

**FINANCIAL FACTORS AFFECTING RETIREMENT PLANNING BY  
SAVINGS AND CREDIT COOPERATIVE SOCIETIES EMPLOYEES  
IN NAKURU TOWN, KENYA**

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## DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

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This research project has been submitted for examination with my approval as University Supervisor.

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## **DEDICATION**

I thank God Almighty for enabling me to work through this document. I trust that He will see me through to the completion of this course of study. I also thank my family for the encouragement, support and patience they have demonstrated during the lengthy hours I have spent to author this document. I dedicate this study to my spouse Anne, and my children Debby, Florence, Evans, Caleb and Seth. Thank you for your inspiration and support. God bless you.

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## **ABBREVIATIONS AND ACRONYMS**

<b>ANOVA</b>	Analysis of variance
<b>BRICS</b>	Brazil, Russia, India, China, and South Africa
<b>CPI</b>	Consumer Price Index
<b>ESSP</b>	End of Service Savings Plans
<b>HSBC</b>	Hong Kong and Shanghai Banking Corporation
<b>GAO</b>	Government Accountability Office
<b>JKUAT</b>	Jomo Kenyatta University of Agriculture and Technology
<b>KSH</b>	Kenya Shillings
<b>NSSF</b>	National Social Security Fund
<b>RBA</b>	Retirement Benefits Authority
<b>SME</b>	Small and Medium Enterprise
<b>SACCO</b>	Savings and Credit Cooperative
<b>SPSS</b>	Statistical Package for Social Sciences
<b>TPB</b>	Theory of Planned Behavior
<b>USA</b>	United States of America

## **DEFINITION OF TERMS**

- Active SACCO:** A SACCO that offers services to its members on a regular basis.
- Annuity:** A contract sold by an insurance company designed to provide payments to the holder at specified intervals, usually after retirement (Business Dictionary 2016).
- Dependency Ratio:** This is the number of working adults relative to those who are retired and drawing social welfare payments (Ortman, Velkoff, & Hogan, 2014).
- Financial education:** The process of building knowledge, skills and attributes to become financially literate (Cohen & Nelson, 2011).
- Financial Inclusion:** It is the process of ensuring access to appropriate and affordable financial products and services needed by all sections of the society (Allen, et al., 2016).
- Financial literacy:** It is the ability to understand financial concepts, and make financial decisions (Selim & Aydemir, 2014).
- Financial Risk tolerance:** It is a comfort level that an individual is willing to accept while risking their current wealth for future growth (Gibson, Michayluk, & Van de Venter, 2013).
- Income:** Income is the flow of cash or cash equivalents received from work; that is, salary or wage, capital - interest or profit, or land - rent (Business Dictionary 2016).
- Liquidity preference:** It is the desire of people to hold their resources in money rather than interest-earning assets (Bibow, 2013).
- Nest egg:** It is the amount a person has accumulated for retirement (Business Dictionary 2016 ).
- Nakuru Town:** Nakuru Town is situated in Nakuru County, Kenya.

**Pension:** This is a periodical or lump sum income received as a retirement benefit (Business dictionary, 2016).

**Superannuation Scheme:** It is a retirement plan in which a monthly payment is made to an employee who has retired from working (Business dictionary, 2016).

## ABSTRACT

Retirement planning is an important concept in personal financial management which has gained prominence in the contemporary world. Since retirement is inevitable, it is crucial to start planning for retirement early in one's life so as to ensure a comfortable life in retirement in which the retiree has a considerable nest egg. Paradoxically, very few people plan for retirement despite its importance. Financial planning is a crucial aspect of retirement planning and it involves planning for the amount of income to expect at retirement, sources of that income and the adequacy of the income to meet the retiree's financial needs such as increased cost of medical care. This study examined financial factors that affect retirement planning by Sacco employees in Nakuru town, Kenya. The specific objectives of the study were to assess the effect of income level, liquidity preference of individuals and financial literacy in retirement planning. Descriptive survey research design was adopted. Stratified random sampling technique was used to draw a sample of 96 respondents out of an accessible population of 126 Sacco employees working in Nakuru Town, Kenya. The study adopted a self-administered semi-structured questionnaire to collect primary data. Secondary data was collected from various institutional databases such as the Central Bureau of Statistics, the Ministry of Industrialization, Trade and Enterprise department of Cooperative Development and the Central Bank of Kenya among others. A pilot study was conducted to test the reliability and validity of the questionnaire. The reliability test was conducted using Cronbach's alpha ( $\alpha$ ) coefficient to test the consistency and coherence of the questionnaire. Validity was tested using content validity test. The data was analyzed using SPSS version 22 where descriptive statistical tools such as mean, mode, median, standard deviation and variance were used. Inferential statistical analysis was done by use of Pearson's Correlation Coefficient, ANOVA and multiple regression analysis to establish the relationship between the dependent and independent variables. Analyzed data was presented in form of tables, charts and graphs. The findings of the study will be significant as they may be used by government policy makers and regulators, human resource specialists, personal financial management practitioners, employers, employees and researchers. The findings of the study supported the research hypotheses that income level, liquidity preference of individuals and financial literacy affect retirement planning by SACCO employees in Kenya. The results also indicated that majority of the SACCO employees are between the ages of 18-50 and therefore are at the prime of their lifecycle.. It was also observed that there is general apathy in discussing the important concept of retirement planning among the youth. We recommend that the Government, employers and other stakeholders develop deliberate programs to teach the general population about financial literacy skills so as to enhance financial inclusion in Kenya.

# CHAPTER ONE

## INTRODUCTION

### **1.1 Background**

Retirement refers to one's withdrawal from the labor force (Coile, 2015). Retirement planning therefore means getting prepared for retirement. Retirement decisions are complex and multifaceted. These decisions involve various considerations like health, family, work, leisure opportunities, and retirement income. Retirement is one of the most financially significant decisions that an individual makes during his or her lifetime. It typically marks the end of labor earnings and the beginning of the drawdown of retirement resources accrued over the employee's career. As such, a calculation on whether one has saved enough to facilitate retirement at a particular age is complicated by uncertainty on longevity, out-of-pocket medical expenditures, and investment returns. Nevertheless, retirement has significant non-financial consequences, as it brings relief from the strain of working while one's health is deteriorating, in addition to the opportunity to spend more time with family or to engage in leisure activities (Coile, 2015).

Individual income is a person's earnings from various sources which include productive services rendered by him or by his property (Beshears et al., 2011). Similarly, it refers to the flow of cash or cash equivalents received from work- that is, wages or salary, interest or profit, or rent (Business dictionary, 2016). Income level has an important influence on retirement planning. For the employed, the income level determines the amount a person saves towards a savings retirement plan. This is because there is a shift from defined benefit pension schemes to defined contribution pension schemes. In defined benefit pension schemes, an employee's retirement is calculated by the employer based on the last pre-retirement salary one earns, and the employer bears all the risk of contributions with little input from the employee. Whereas, in defined contribution schemes, employees contribute 10-15% of their basic pay towards a retirement scheme which is usually employer sponsored. The employer contributes an equivalent amount or twice what the employee contributes towards the scheme. Thus, the amount one will have accumulated in a given period of contributions will be determined by that person's income level. Income level also influences the consumption pattern and the ability of a person to accumulate wealth

during working life and ultimately the person's retirement planning (Beshears et al., 2011).

On the other hand, money is the most liquid asset and it commands universal acceptability. Thus, everybody likes to hold assets in the form of cash money. If at all they surrender this liquidity they must be paid interest. As water is liquid and it can be used for anything at will, so also cash can be converted to anything immediately. Keynes refers to this desire to hold assets in cash as liquidity preference. According to Keynes, interest is the price paid to people for surrendering their liquid assets. Hence, the greater the liquidity preference the higher shall be the rate of interest. The liquidity preference constitutes the demand for money. It is an established fact that cash does not earn an income. The higher a person's liquidity preference, the less likely the person is to invest long term and this influences retirement planning (Varun, 2011).

Financial literacy is a measure of the degree to which one understands key financial concepts and possesses the ability, and confidence to manage personal finances through appropriate, short-term decision making and sound long-range events and changing economic decisions (Remund, 2010). The basic economic concepts include knowledge of interest rate, inflation, and risk diversification. Financial literacy is influenced by a person's level of education, age, gender and socio-economic status. There is a high level of correlation between financial literacy and planning for retirement. Financial decisions about investing and saving for retirement are increasingly complex. They require financial knowledge and confidence in that knowledge. These financial decisions include asset allocation, risk tolerance (the risk and return trade-off), budgeting, saving, and borrowing (Parker et al., 2012).

### **1.1.1 Global Perspective of Retirement Planning**

In the USA, the government has legislated laws and policies that ensure that citizens effectively participate in retirement planning (Natixis, 2015). Schemes such as 401(K) plan, mutual funds and investment funds that operate on the principle of defined contribution are in operation. Although the USA government encourages workers to save for the future, other developed countries have better retirement plans with lower costs, clearer disclosures, and simpler investments. However, retirement saving is not compulsory in the USA which has a good social security system. Therefore, savings

for retirement are low and only augment the state- administered social security system.

In Russia, the state pension is not sufficient to meet the needs of retirees (Kuzina, 2013). Most people employ two strategies namely postponing retirement, and investing in retirement savings. The first strategy is the most popular among the people. They prefer to remain in employment so as to accumulate enough income for retirement. In the second strategy, pension contributors do not like investing in private pension schemes because they doubt them. Majority also lack sufficient personal income to invest in the private schemes (Kuzina, 2013). Russia is an emerging market country with a big population of retirees. It has also enjoyed steady economic growth above 3% in the last few years. The country therefore has a lot of opportunities for personal financial planning experts, a scenario that is replicated in other emerging markets (Natixis, 2015).

In Chile, very few individuals plan for their retirement (Moure, 2016). Financial literacy is low among women, the youth, low income earners, and the elderly. However, Chile has mandatory defined contribution pension plans at the core of its retirement policy. This system of mandatory pension contributions was introduced in 1981 and has been replicated in several other Latin American countries. The contributions are at 10% level of gross earnings but there are suggestions to increase to 15% level, and also to increase the retirement age which is currently 65 for men and 60 for women. These suggestions for improving an already well running system have been necessitated by longevity of life of the pensioners. This system allows pension contributors to choose only five funds from one of six different providers. It places minimal burden on the state in sharp contrast with pensions in developed countries (Moure, 2016).

In Japan, financial literacy is low and few people plan for retirement. Women, the young, those with low incomes, and low educational attainment have the lowest levels of financial literacy (Sekita, 2011). Financial literacy increases the probability of having a retirement savings plan. Before the 2004 reform of Japan's public pension system, pension benefits were fixed by law with the working population bearing the pension burden of the aging population. Following these reforms, individuals are now responsible for their own retirement planning ensuing from the introduction of



Defined Contribution Pension Plans in 2001. There has also been rapid development of financial markets in Japan following globalization, leading to innovation of complex financial products that people may invest in. This scenario calls for adequate financial knowledge and education before the investors understand the risky financial assets they may purchase (Sekita, 2011).

In Australia, the retirement age is 65 years and 60 years for men and women respectively. Most people prefer to retire early when they are strong and healthy so as to enjoy their retirement (Jefferson, 2012). However, Australia has a higher proportion of the aging population and this poses a big challenge to employers. Consequently, this has led to legislative restrictions on social security, superannuation, and tax systems to make people stick to the recommended retirement age. Superannuation is an increasingly important component of people's retirement planning. The country has Superannuation Guarantee Charge and Occupational Superannuation Schemes. Retirement incomes in Australia are structured around three pillars: the age pension, compulsory superannuation (a form of legislated, private pension contribution), and voluntary private savings (Jefferson, 2012).

### **1.1.2 African Perspective of Retirement Planning**

In Africa, retirement planning practice is not well developed (Natixis, 2015). In most countries, retirement planning has not been given the prominence it deserves. Financial literacy is low and most people rely on social support of family members upon their retirement. The Global Retirement Index 2015 does not have a single country from Africa among the top thirty (Natixis, 2015). Eight of the top ten countries in the index are Northern European, whereas all of the ten bottom countries are from sub-Saharan Africa (Natixis, 2015).

Egypt has public and private pension schemes. The latter have higher average returns of about 10% compared to the public's 3%. Most people supplement the public pension plan with private pension plans. There are also end of service savings plans (ESSP) which allow for tax free contributions for up to 20% of the individual's pre-tax salary (Craig & Chamber, 2008). Most pre-retirees in Egypt cite a lack of understanding about how much to save for healthcare costs as a main barrier to retirement planning. The retirement age in Egypt is 60 years (Global Report, 2013).

In South Africa, financial literacy is low in the general population (Klapper, Lusardi, & Van Oudheusden, 2014). This low rate of financial literacy has been cited as the main reason for poor saving rates, increasing consumer debt, and inadequate retirement planning among the people (Rousseau & Venter, 2016). Most households in South Africa are poor and do not save. South Africa is a consuming nation with increasing ratios of household consumption resulting in dis-saving and often unsustainable levels of household debt. The government is putting in place a new retirement policy. There is currently a lot of public debate on retirement planning. The issue in South Africa currently is that retirement scheme members do not preserve their benefits forcing the government to undertake retirement fund reforms. Non-preservation of benefits refers to the cashing-out of a retirement fund when a member resigns or leaves employment for any reason. Thus retirement planning is not well entrenched in South Africa (Kojo, 2010).

In Nigeria, pension reform is faced with many challenges which include coverage, adequacy, administrative efficiency, transparency, corruption, governance, and regulation (Iyortsuun & Akpusugh, 2013). Pension systems are sensitive issues especially in low income developing countries like Nigeria where most employees neither have any meaningful retirement benefits nor earn enough during their working lives to cater for their retirement period (Iyortsuun & Akpusugh, 2013). There is evidence of lack of retirement planning in Nigeria which leads to destitution among many retirees. Many people enter into retirement without any personal plans or pre-retirement counseling. Employers have done little to enlighten their employees on the need for retirement planning. Some of the problems noted among retirees include: sudden loss of life, anxiety about residential home, dwindling status, deterioration of health status and lack of occupation (Garba & Mamman, 2014).

In Malawi, financial literacy is low (Xu & Zia, 2012). There is limited planning for old age which is partly attributable to low income in the general population. Most households in Malawi struggle to meet planned and unplanned expenses and very few have thought on a pension plan for retirement. Planning for retirement in Malawi is positively correlated with financial literacy, income levels, and improvements in financial well-being. Since financial literacy is low, the Malawian government has set up financial education programs to improve financial literacy (Chirwa & Mvula, 2014).

In Mauritius, there is a basic retirement pension payable to all citizens aged 60 years and above subject to certain residency conditions (Bulletin, 2012). The civil service enjoys a generous defined benefit pension scheme funded by the government. The level of financial literacy and financial inclusion is high as only 10 percent of the population is un-banked (Evans & Adeoye, 2016). There is an occupational mandatory scheme called the National Pension Fund that manages pensions for workers in the private sector. There are also private pension schemes where people voluntarily invest for retirement. Mauritius has some of the best pension systems in the world (Bulletin, 2012).

### **1.1.3 Kenyan Perspective on Retirement Planning**

In Kenya, a large number of retirees lack any form of regular income to sustain them in retirement (Ngare & Githui, 2014). Kenya has one of the highest levels of old age poverty rates currently estimated at 56%. This creates social problems including dependency burdens, security, and health challenges. The high poverty rate among retirees is a result of low financial literacy that makes people not to plan for retirement. Financial education is critical to assisting a person make effective long term financial decisions that is relevant to retirement planning (Gitari, 2012). There is therefore a need to increase the level of financial education as this has a direct correlation with retirement planning (Ngare & Githui, 2014).

The Kenyan pension system has four main components including National Social Security Fund (NSSF), Civil Service Pension Scheme, privately managed occupational pension schemes and individual retirement pensions (Githui, 2014). The industry regulator on retirement savings matters is the Retirement Benefits Authority (RBA). The RBA is conducting education of pension scheme members and training of trustees to increase the level of awareness and participation in retirement planning. RBA commissioned the Dip-Stick Survey in March 2009 to ascertain the level of awareness on the importance of saving for retirement among Kenyans. The study found out that saving is not given priority in Kenya. A typical monthly budget in Kenyan households will include: rent, food, household bills, transport, religious offerings, clothing, entertainment, and saving in that order. RBA is also promoting retirement planning among Kenyan citizens in all sectors of the economy including formal and informal activities (Kwena, 2009).

## **1.2 Statement of the Problem**

Retirement is a must for everybody irrespective of one's occupation or condition in life. Retirement planning enables a person to accumulate adequate financial resources that will enable him meet financial needs during retirement. This is particularly important because of increased longevity of life with expected increased medical expenses besides other normal living expenses. Retirement planning also eliminates old age dependency on the family and community. It enhances savings and investment in the economy. Paradoxically, in Kenya very few people plan for retirement.

Failure to plan for retirement condemns most retirees to miserable living because of reduced retirement nest egg. As a result, retirees exhibit high dependency on family, relatives and friends for their financial needs. Some of the retirees resort to taking up bridge jobs to earn income to meet their financial needs. Thus people who fail to plan for their retirement cannot enjoy the beneficial effects of retirement such as leaving the strain of working, leisure activities, spending more time with spouse and grandchildren among others.

## **1.3 Objectives of the Study**

The study examined the general objective and three specific objectives.

### **1.3.1 General Objective**

The general objective of the study was to determine the financial factors affecting retirement planning by Savings and Credit Cooperative (SACCO) employees in Nakuru town, Kenya.

### **1.3.2 Specific Objectives**

The study adopts the following specific objectives;

- (i) To investigate the effect of income level on retirement planning by SACCO employees in Nakuru town, Kenya.
- (ii) To examine the effect of liquidity preference of individuals on retirement planning by SACCO employees in Nakuru town, Kenya.
- (iii) To determine the effect of financial literacy on retirement planning by SACCO employees in Nakuru town, Kenya.

#### **1.4 Research Hypotheses**

**H<sub>01</sub>:** Income level does not affect retirement planning by SACCO employees in Nakuru town, Kenya.

**H<sub>02</sub>:** Liquidity preference of individuals does not affect retirement planning by SACCO employees in Nakuru town, Kenya.

**H<sub>03</sub>:** Financial literacy does not affect retirement planning by SACCO employees in Nakuru town, Kenya.

#### **1.5 Scope of the Study**

The study was conducted in Nakuru town, Kenya. It focused on savings and credit cooperatives (SACCOs) registered by the Department of Cooperative Development in the Ministry of Trade, Industrialization and Enterprise and regulated by the Sacco Societies Regulatory Authority (SASRA). The study was delimited to employees currently working in the aforementioned SACCOs. The study was guided by three independent variables namely income level, liquidity preference of individuals and financial literacy. It was delimited to one dependent variable, namely retirement planning. The study was to be carried out for a period not exceeding three months.

#### **1.6 Significance of the Study**

The study will be beneficial to government economic planners, retirement benefits regulators, employers and employees, researchers and policy makers. It is expected that this study will add to the existing body of knowledge on retirement planning in Kenya. Government economic planners and policy makers such as legislators can use the findings from this research and other related researches in collecting information on the economic and social structure of the country as pertains retirement planning. This will bring to light the issues of retirement planning to help reduce social problems that arise from lack of retirement planning.

Employers and employees are major stakeholders in retirement planning. Defined contribution retirement plans require contributions from employees as well as employers. The employers have a duty to educate their employees and help them to plan for their retirement. The retirement benefits regulators such as Retirement Benefits Authority (RBA) in Kenya can use the findings of this study to assess the level of awareness and preparedness of employees to plan for retirement, and take

remedial action. Scholars can use the findings of this study and replicate it in other sectors of the Kenyan economy to gain a deeper understanding of retirement planning in the country. Educationists can also use the findings of this study to develop programs to address any gaps in the financial education curricula at various levels of learning.

### **1.7 Limitations of the Study**

The study was faced by various challenges. There was a slow response by respondents to complete the questionnaires administered. This was attributed to the sensitive and demanding nature of the respondents' work. Some of the institutions reluctantly allowed their staff to complete the questionnaires. To surmount the challenges posed during data collection, the researcher used persuasion and persistence to obtain the data from the respondents. The respondents were reassured that the information obtained would be treated confidentially and used only for academic purposes.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter discusses the theoretical review, conceptual framework, empirical review, and summary and research gaps.

#### 2.2. Theoretical Review

This section discusses the various theories that underlie the dependent variable and the independent variables.

##### 2.2.1 The Life Cycle Theory of Consumption

The Life Cycle Theory of Consumption was proposed by Modigliani and Blumberg in 1954, later revised by Modigliani and Ando in 1957 and Modigliani and Blumberg in 1980. The theory asserts that individuals attempt to maximize their utility or personal well-being by balancing a lifetime stream of earnings with a lifetime pattern of consumption. The theory has been used extensively to examine savings and retirement behavior of older persons. The theory begins with the observation that consumption needs and income are often unequal at various points in the life cycle of a person. Younger people tend to have consumption needs that exceed their income. Their needs tend to be mainly for housing and education and therefore they make little savings. In middle age, earnings generally rise, enabling debts accumulated earlier to be paid off and savings to be accumulated. In retirement, incomes decline and individuals consume out of previously accumulated savings. There are however observed deviations from this theory. For instance, some older people continue to save even during their retirement because of increased risk aversion (weariness of future uncertainty) leading to an increase in precautionary savings; some because they have very good pension programs like those available in some European countries such as France, Germany and Italy. Also, some older people save more because of profitable investments they made in their youth (Deaton, 2012).

Modigliani notes that one of the most important motives for putting money aside is the need to provide for retirement. Young people will save so that when they are old and either cannot or do not wish to work, they will have money to spend. Modigliani further argues that the life cycle story is such that the wealth of a nation gets passed around. The very young have little wealth, middle aged people have more, and peak

wealth is reached just before people retire. As they live through their golden years, retirees sell off their assets to provide for food, housing, and recreation in retirement. These assets shed by the old are taken up by the young who are still in the accumulation part of the cycle.

In the macroeconomic context, Modigliani and Blumberg (1980), contend that the economy as a whole and the saving ratio should be constant over the long run (provided the rate of growth of the economy does not change), but will vary procyclically over the business cycle. Hence, over the business-cycle, as over the life-cycle, consumption is smoother than income. Modigliani and Blumberg (1954 & 1980) contain the same basic theory, but the later study makes a series of bold empirical predictions about the relationship in the aggregate economy between saving and growth and about the ratio of wealth to income in relation to the retirement span. This theory also develops a time-series aggregate consumption function, linking aggregate consumption to aggregate income, aggregate income expectations and aggregate assets, with coefficients that are affected by, among other things, the demographic structure of the population (Deaton, 2012).

### **2.2.2 The Liquidity Preference Theory of Interest**

The Liquidity Preference Theory of Interest was advanced by John Maynard Keynes in 1936. According to Keynes, interest is purely a monetary phenomenon because the rate of interest is calculated in terms of money. It is a monetary phenomenon in the sense that rate of interest is determined by the supply of and demand for money. Keynes defined interest as the reward for parting with liquidity for a specified time. While, liquidity means shift ability without loss; it refers to easy convertibility to any form of asset. Thus, money is the most liquid asset and it commands universal acceptability. Hence, everybody likes to hold assets in the form of cash money. If at all they surrender this liquidity they must be paid interest. As water is liquid and it can be used for anything at will, so also money can be converted to anything immediately. Keynes refers to this desire to hold assets in cash as liquidity preference. According to Keynes, interest is the price paid to people for surrendering their liquid assets. The greater the liquidity preference the higher shall be the rate of interest. Therefore, liquidity preference constitutes the demand for money (Varun, 2011).



The Liquidity Preference Theory of Interest avers that people hold money for three main motives that is the transaction motive, the precautionary motive, and the speculative motive (Belke & Polleit, 2010). The transaction motive is hinged on the premise that people keep some cash with them to facilitate the daily necessities of life. The amount of cash which an individual will keep in possession depends on two factors namely the size of his personal income and the length of time between pay-days. The richer a community is, the greater the demand for transaction motive. Secondly, the precautionary motive for holding money refers to the desire to hold cash balances. This is aimed at meeting the unforeseen contingencies such as loss of employment, accidents, and illness among others. Lastly, the amount of money an individual keeps under the precautionary motive depends on the individual's condition in life (whether one is rich or poor), the size of income, the nature of the person, and the person's far-sightedness. Equally, businessmen keep cash in reserve to overcome unfavorable conditions or to gain from unexpected deals. Keynes holds that the transaction and speculative motives are relatively inelastic but are highly income elastic (Kumar, 2015).

The speculative motive relates to the desire to hold one's resources in liquid form (that is in cash) to take advantage of the future changes in the rate of interest or bond prices. Bond prices and rate of interest are inversely related. If bond prices are expected to rise, then the rate of interest is expected to fall- people will buy bonds to sell when the price later actually rises. However, if bond prices are expected to fall, then the rate of interest is expected to rise, people will sell bonds to avoid losses. Keynes notes that the higher the rate of interest, the lower the speculative demand for money and the lower the rate of interest, the higher the speculative demand for money (Tushar, 2016). Therefore, in the context of retirement planning, setting funds aside by investing in long term assets means that the individuals will surrender current liquidity so as to invest. Thus, the amount people save towards retirement depends on their liquidity preference (Bibow, 2013).

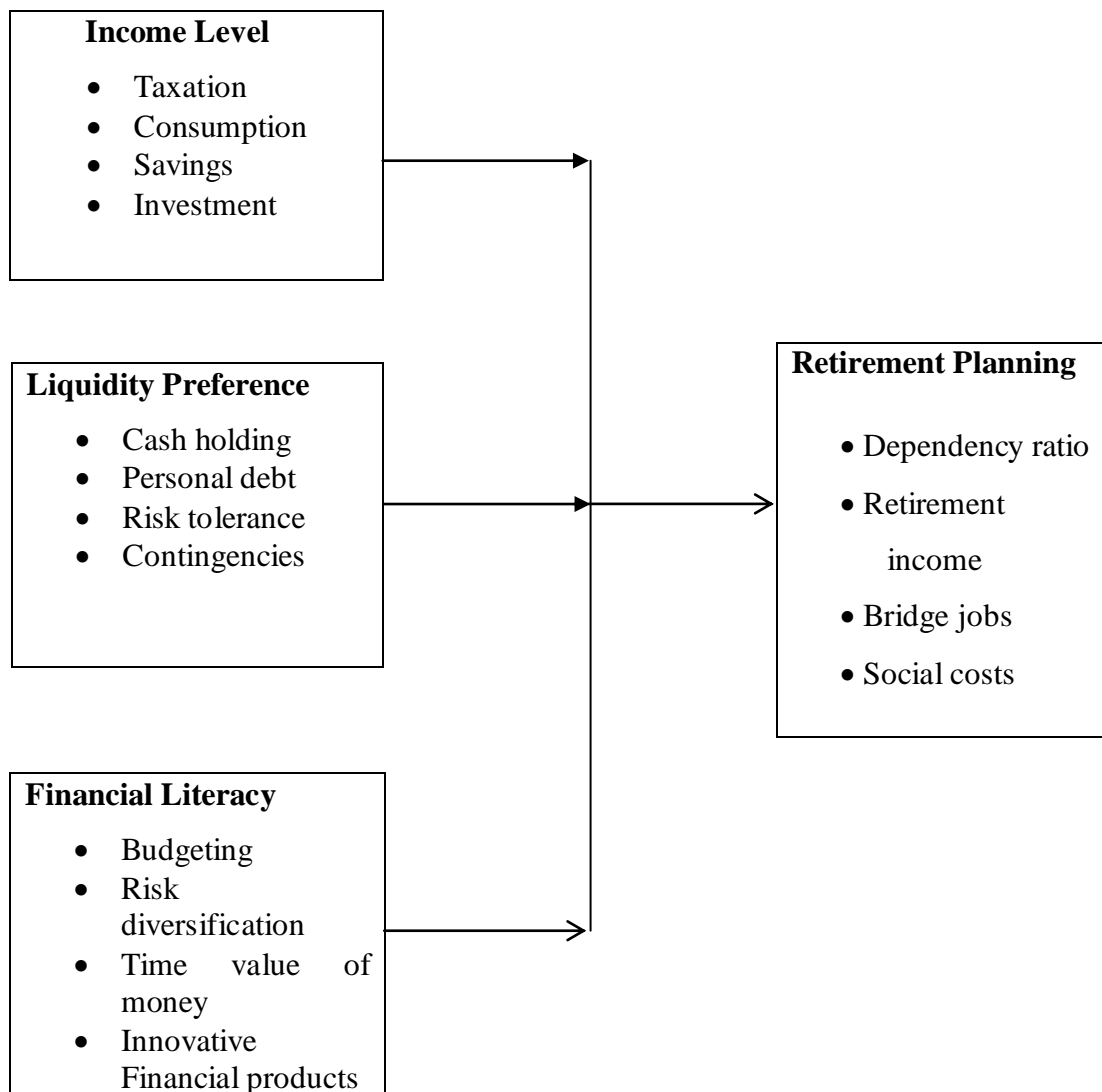
### **2.2.3 The Theory of Planned Behavior.**

The Theory of Planned Behavior was proposed by Icek Ajzen in 1991. The theory avers that intentions to perform behaviors of different kinds can be predicted with high accuracy from the attitudes towards the behavior, behavioral norms, subjective norms, and perceived behavioral control. Attitude is influenced by behavioral beliefs

and outcome evaluations. Subjective norms are influenced by normative beliefs and motivation to comply whereas perceived behavioral control is dependent on control beliefs and perceived facilitations. In the context of financial literacy, people purpose to gain insight of the various concepts because they have the right attitude, and they perceive it to be a good attribute that is generally accepted and because they can afford to learn. Ajzen argues that people are more likely to perform or intend to perform behaviors over which they feel high levels of control than those over which they feel little control. Thus, financial literacy and hence retirement planning can be described as planned behavior. (Griffin, Loe & Hesketh, 2012).

### **2.3 Conceptual framework**

The conceptual framework is a written or visual presentation that explains either graphically, or in narrative form, the main things to be studied, the key factors, concepts and variables, and the presumed relationship among them (Creswell, 2013). The framework contains the independent variables, the dependent variable and the attributes that operationalize the variables (that is define variables into measurable factors). In this study, the conceptual framework used is presented in Figure 2.1.



**Independent variables**

**Dependent variable**

**Figure 2. 1: Conceptual Framework for factors affecting retirement planning by SACCO employees in Nakuru town, Kenya**

### 2.3.1 Income Level

Income refers to the sum total of a person's earnings from various sources (Atkinson, Piketty & Saez, 2011). A person's level of income determines the consumption pattern, and savings made by the person. This in turn affects the investments the person makes. Income is also affected by taxation. A tax is a compulsory levy by the government on all income earned by citizens of a country. Taxation reduces a person's disposable income and therefore retirement planning requires prudent tax management. One such way is to participate in defined contribution retirement plans

such as NSSF and occupational pension schemes, which are tax sheltered. These plans provide advantages such as tax deductible contributions, employer matching contributions, tax deferred growth of interest, capital gains and dividends. They also offer the employee an opportunity to start saving early with the benefit of accumulating large savings for retirement (Garman & Forgue, 2011).

There is evidence from literature that supports a positive relationship between saving rates and long-run income. This income is based on an eliminated measurement of error and transitory fluctuations (Alan, Atalay & Crossley, 2015). Active savings refer to either after-tax net income minus total consumption or as the net changes in assets and debts excluding capital gains and then divided by current income to give the saving rate. Thus, income is net household earnings after taxes and includes wages and salaries, investment income, self-employment earnings, government transfer payments, and income from other sources (alimony, child support, and income from tax sheltered saving plans). Total consumption is constructed based on total expenditure for housing, food, and clothing, household operations, transportation, recreation, education, reading materials, entertainment, and miscellaneous expenses. There is a strong positive relationship between saving rates and predicted long-run income. There is also a strong correlation between savings rates and current income. The people who are poor in a life-time sense do not save possibly because of their reaction to life struggles (Alan, Atalay & Crossley, 2015). Therefore, retirement planning involves long term saving that is affected by income level.

The level of individual investment depends on the level of savings which is also dependent on the income level (Alvarez-Cuadrado & El-Attar, 2012). People invest for the future depending on their risk appetite. Hence, retirement planning is hinged on long term investment. The portfolio of assets in which an individual invests in, also depends on the investor's financial literacy level. Some investments such as financial assets require basic understanding of financial concepts such as risk and return. However, to actualize an investment plan requires a certain minimum income level. Thus, income level directly influences investment. Investments can be classified as marketable and liquid or non-marketable and illiquid. Some investments are risky, while others such as treasury bills are almost riskless. For example, equity is a risky investment but has high return. Investments in equity should be held long term in order to cushion investors against short term stock price volatility. People choose

investments depending on their specific needs, risk preference and expected returns (Ramesh, 2011).

### **2.3.2 Liquidity Preference of Individuals**

Liquidity preference refers to the tendency to prefer holding cash as opposed to other forms of wealth (Dafermos, 2012). Keynes (1936) distinguishes three motives for holding cash balances. These are the transaction motive, the precautionary motive and the speculative motive. The transaction motive bridges the gap between receipt of income and planned expenditure. The precautionary motive provides a reservoir of purchasing power that can be used to finance unexpected transactions. People hold cash because of the speculative motive to satisfy the desire to hold wealth in the most liquid form. The level of cash holding by an individual measures an individual's liquidity preference. It will influence the person's choice of investments such as retirement savings (Ogiriki & Andabai, 2014).

Personal debt such as student loans and credit cards increase the risk of having inadequate income in retirement. This is because personal debt directly reduces saving in retirement plans and indirectly reduces investments in home ownership and home values. Frugality (economizing) in daily living is therefore a desirable characteristic if a person expects to achieve financial control and hence be able to plan for retirement (Munnell, Hou & Webb, 2016). Individuals with high liquidity preference run the risk of spending their cash holding. The opposite is true of individuals with low liquidity preference who are more likely to invest in interest-earning financial assets.

Risk tolerance refers to a person's general predisposition toward financial risk (Hanna, Waller & Finke, 2013). Individuals with high risk tolerance have low liquidity preference and vice versa. The attribute of risk tolerance influences the investment choices that a person makes. Risk tolerance together with risk perceptions influences the level of individual liquidity preference and investor behavior. Therefore, this in turn affects the person's ability to invest long term for retirement (Hoffman, Thomas, & Joost, 2015).

Contingency planning refers to setting up alternative courses of action for exigencies. The exigencies include unforeseen incidences such as sudden illness, accident or loss of income. Just like organizations do, individuals need to plan for contingencies

which are a reality of life. In personal financial management, contingency planning increases the need to hold money for the precautionary motive. Cash does not earn an income but it is necessary to keep cash balances for contingencies. In the context of retirement planning, the precautionary motive and hence contingency planning leads to an increase in liquidity preference and a reduction in the amount of cash available for investment( Baker & Powell,2009).

### **2.3.3 Financial Literacy**

Financial literacy refers to people's understanding of basic economic concepts such as interest rate, inflation, and risk diversification (Lusardi & Mitchel, 2011). The understanding of people on these concepts determines their level of financial sophistication and their ability to make investment portfolio choices. Financial literacy is demonstrated through practices such as budgeting. A budget is a statement of planned future results which are expected to follow from actions taken by a person to change the current financial circumstances. Therefore, budgeting is the process of making the budget statement. Budgets enhance thrift and financial discipline (Randall& Hopkins, 2012). A clear understanding on how interest rates affect investments demonstrates an understanding of a fundamental concept, the time value of money, which stipulates that a unit of currency today is worth more than the same unit a year from now. Risk diversification is the ability to cushion investments against fluctuations in asset prices, thus protecting the investment against any loss through investing in a portfolio. The time value of money concept enables a person to understand how financial assets increase in value over the time they are invested due to compounding and how the value of future cash flows can be stated in current terms( discounting) using the cost of capital ( rate of interest for the investment). In compounding, the interest earned on a financial asset is re-invested with the principal to earn a higher return. Understanding the concept of time value of money demonstrates a high level of financial literacy (Brealey et al., 2012). Knowledge of financial products measures financial literacy and enhances financial inclusion in the country. It also enables people to diversify investments and participate in the stock exchange market(Rousseau & Venter, 2016).

### **2.3.4 Retirement Planning**

Retirement planning manifests itself in reduced old age dependency ratio, increased retirement income, a reduction in the number of retirees taking up bridge jobs and a

reduction in the social costs of supporting retirees. Old age dependency ratio refers to the number of working adults relative to those who are retired and drawing social welfare payments (Ortman, Velkoff & Hogan, 2014). A high old age dependency ratio implies lack of retirement planning and vice versa. A bridge job refers to the kind of employment contract where a person who has retired seeks a short term job. The purpose of taking up a bridge job is to raise income for the retiree. However, workers with career jobs may also retire gradually, in stages, often working for a period of time at a bridge job that offers a part-time schedule, more flexibility, or fewer responsibilities. Retirement planning leads to increased retirement income from various sources such as pension, retirement savings and investments (Coile, 2015). The social costs of supporting retirees include costs of medical care, food, housing and personal expenses that are financed by the retiree's family or the state through transfer payments to the retiree. Where there is evidence of retirement planning, the social costs are substantively lower and vice versa (Van Rooij, Lusardi & Alessie, 2011).

#### **2.4. Empirical Review**

Studies in regard to retirement planning have been done locally and internationally. Bird, Sener & Coskuner (2014) studied visualizing financial success in the USA. The study found out that when income is stable, financial planning practices increase leading to increase in economic welfare, thus reducing the accumulation of consumer debt that adversely affects retirement planning. The study also found that long-term un-interrupted income and not wealth is important to retirement planning, and that income level did not influence retirement planning. The study was however carried out in the setting of a developed country with higher personal income levels that does not apply to Kenya.

Rhee (2013) carried out a study on the retirement savings crisis in USA. The study found that retirement savings are closely correlated with income and wealth. The savings crisis stems from two main problems namely lack of retirement plans in and out of the work place particularly among low-income workers, and families' low retirement savings. These twin challenges amount to a severe retirement crisis that if not addressed will result in grave consequences for the USA. In Kenya, there is no evidence of studies carried out to examine the extent of retirement savings crisis which is however a reality.

Bateman et al. (2010) in a study about investment decisions for retirement savings in Australia found that young and low-income retirement savers were generally risk averse and many of these people are inexperienced and have low financial literacy. The study found that many young investors exhibit unrealistic investment expectations and choose conservative portfolios while anticipating high minimum rates of return, a disconnect that researchers attribute to inexperience. A similar study about the level of financial literacy and investment decision making by young people in Kenya is required to be done.

Szinovacz, Martin & Davey (2014) studied about recession and expected retirement age in USA and found that economic changes impinge on retirement expectations. Retirement expectations also show stronger influences of other factors such as debts and the work environment. The study proposed that it is important to understand how workers consider macro-factors such as the state of the economy, firm-level factors, and personal finances when planning for retirement.

Beshears et al (2011) studied about self-control and liquidity in USA and found that most savings retirement schemes in many countries are illiquid before the contracted commitment date which is usually the mandatory retirement age. However, in the USA, certain retirement schemes allow early withdrawals with a tax penalty. Early withdrawals are defined as withdrawals that are requested prior to a commitment date chosen. The study found out that people who have a high liquidity preference will commit very little funds if any to the retirement savings plans because of the aspect of illiquidity of these plans (Beshears et al., 2011) .

Gitari (2012) studied the relationship between financial literacy and retirement planning in Kenya. The study found out that for members of pension schemes, financial literacy, income level and education level significantly determine their retirement savings. The study was however done in Nairobi City which is an urban setting. More similar studies are required to be done in other towns in Kenya and even in rural areas of the country so as to get in-depth knowledge about financial literacy and retirement planning in Kenya.

Sekita (2011) studied about financial literacy in Japan and found out that about 50 % of Japanese score low on financial literacy. The study further revealed that women, the young and individuals with lower incomes and lower education attainment levels



score low in financial literacy. With respect to the relationship between financial literacy and retirement planning, Sekita (2011) found out that financial literacy increases the probability of having a savings plan for retirement. He also found out that if people save regularly when they are children, they are more likely to develop a plan for retirement when they become adults (Sekita, 2011).

Almenberg & Säve-Söderbergh (2011) studied the extent to which Swedish adults are equipped to make complex financial decisions with a particular emphasis on pension planning. The study found that many Swedish adults have low levels of financial literacy and that there is a positive relationship between financial literacy and planning for retirement. This study was however done in a developed country setting.

Moure (2016) studied financial literacy and retirement planning in Chile. The study found that this country has mandatory defined contribution pension plans at the core of its retirement policy. The study revealed that very few Chileans plan for their retirement and financial literacy is low. The study also found that there is a positive and significant relationship between financial literacy and retirement planning, thus suggesting that investments in financial education could have a substantial impact on the way people think about retirement. There is need to conduct a similar study in Kenya to determine the efficacy of the various retirement plans and make recommendations to policy makers and the investing public.

Onduko, Gweyi, & Nyawira (2015) studied the determinants of retirement planning in Kenya. The study found that financial literacy affects both savings and portfolio choice and that income, financial literacy and education level significantly determine retirement planning. This study however surveyed registered pension schemes in Nairobi. There is need to replicate this study in a rural setting in Kenya.

Iyortsuun & Akpusugh (2013) studied about effective management of life after retirement and its impact on retirees from the public service in Nigeria. The study found that most employees do not invest for retirement because of low pay and that retirees face financial distress because of failure to plan for retirement. This study needs to be replicated in Kenya.

Most of the existing literature reviewed points to the fact that retirement planning is imperative in the contemporary world. Most research work has been done in the

developed countries and in emerging market countries. Little research has been done in developing countries, particularly in sub-Saharan African countries including Kenya. Most developing countries have young growing populations, most of who are employed in small micro enterprises (SMEs) and the informal sector. Therefore, these young populations need to plan their retirement to avert impending crises since developing countries do not have suitable social security programs. Further, most people in developing countries have low financial education, low income levels, and high poverty levels. This is a perfect recipe to fail in retirement planning. However, in developed countries where people earn super incomes, the level of financial education is also low, but their governments have formulated deliberate awareness programs for retirement planning.

## **2.5 Summary of Reviewed Literature**

The Life Cycle Theory of consumption asserts that individuals attempt to maximize their utility or personal well-being by balancing a lifetime stream of earnings with a lifetime pattern of consumption. The theory is used extensively to examine savings and retirement behavior of older persons. It avers that consumption needs and income are often unequal at various points in the life cycle of a person. Thus taxation, consumption pattern, savings and investment for retirement follow the life cycle theory of consumption. The people who are poor in a lifetime sense do not save possibly because of their reaction to life struggles. Therefore, retirement planning involves long term saving that is affected by income level.

According to Keynes, interest is purely a monetary phenomenon because the rate of interest is calculated in terms of money. It is a monetary phenomenon in the sense that rate of interest is determined by the supply of and demand for money. Keynes defines interest as the reward for parting with liquidity for a specified time. Liquidity means the shifting ability without a loss. Hence, this study examines the effect of liquidity preference of individuals on retirement planning in Kenya by looking at attributes such as cash holding, personal debt, risk tolerance and contingencies. The level of cash holding by an individual measures the individual's liquidity preference. It will influence the person's choice of investments such as retirement savings. Risk tolerance refers to a person's general predisposition toward financial risk. Individuals with high risk tolerance have low liquidity preference and vice versa. The attribute of

risk tolerance influences the investment choices that a person makes. Contingency planning increases cash holding for precautionary motive,

Financial literacy refers to people's understanding of basic economic concepts such as interest rate, inflation, and risk diversification. This study assesses the effect of financial literacy on retirement planning by looking at attributes such as budgeting, risk diversification, inflation, and savings. A clear understanding on how interest rates affect investments demonstrates an understanding of a fundamental concept, the time value of money. Risk diversification is the ability to cushion investments against fluctuations in asset prices. Also, rising inflation erodes investments in financial assets, hence the need to diversify investments in a portfolio.

The theory of planned behavior avers that intentions to perform behaviors of different kinds can be predicted with high accuracy from the attitudes towards the behavior, behavioral norms, subjective norms, and perceived behavioral control. The theory has been applied in various studies on financial literacy to explain the motivation behind individual's deliberate actions relating to financial behavior such as savings, debt management, and consumer behavior. Thus, this study examines the effect of financial literacy on retirement planning in Kenya by investigating various attributes such as interest rate computation, risk diversification, inflation and savings.

## **2.6 Research Gaps**

Bird, Sener, & Coskuner (2014) studied visualizing financial success in the USA. Rhee (2013) carried out a study on the retirement savings crisis in USA. Bruine de Briun et al (2010) carried out a study in the USA on expectations of inflation-the role of demographic variables, expectation formation and financial literacy. Bateman et al., (2010) carried out a study about investment decisions for retirement savings in Australia. Szinovacz, Martin & Davey (2014) studied recession and expected retirement age in USA. Beshears et al (2011) studied about self-control and liquidity in USA. Gitari (2012) studied the relationship between financial literacy and retirement planning in Kenya. Sekita (2011) studied about financial literacy in Japan. Almenberg & Säve-Söderbergh (2011) studied the extent to which Swedish adults are equipped to make complex financial decisions with a particular emphasis on pension planning. Moure (2016) studied financial literacy and retirement planning in Chile. Onduko, Gweyi, & Nyawira (2015) studied the determinants of retirement planning in

Kenya. Iyortsuun & Akpusugh (2013) studied about effective management of life after retirement and its impact on retirees from the public service in Nigeria. From the foregoing discussion, it is evident that most of these studies were done in developed countries that have different circumstances from those obtaining in developing countries. More related studies need to be replicated in developing countries, especially in sub-Saharan Africa. Therefore, a study on other financial factors including financial literacy that affect retirement planning in developing countries is necessary, thus, the need for this study.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter discusses the research design, population, sampling technique and sample size, data collection instruments and procedure for data collection, pilot study as well as processing and analysis.

#### **3.2 Research Design**

Research design refers to a defined road-map to achieving the study objectives and answering research questions (Stevens, Loudon & Wrenn, 2012). It serves the function of enabling the researcher to answer the research questions explicitly. This is the conceptual structure within which research is conducted. It constitutes the blue print for data collection, measurement, and analysis (Kothari, 2013). According to Kothari, research design is needed because it facilitates the smooth sailing of the various research operations, thereby, making research as efficient as possible. This yields maximum information with minimal expenditure on effort, time, and money.

This study adopted a descriptive survey research design. According to Kothari (2013), descriptive research seeks to find out what is happening or what is causing a certain occurrence. The objective of descriptive research survey is to portray an accurate profile of the situation (Mugenda & Mugenda, 2003). Hence, this method is appropriate as the study involves collecting data regarding values, behavior, experiences, and attitudes of the population.

#### **3.3 Population**

Population is asserted to be an aggregate of subjects that share similar characteristics (Bryman & Bell, 2015). Mugenda & Mugenda (2003) assert that a researcher should be able to identify and define the population of study as consistently as possible with the objective of the study. The population should be carefully chosen, clearly defined, and specifically delimited. This is anticipated to set precise parameters for ensuring discreteness to the population. The target population is asserted to be the entire set of units to which the study findings will be generalized (Levy & Lemeshow, 2013).

The target population for this study comprised of all SACCO employees in Kenya. The accessible population is the group the researcher can actually reach for

information. This population is arrived at given budgetary constraints and physical limitations that the researcher can face. As such, this study worked with an accessible population of 126 employees of active SACCOs in Nakuru Town, Kenya.

### 3.4 Sampling Technique and Sample Size

Sampling is the process of selecting a few members of the accessible population, to determine the characteristics of the random chosen figures (Recker, 2012). Therefore, a sample is a subset of the target population. A good sample should be large enough and representative of the target population. Orodho (2009) observes that the larger the sample size, the less likely for the researcher to obtain negative results or fail to get the truth. Thus, a large sample size is more representative of the population and limits the influence of outliers or extreme observations. However, a right sized sample size economizes on the resources and is good for ethical reasons.

This study used the **Taro Yamane formula** to estimate the sample size.

$$n = N / \{1 + N * (e)^2\}$$

Where, n= the sample size, N= the accessible population size, e= the acceptable sampling error. (95% confidence level and p=0.05 are assumed).

Applying this formula the sample for the study is computed as follows:

$$\begin{aligned} n &= 126 / (1 + 126(0.05)^2) \\ &= 96 \text{ respondents} \end{aligned}$$

The study used the stratified random sampling method of selection. The population was divided into strata comprising the various SACCOs and proportionate random samples drawn from the strata. The various institutions form the strata. From each of these strata, a random representative sample was drawn. Table 3.1 shows the list of SACCOs forming the strata.

**Table 3. 1: Sample Distribution**

<b>Name of SACCO</b>	<b>Number of Employees</b>	<b>Sample size</b>
Cosmopolitan	46	35
Unitas	15	11
Boresha	11	8
Stima	11	8
Vision Afrika	12	9
Metropolitan	6	5
Mwalimu National	9	7
Harambee	7	5
Comply	2	2
Pareto	2	2
Wananchi	5	4
<b>Total</b>	<b>126</b>	<b>96</b>

### **3.5 Data Collection Instrument and Procedure for Data Collection.**

The study adopted a self-administered semi-structured questionnaire with open and closed questions to collect primary data. The questionnaire was designed and prepared based on a five point Likert Scale in a manner that makes it attractive and inviting to the respondents as recommended by Mugenda & Mugenda (2003). The study adopted this instrument because it enables the researcher to collect both qualitative and quantitative data from the respondents.

### **3.6 Pilot Study**

A pilot test was conducted to detect weaknesses in design and instrumentation and to provide proxy data for selection of a probability sample (Blair, Czaja, & Blair, 2013). It was carried out so as to assess validity and reliability of research instruments. This is essential in enlightening upon the research design before carrying out the main study. A pilot investigation is often employed to investigate the design of the complete test which can be adjusted. Therefore, a good pilot study increases the likelihood of success in the main study (Cooper & Schindler, 2014).

### **3.6.1 Reliability Test**

Mugenda & Mugenda (2003) defines reliability as a measure of the degree to which a research instrument yields consistent results or data after repeated trials. Reliability is also posited to be the consistency with which any measuring instrument produces a certain result when the item being measured has not changed (Leedy & Ormrod, 2001). The purpose of reliability testing is to ensure consistency and coherence of the questions in the questionnaire. The study adopted Cronbach's alpha ( $\alpha$ ) coefficient to test the reliability of the questionnaire, where  $\alpha$  value equal to or greater than 0.70 would mean that the questionnaire has acceptable internal consistency. The reliability test for the research instrument returned an overall Cronbach's alpha ( $\alpha$ ) of greater than 0.70 and therefore the questionnaire was deemed reliable.

### **3.6.2 Validity Test**

Validity refers to the degree to which a test actually measures the variables that it is meant to measure (Recker, 2012). Tests are not valid or invalid; instead, the researcher validates the outcomes of the result score. This means that a test that is perfectly correct and useful in one aspect may be unsuitable or unsatisfactory in another aspect. Hence, it is the degree to which results obtained from the analysis of data actually represent the phenomenon under study (Mugenda & Mugenda, 2003). Thus, the content validity of a measuring instrument refers to the extent to which it provides adequate coverage of the investigative question guiding the study (Cooper & Schindler, 2011). The study determined the content validity of the research instrument as guided by the project supervisor.

### **3.7 Data Collection Procedure**

The researcher sought the consent of the faculty of Strategic Human Resource Development of the Jomo Kenyatta University of Agriculture & Technology (JKUAT) for authorization to collect the requisite data. The researcher also sought the permission of the managements of the various Sacco's where the study was carried out. The researcher attached to each questionnaire an introductory letter clarifying the purpose of collecting the data and the objective of the study so as to win the respondents' cooperation. Further, the researcher undertook to self-administer the questionnaires in person to the institutions identified for the study.



### 3.8 Data Processing and Analysis

After collecting the questionnaires from the field, they were checked for completeness and accuracy. This is because only complete and accurately filled questionnaires were considered for the study. The completed questionnaires were coded and the data was analyzed using SPSS version 22 software. The study adopted descriptive statistical tools such as mean, mode, median, standard deviation and variance. Inferential statistical analysis was done using Pearson's Correlation Coefficient, ANOVA and multiple regression analysis to establish the relationship between the dependent and independent variables.

The following multiple regression analysis model was used in this study:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

**Y** represents retirement planning.

**$\beta_0$**  is a constant

**$\beta_1$ ,  $\beta_2$ , and  $\beta_3$**  represent regression coefficients for income level, liquidity preference of individuals and financial literacy respectively.

**$X_1$**  represents income level;

**$X_2$**  represents liquidity preference of individuals; and

**$X_3$**  represents financial literacy.

**$\varepsilon$**  is error term.

## CHAPTER FOUR

### RESEARCH FINDINGS AND DISCUSSION

#### 4.1 Introduction

This chapter presents findings and discussions on the financial factors affecting retirement planning by SACCO employees in Nakuru Town, Kenya. The findings are discussed starting with the response rate, followed by the descriptive and inferential statistics. The findings are in line with the objectives of the study.

#### 4.2 Response Rate

The response rate for this study was 71 %. Out of the 96 questionnaires that were issued by the researcher, 68 were completed and returned back. The response rate was considered satisfactory considering the working environment of the respondents.

#### 4.3 Background Information

The study examined the background information of the respondents with regard to age, gender, marital status and education level, employment period, number of dependents and whether they contribute to a pension scheme. The results are discussed below.

##### 4.3.1 Age Category

The respondents were categorized according to age. Table 4.1 shows the distribution according to age.

**Table 4. 1: Distribution of Respondents by Age Category.**

Age	Frequency	Percent
18-30 years	10	14.7
31-50 years	54	79.4
51-60 years	4	5.9
Total	68	100.0

The results of the age distribution of the respondents indicates that majority of the SACCO employees working in Nakuru Town are in the 31-50 years old age bracket at 79.4 % followed in number by those in the 18-30 years age bracket at 14.7 %. Employees in these two categories are in the prime of their lives and therefore need to

plan for their retirement early enough. The employees in the age bracket 51-60 years old represented only 5.1%. This category constitutes those nearing retirement. They should therefore evaluate their preparedness for exit from employment.

#### 4.3.2 Gender

The distribution of the respondents according to gender is depicted in Table 4.2.

**Table 4. 2: Gender of the Respondents**

<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>
Male	28	41.2
Female	40	58.8
Total	68	100

The findings from the respondents sampled indicate that majority of SACCO employees in Nakuru Town, Kenya are females at 58.8 % whereas males comprise of 41.2 %. These results suggest that women need to take a leading role in retirement planning.

#### 4.3.3 Marital Status

The respondents were also categorized on the basis of their marital status. The findings are summarized in Table 4.3.

**Table 4. 3: Distribution of Respondents as per Marital Status.**

<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>
Single	23	33.8
Married	41	60.3
Other	4	5.9
Total	68	100

From the findings, 33.8 % of the respondents are single, 60.3 % are married and 5.9 % represent others. All categories need to plan for retirement with those in marriage having a heavier responsibility. The findings also indicate that most people take longer to enter into marriage thus they should plan early for their retirement and not wait till they are in marriage when responsibilities increase.

#### 4.3.4 Education Level

The findings were also analyzed to show the education level of respondents.

**Table 4. 4: Distribution of Respondents as per Education Level**

Education	Frequency	Percent
Tertiary	19	27.9
University	49	72.1
Total	68	100

The findings indicate that majority of the respondents (72.1 %) have university education and 27.9% have at least tertiary education. The paradox is that despite the high levels of education, some of the employees are not comfortable discussing about their retirement planning.

#### 4.4 Descriptive Findings and Discussion

This section presents the findings in accordance with the objectives of the study. The research examined the financial factors affecting retirement planning and investigated the influence of income level, liquidity preference of individuals, and financial literacy on retirement planning.

##### 4.4.1 Income Level

The finding on descriptive statistics for Income Level summarized in Table 4.5

**Table 4. 5: Descriptive Statistics for Income Level**

	N	Min	Max	Mean	Std. Dev.
Taxation	68	1	5	2.60	1.329
Consumption spending	68	1	5	2.21	1.153
Retirement savings	68	4	5	4.44	.500
Investment	68	1	5	3.82	1.119

From the data analyzed as depicted in Table 4.5, it is evident that most respondents affirmed that retirement savings ( $\mu= 4.44$ ,  $\delta= 0.500$ ) and investment ( $\mu= 3.82$ ,  $\delta=$

1.119) respectively affect retirement planning. Also, most respondents were indifferent as to the effect of taxation and consumption pattern of individuals on retirement planning.

#### 4.4.2 Liquidity Preference of Individuals

The findings on descriptive statistics for Liquidity Preference of Individuals are summarized in Table 4.6.

**Table 4. 6:Descriptive Statistics for Liquidity Preference of Individuals**

	N	Min	Max	Mean	Std. Dev.
Cash holding	68	1	5	2.63	1.183
Personal debt	68	1	5	4.09	.842
Risk Tolerance	68	2	5	3.90	.849
Contingencies	68	1	5	3.65	1.089

The analyzed data on liquidity preference of individuals indicates that most respondents agreed that personal debt ( $\mu=4.09, \delta=0.842$ ), risk tolerance ( $\mu=3.90, \delta=0.849$ ) and contingencies ( $\mu= 3.65, \delta= 1.089$ ) affect retirement planning. They were however indifferent as per whether cash holding affects retirement planning.

#### 4.4.3 Financial Literacy

The findings were analyzed for descriptive statistics on financial literacy which are summarized in Table 4.7.

**Table 4. 7: Descriptive Statistics for Financial Literacy**

	N	Min	Max	Mean	Std. Dev.
Budgeting	68	3	5	4.59	.553
Risk diversification	68	1	5	4.15	.815
Time value of money	68	2	5	4.29	.600
Innovative financial products	68	4	5	4.66	.477

The analysis of the findings shows that respondents strongly agree that budgeting ( $\mu=4.59$ ,  $\delta= 0.553$ ) and innovative financial products ( $\mu=4.66$ ,  $\delta= 0.477$ ) affect retirement planning. It also shows that respondents agree that risk diversification and time value of money affect retirement planning.

#### 4.4.4 Retirement Planning

**Table 4. 8: Descriptive Statistics for Retirement Planning**

	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Dev.</b>
Dependency ratio	68	1	5	4.38	.754
Retirement income	68	1	5	3.35	.910
Bridge jobs	68	2	5	3.85	.778
Social costs	68	1	5	4.06	.862

From the findings, most respondents agreed that retirement planning reduces dependency ratio ( $\mu=4.38, \delta= .754$ ), social costs ( $\mu= 4.06$ ,  $\delta= .862$ ) and bridge jobs ( $\mu= 3.85$ .  $\delta= 0778$ ). They were however indifferent as to whether retirement planning increases retirement income.

#### 4.5 Inferential Statistical Findings

This section documents and discusses the inferential statistical findings analyzed from the data collected in respect of the effect of income level, liquidity preference of individuals and financial literacy on retirement planning by SACCO employees in Kenya.

##### 4.5.1 Effect of Income Level on Retirement Planning by SACCO Employees in Kenya

The study used the analyzed results to test the hypothesis,  $H_{01}$ : Income level does not affect retirement planning by SACCO employees in Kenya,  $H_1$ : Income level affects retirement planning by SACCO employees in Kenya. The study determined the effect of income level on retirement planning using Pearson's Correlation and regression analysis.

**Table 4. 9: Pearson’s Correlation between Income Level and Retirement Planning.**

		<b>Retirement Planning</b>
<b>Income Level</b>	Pearson Correlation	-0.164
	Sig. (2-tailed)	0.182
	N	68

Analysis of the findings shows that, Pearson’s Correlation between income level and retirement planning is not significant at 0.05 level (2-tail). Based on this statistic, since the p value (p= 0.182) is greater than  $\alpha$  ( $\alpha=0.05$ ), we fail to reject the null hypothesis and conclude that income level does not affect retirement planning.

#### **4.5.2 Effect of Liquidity Preference on Retirement Planning in Kenya.**

The study used the analyzed results to test the hypothesis below.  $H_0$ : Liquidity Preference does not affect Retirement Planning in Kenya.  $H_1$ : Liquidity Preference affects Retirement Planning in Kenya. The purpose was to examine the effect of liquidity preference on retirement planning.

**Table 4. 10: Pearson’s Correlation between Liquidity Preference and Retirement Planning**

		<b>Retirement Planning</b>
<b>Liquidity Preference</b>	Pearson Correlation	.284*
	Sig. (2-tailed)	.019
	N	68

\*. Correlation is significant at the 0.05 level (2-tailed).

Based on the analysis of the findings, since p value (p=0.019) is less than  $\alpha$  value ( $\alpha=0.05$ ), we reject the null hypothesis and conclude that liquidity preference affects retirement planning.

### 4.5.3 Effect of Financial Literacy on Retirement Planning.

The study used the analyzed results to test the following hypothesis. H<sub>0</sub>: Financial Literacy does not affect Retirement Planning by SACCO employees in Nakuru Town Kenya. H<sub>1</sub>: Financial literacy affects Retirement Planning by SACCO employees in Nakuru Town, Kenya. This was meant to examine the correlation between financial literacy and retirement planning by SACCO employees in Nakuru Town, Kenya.

**Table 4. 11: Pearson’s Correlation between Financial Literacy and Retirement Planning.**

		<b>Retirement Planning</b>
<b>Financial literacy</b>	Pearson Correlation	.274*
	Sig. (2-tailed)	.024
	N	68

\*Correlation is significant at 0.05 level (2 tailed)

Based on this criteria, since the p value ( $p = 0.024$ ) is less than alpha ( $\alpha = 0.05$ ) we reject the null hypothesis and conclude that financial literacy affects retirement planning.

### 4.5.4 Influence of Financial Factors on Retirement Planning

The study ascertained the influence of financial factors as represented by income level, liquidity preference of individuals and financial literacy on retirement planning by Sacco employees in Nakuru town, Kenya. The results in relation to the foregoing are illustrated in Tables 4.12, 4.13 and 4.14.

**Table 4. 12: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
	.404 <sup>a</sup>	.163	.124	1.807	.163	4.165	3	64	.009

a. Predictors: (Constant), financial literacy, income level, liquidity preference



As illustrated in Table 4.12, the relationship between financial factors and retirement planning was established to be moderate ( $R=0.404$ ). This meant that financial factors have a moderate influence on retirement planning. The  $R^2 = 0.163$  shows the variation of the dependent variable (retirement planning) in respect to the changes in the independent variables (income level, liquidity preference of individuals and financial literacy). The findings illustrated that 16.3% of the changes in retirement planning by Sacco employees in Nakuru town, Kenya were as a result of financial factors.

**Table 4. 13 : ANOVA<sup>a</sup>**

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	40.807	3	13.602	4.165	.009 <sup>b</sup>
Residual	209.002	64	3.266		
Total	249.809	67			

a. Dependent Variable: retirement planning

b. Predictors: (Constant), financial literacy, income level, liquidity preference

The findings indicated in table 4.13 show that the association between financial factors and retirement planning was positive and statistically significant ( $F=4.165$ ;  $P<0.05$ ). Therefore the financial factors investigated were pertinent to retirement planning by Sacco employees in Nakuru town, Kenya.

**Table 4. 14: Multiple Regression Analysis**

Model		Coefficients <sup>a</sup>					95.0% Confidence Interval for B	
		Unstandardized Coefficients	Std. Error	Standardized Coefficients	T	Sig.	Lower Bound	Upper Bound
1	(Constant)	8.124	3.301		2.461	.017	1.529	14.718
	Income level	-.128	.103	-.145	-1.247	.217	-.334	.077
	Liquidity Preference	.184	.090	.237	2.033	.046	.003	.364
	Financial Literacy	.372	.163	.263	2.283	.026	.046	.697

a. Dependent Variable: retirement planning

Table 4.13 shows that liquidity preference of individuals and financial literacy significantly affect retirement planning. ( $t= 2.461$ ,  $p<0.05$ ). However, income level does not significantly affect retirement planning ( $t= -1.247$ ,  $p > 0.05$ ). Thus the multiple regression model is:  $Y=8.124-0.128X_1+0.184X_2+0.372X_3+3.301$ . Thus, a unit increase in retirement planning results from 0.128 units decrease in income level, 0.184 units increase in liquidity preference and 0.372 units increase in financial literacy. Based on the results of the multiple regression analysis, it can be concluded that income level, liquidity preference of individuals and financial literacy affect retirement planning.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter focuses on summarizing the major findings of the study both descriptive and inferential. This is followed by presentation of the conclusions that were inferred from the findings and suggestions of relevant recommendations. The chapter also outlines areas suggested for further research.

#### **5.2 Summary**

The study findings are summarized in this section. It outlines the findings in line with the objectives of the study.

##### **5.2.1 Income Level**

The study revealed that most respondents affirmed that retirement savings and investment respectively affect retirement planning. Also, most respondents were indifferent as to the effect of taxation and consumption pattern of individuals.

##### **5.2.2 Liquidity Preference of Individuals**

From the findings, the respondents agreed that risk tolerance and personal debt affect retirement planning. They were however indifferent as per whether cash holding and contingencies affect retirement planning.

##### **5.2.3 Financial Literacy**

The findings revealed that respondents strongly agree that budgeting and innovative financial products affect retirement planning. Respondents also agreed that risk diversification and time value of money affect retirement planning.

##### **5.2.4 Retirement Planning**

From the findings of the study, the respondents agreed that retirement planning reduces old age dependency ratio, bridge jobs, and social costs. They also agreed that retirement planning increases retirement income.

#### **5.3 Conclusions**

The study drew conclusions in respect of the financial factors parameters of income level, liquidity preference of individuals and financial literacy in relation to retirement planning by Sacco employees in Nakuru town, Kenya.

### **5.3.1 Income Level and Retirement Planning.**

Taxation affects the level of disposable income which in turn affects consumption, savings and investment. The study concluded that the level of income does not fundamentally influence retirement planning although it has an inverse relationship with it.

### **5.3.2 Liquidity Preference of Individuals and Retirement Planning**

The study concluded that liquidity preference of individuals as explained by variables such as cash holding, personal debt, risk tolerance and contingency planning fundamentally affects retirement planning by Sacco employees in Nakuru town, Kenya.

### **5.3.3 Financial Literacy and Retirement Planning**

The study concluded that financial literacy as explained by knowledge of attributes such as budgeting, risk diversification, time value of money and innovative financial products is instrumental in retirement planning by Sacco employees in Nakuru town, Kenya.

## **5.4 Recommendations**

The study recommends that the Government, employers and other stake-holders should develop programs and policies to increase awareness about retirement planning. Attributes such as financial literacy which were found to affect retirement planning, need to be taught to the general population so as to increase financial inclusion. It is also recommended that the Government sets up a state funded mandatory pension system to ensure a minimum income at retirement for all citizens as is the case in some countries.

## **5.5 Suggestions for Further Study**

The study suggests that an investigation on the relationship between financial literacy and financial inclusion be carried out in Kenya. Also, the study needs to explore how the two constructs influence retirement planning.

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## APPENDICES

### APPENDIX I: LETTER OF INTRODUCTION

Dear respondent,

#### **RE: REQUEST FOR INFORMATION FOR RESEARCH**

I am a postgraduate student at Jomo Kenyatta University of Agriculture and Technology Nakuru Town Campus, undertaking Master of Business Administration Finance Option course. I am currently undertaking a research study titled: “**Financial factors affecting retirement planning by Sacco employees in Kenya**”

I kindly request you to provide the information requested in the questionnaire attached to this letter. The information you provide will be used for academic purposes only and will be treated in strict confidence.

Thank you in advance.

Yours faithfully,

---

**Kepha N. Mokaya**

**Student**

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**Dr. Kimani Maina**

**Supervisor**

## APPENDIX II: QUESTIONNAIRE

### INSTRUCTIONS

Kindly provide responses to the following questions/data request diligently in the spaces provided by filling in the blanks or ticking the appropriate response. The responses you provide will be used only for academic purposes and will be treated anonymously and in strict confidence. I will highly appreciate your cooperation in this regard.

### SECTION A: BACKGROUND INFORMATION

1. Designation: \_\_\_\_\_
2. Profession: \_\_\_\_\_
3. Organization: \_\_\_\_\_
4. Age: 18-30 years ( ) 31-50 years ( ) 51-60 years ( )
5. Gender : Male ( ) Female ( )
6. Marital Status: Single ( ) Married ( ) Other ( )
7. Highest education level attained:  
Primary ( ) Secondary ( ) Tertiary level ( ) University ( )
8. How many years have you worked with the current employer?  
Less than 5 years ( ) 5 to 10 years ( ) 10 to 20 years ( ) Over 20 years ( )
9. How many years had you worked with previous employer/employers?  
Less than 5 years ( ) 5 to 10 years ( ) 10 to 15 years ( ) Over 15 years ( )
10. How many people depend on you financially?  
None ( ) 1-2 ( ) 3-4 ( ) 5 and more ( )
11. Does your employer have a staff pension scheme?  
Yes ( ) No ( )

12. Do you contribute to any retirement/pension scheme?

Yes ( ) No ( )

**SECTION B:**

The questions in the following sections measure income level, expected inflation, individual liquidity preference and financial literacy attributes. Please provide your response by ticking the appropriate box in the table to indicate your response.

**Strongly agree –SA [5]; Agree-A [4]; neither agree nor disagree-N [3] Disagree-D [2]; strongly disagree-SD [1]**

**SECTION B: INCOME LEVEL**

		Strongly agree	Agree	Neither agree /disagree	Disagree	Strongly disagree
	Statement	5	4	3	2	1
1	Taxation does not affect planning for retirement.					
2	A person's consumption (spending) pattern does not affect planning for retirement.					
3	Retirement savings should be progressively set aside during a person's life cycle.					
4	The decision to invest for retirement depends on income level.					

**SECTION C: INDIVIDUAL LIQUIDITY PREFERENCE**

		Strongly agree	Agree	Neither agree/Disagree	Disagree	Strongly disagree
	Statement	5	4	3	2	1
1	It is preferable to hold cash in hand rather than in interest-earning assets such as bonds.					
2	The level of personal debt affects a person's ability to plan for retirement.					
3	High yield/high risk investments are preferable to low yield/low risk investments					
4	Setting aside funds for contingencies affects retirement planning.					



**SECTION D: FINANCIAL LITERACY**

		Strongly Agree	Agree	Neither agree/disagree	Disagree	Strongly Disagree
	Statement	5	4	3	2	1
<b>1</b>	Budgeting is an indicator of thrift and financial discipline					
<b>2</b>	It is preferable to invest in a mutual fund rather than in individual stocks in the stock markets.					
<b>3</b>	It is preferable to invest modest amounts for a long time than huge amounts for a short time to accumulate enough funds for retirement.					
<b>4</b>	Innovative financial products such as credit/debit cards and M-pesa have increased the volume of transactions.					

## SECTION E: RETIREMENT PLANNING

		Strongly agree	Agree	Neither agree/disagree	Disagree	Strongly disagree
	Statement	5	4	3	2	1
<b>1</b>	Old age dependency ratio in Kenya is a phenomenon worth investigating.					
<b>2</b>	People in Kenya plan for their sources of retirement income.					
<b>3</b>	It is common for retirees to look for bridge jobs (part time employment after retirement).					
<b>4</b>	Planning for retirement is a civil duty to ease burden on society.					

### **APPENDIX III: LIST OF SACCOS/SACCO BRANCHES STUDIED**

1. COSMOPOLITAN	46
2. MWALIMU NATIONAL	9
3. UNITAS	15
4. BORESHA	11
5. STIMA	11
6. VISION AFRIKA	12
7. METROPLITAN	6
8. HARAMBEE	7
9. COMPLY	2
10. PARETO	2
11. WANANCHI	5
<b>TOTAL</b>	<b><u>126</u></b>