublished MBA Project), University of Nairobi
- Monticone, R. & Chiara, M., (2010).How much does Wealth Matter in the Acquisition of Financial Literacy. *Journal of Consumer Affairs*, 44, 403-422
- Muchiri, M. P. (2015). The Relationship between Financial Literacy and Stock Market Participation by Retail Investors in Kenya, *Unpublished MBA Research Project, University Of Nairobi*
- Musundi M (2014).The Effects of Financial Literacy on Personal Investment Decisions of Real Estate Investors in Nairobi County, *Unpublished MSc Research Project, University of Nairobi, Kenya*.
- Ngigi, G. (2016). NTV inks deal with bankers to educate, fund small businesses
<http://www.nation.co.ke/business/NTV-inks-deal-with-bankers-to-educate--fund-small-businesses/996-3480026-rj42wiz/index.html>
- Nye, K., Pete, W. & Cinnamon H. (2013). Personal Financial Behavior: The Influence of Quantitative Literacy and Material Values. 6 (1):23-26.
- Rappaport, A. (2014). *Creating shareholder value*. New York: Simon and Schuster.

- Sabana, B. M. (2014). Entrepreneur financial literacy, financial access, transaction costs and performance of micro enterprises in Nairobi city county, Kenya
- Tolman, E. C. (1932). Purposive Behavior in Animals and Men. New York: *The Century Company*
- Trochim, W. M., & Donnelly, J. P. (2006). The research methods knowledge base (3rd ed.). Cincinnati, OH: Atomic Dog.
- Vasantbhai, Sakaria, and Sima (2013). Financial Literacy among Retired Persons: A case study of Rajkot City, Indian Journal of Applied Research,3(4), 2013.
- Were, P. (2015). Financial literacy fast becomes a must for all in modern world.
<http://www.businessdailyafrica.com/Financial-literacy-fast-becoming-a-must/539444/2743292/-/fkgvkhz/-/index.html>
- Willis L.E (2011). Against financial literacy education. Iowa. L. Rev. 2008:94
- Yanga N (2010). The Relationship Between Leverage and Investment Decisions for Companies Listed at The Nairobi Stock Exchange, *Unpublished MBA Research Project*, University of Nairobi, Kenya.

APPENDIX 1: RESEARCH QUESTIONNAIRE

The purpose of this questionnaire is to collect data on the effects of financial literacy on the personal investment decisions among the bankers in Kenya. Please fill in the following questionnaire by answering all the questions given as instructed. All information obtained will be treated confidentially and will only be used for the purposes of this research. Please do not indicate your name in the questionnaire.

SECTION A: DEMOGRAPHIC INFORMATION

(Tick Appropriately)

1. What is your gender?

Male

Female

2. What is your age bracket?

20-30 yrs

31-40yrs

40-50yrs

Above 50 yrs

3. a. What is your highest level of education?

Secondary level

College level

University level

Post graduate level

3 b. What is your area of specialization? Financial Non-financial

If non-financial, kindly specify your area of training

4. How long have you worked with this banks? Below 1yr []

1-5yrs []

6-10yrs []

11-15yrs []

16-20yrs []

Above 20yrs []

SECTION B: PERSONAL INVESTMENT DECISIONS

1. What is your salary range (Kes)?

Between

1-50,0000 []

50,000- 100,000 []

100,001- 150,000 []

150,001- 200,000 []

Above 200,000 []

2. Do you have a savings plan that could sustain your recurrent expenditures in case of unexpected loss of employment income?

Yes []

No []

a) For how long can your savings sustain your substance?

0-3 months []

4-6 months []

7-12 months []

Over 1 yr []

b) What proportion of your earnings do you save?

0 – 10% []

10 – 20% []

20-30% []

30-40% []

Above 40% []

If no,

Why and how do you plan to handle such an eventuality?

.....

3. Other than your employer's group pension plan, do you have a well outlined personal investment plan?

Yes []

No []

4. Knowledge of investments and taking part in them is fundamental. What investments have you

taken part in: Tick Yes or No

	Yes	No
I have purchased stocks in the last five years		
I have borrowed a loan in the last five years		
I have bought land in the past		
I own and use a credit card		

I have taken a car loan		
I have bought a house		
I have built a house		
I have a life insurance policy		
I have taken part in purchase of bonds		

SECTION C: FINANCIAL LITERACY

1. To what extent do you agree with the following statements on the effects of financial literacy on the personal investment decisions among the bankers in Kenya? Rate on a scale of 1 to 5 where 1= strongly disagree, 2= disagree, 3= undecided, 4= agree and 5 is strongly agree

Statements	1	2	3	4	5
The prevailing interest rates influence my level of debt					
Investment in a pension plan is a good investment					
Financial literacy classes would improve my ability to manage finances					
It is better to invest in small mutual funds than in top performing mutual funds					
I invest out of each income I receive					
Having Kes 10,000 today is not as good as having to Kes 10,000 in two years					
You should pay down your largest debts first					
Investing in your company stock is a safe investment					

Continue from previous page	1	2	3	4	5
It is important to have a will protecting your estate					
It is safer to put your money into multiple businesses or investment than into one business or investment					
Suppose over the next 10 years the prices of the things you buy double and your income also doubles you will be able to buy the same as you can buy today					

2. To what extent do you agree with the following statements on investment capital with relation to personal investment decisions among the bankers in Kenya? Rate on a scale of 1 to 5 where 1= strongly disagree, 2= disagree, 3= undecided, 4= agree and 5 strongly agree

Statements	1	2	3	4	5
The decision to invest depends much on the investment capital at my disposal					
I always engage financial advisors in budgeting for my required capital					
My investment capital comes mainly from debt					
My investment capital comes mainly from savings					

3. Taking part in investment can be a risky venture. To what extent to agree with the below Rate on a scale of 1 to 5 where 1= strongly disagree, 2= disagree, 3= undecided, 4= agree and 5 strongly agree

Statements	1	2	3	4	5
I prefer to invest in stocks rather than in treasury bills and bonds					
I prefer to undertake riskier investments so as to get more returns					
I prefer to undertake less riskier investments with guaranteed returns					
I prefer to invest in long term investments compared to short term investments					
I would rather buy land in the capital city than in the country side					

4. To what extent do you agree with the following statements on growth relate to the personal investment decisions among the bankers in Kenya?

Rate on a scale of 1 to 5 where 1= strongly disagree, 2= disagree, 3= undecided, 4= Agree and 5 strongly agree.

Statements	1	2	3	4	5
My investments have grown more since I became a banker					
I believe taking a loan will add more value to my life					
I purpose to get an additional type of investment annually					
I always have between 3-5 different types of investments at the same time					
I attend at least one investment seminar every year					
I believe it is necessary to make use of at least one facility available to an employee of the bank					