DETERMINANTS OF GROWTH IN WEALTH OF INVESTMENT GROUPS IN KENYA

MONICAH WANJIKU NDERITU

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Determinants of Growth in Wealth of Investment Groups in Kenya

Monicah Wanjiku Nderitu

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DECLARATION

This thesis is my original work and has not been presented for examination in any other university.

Signature…… Date……..……..

Monicah Wanjiku Nderitu

This thesis has been submitted for examination with our approval as the university supervisors.

Signature…… Date…….

Dr. Agnes Njeru, (PhD)

JKUAT, Kenya

Signature…… Date…….

Dr. Esther Waiganjo, (PhD)

JKUAT, Kenya

DEDICATION

To my late husband Carlos Chege and my children Joy, Mark and Peace who gave me support throughout this research process. My children, let this work be an inspiration to you. Aspire to set goals and strive beyond measure to accomplish them bearing in mind that you can do all things through Christ who strengthens you (Philippians 4:13). He gives power to the faint; and to them that have no might He increases strength (Isaiah 40:29). Behold, He that keeps Israel shall neither slumber nor sleep (Psalms 121: 4).

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LIST OF ABBREVIATIONS AND ACRONYMS

AB	-Asset Base
AGM	-Annual General Meeting
ANOVA	-Analysis of Variance
ASCAS	- Accumulating Savings and Credit Associations
CAPM	-Capital Asset Prising Model
EVA	-Estimated Value Added
GDP	-Gross Domestic product
GOK	-Government of Kenya
IG	-Investment Group
JKUAT	- Jomo Kenyatta University of Agriculture and Technology
KAIG	-Kenya Association of Investment Groups
KMO	-Kaiser-Meyer-Olkin
KNBS	-Kenya National Bureau of Statistics
KWFT	-Kenya Women trust Fund
MMR	-Moderated Multiple Regression
MPT	- Modern Portfolio Theory
NSE	-Nairobi Securities Exchange
OECD	-Organization for Economic Co-operation and development
OLS	-Ordinary Least Square
R & D	-Research and Development
ROE	-Return on Capital Employed
ROI	-Return on Investment
ROSCAs	- Rotating Savings and Credit Associations
SACCO	-Savings and Credit Co-operative Society
SMEs	-Small and Medium Enterprises
SMEP	-Small and Micro Enterprise Programme
SMME	-Small, Micro and Medium Enterprises

SPSS	-Statistical Package for the Social Sciences
USA	-United States of America
USAID	-United States Agency for International Development
WACC	-Weighted Average Cost of Capital
WEF	-Women Enterprise Fund
WOCCU	-World Council of Credit Unions
YEDF	-Youth Enterprise Development Funds

DEFINITION OF TERMS

Capital Structure: Refers to the mix of the different forms of financing employed by firms to finance their business operations (Aggarwal & Kyaw, 2006)

Corporate Governance: Corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders (Organization for Economic Co-operation and development, 2004)

Growth in Wealth: Growth in wealth is increase in assets, net worth, capital, savings, profits and returns of an organisation. (Wickham, 2008). Change in size or magnitude of a firm from one period of time to another. Marked and sustainable increase in assets, market share, profitability, customer base, branch network, capital base, and social impact (Coad, 2009).

Investment Groups (Chama): Any collection of individuals or legal persons in any form whatsoever including but not limited to: societies registered under the Societies Act, Partnerships and Limited Liability Companies, whose objective is the pooling together of capital or other resources with the aim of using the collated resources for investment purposes (KAIG, 2014).

Financial Literacy:	The ability of an individual to use knowledge and skills to manage financial resources effectively. (United States Agency for International Development, 2009).
Portfolio Diversification:	Is the means by which investors minimize or eliminate their exposure to company-specific risk, minimize or reduce systematic risk and moderate the short-term effects of individual asset class performance on portfolio value by investing in different asset classes and securities (Pandey, 2010)
Firm Size	Represents how big or small a firm is; usually in terms of investment in assets, turn-over or employment capacity (Babalola, 2013)

ABSTRACT

In the Vision 2030 under the financial services sector of the economic pillar, capital mobilization to raise funds for investment is expected to play a critical role in the anticipated economic growth. Investment groups are formed with the aim of growing and maximising wealth for the members. However, some have failed making it difficult for them to be sustainable. It is against this background that this study assessed the determinants of growth in wealth of investment groups in Kenya. The study had five objectives which were: To determine the influence of financial literacy on the growth of investment groups' wealth, to establish the influence of portfolio diversification on growth in wealth of investment groups; to establish the influence of capital structure on growth in wealth of investment groups, to examine the influence of group governance on growth of investment groups' wealth and to establish the moderating effect of group size on the relationship between determinants of growth and the growth in wealth of investment groups in Kenya. The study used cross sectional survey research design. The population of interest was 4020 investment groups registered by Kenya association of Investment groups. Stratified random sampling method was used and 364 investment groups were selected proportionate to the size of the strata. The survey instrument was a questionnaire administered to the group members and their officials. Pilot test was done using 36 respondents who were drawn from target population but not be included in the main study sample. Cronbach alpha was used to test reliability of the instrument, factor analysis was used in the testing of construct validity. Descriptive statistics were used which involved computations measures of central tendency and presented in frequency tables, pie charts and graphical charts. Inferential statistics was done using the multiple regression. Inferential analysis involved fitting of regression models which were obtained from the study to show that all the determinants of growth that is financial literacy, Portfolio diversification, capital structure and group governance had significant influence on growth in wealth. A moderated multiple regression was fitted to test the moderating effect of size on the relationship between determinants of growth and growth in wealth. The results showed that size has a significant influence on the relationship between determinants of growth and growth in wealth. The findings and conclusions of this study are of significance to the investment groups. Based on the findings the management can be able to understand the strategies to be taken in order to improve the growth of their investment groups. The agencies who use group model to provide funding like the managers of the Uwezo Fund, Youth Enterprise Fund and Women Enterprise Fund will find the study useful as they will get to know how the growth in wealth is influenced by the study variables. The study therefore recommended that that the groups should apply all the determinants of growth to create the investment groups wealth. This study will empower investment groups with knowledge to ensure their sustainability from within, hence support vision 2030 by widening financial inclusion.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Investment groups are known by different names all over the world. They are referred to as Rotating savings and credit organization (ROSCAS), Merry go rounds and "Chama" in most parts of Africa, solidarity groups in Europe and South America, Christmas clubs and saving circles in the USA (Mehta, Garguillo, & Brown, 2011). An investment group is defined as "Any collection of individuals or legal persons in any form whatsoever including but not limited to; societies registered under the Societies Act, Partnerships and Limited Liability Companies, whose objective is the pooling together of capital or other resources with the aim of using the collated resources for investment purposes" (Kenya Association of Investment Groups, 2012).

Globally, Cooperation among human societies can be traced back to the ancient times when people started to work together to enhance their efficiency in hunting, gathering, shelter construction and other activities. Historians today have discovered evidence indicating cooperation among people in ancient civilizations like Greece, Rome and Egypt. Anthropologists have also uncovered evidence suggesting that Babylonians had practiced cooperative farming, while informal saving and loan associations had been practiced in ancient China (www.umanitobia, 2011).

Investment groups have been around for over one hundred years with the first one on record dating back to the 1800s in western America and they play a very significant role in the economic development of any country as noted by Harrington (2008).Studies done by Pelrine and Kabatalya (2005), Ratner (2010) showed that investments plays an important role in sustaining growth and development of any country. They noted that

high rates of investments depend on high rates of saving and that investing in groups and social organizations is a critical component of long-term economic growth. Harrington (2008) noted that among the most important structural conditions that facilitated the stock market boom of the 1990s was the ease with which individuals who were not finance professionals could form investment associations. According to Bouman (2005), the saving and investment groups involve between 50% to 95% of the adult population in several African countries. (Anderson *et al*., 2003) noted that informal groups which investment groups are part of act as channels by which substantial amount of economic and social activities are carried out. Bouman (1994) classified the functions of informal institutions into three, that is: provision of security or insurance, economic function, and socialization. He adds that the Economic function involves the provision of loans and safekeeping facilities, development works for the community as well as collective investment and this is part of what investment groups are concerned with.

According to FinMark Trust's FinScope survey, there were roughly 37 million people participating in some kind of informal savings group in East Africa as of 2009. In West Africa, Nigeria alone had nearly 41 million people participating in such groups (Napier, 2009). The value these individuals gain from participation in a savings group includes both tangible economic benefits as well as intangible social benefits. Most investment groups have grown to be Micro and Macro enterprises which are the key drivers of economic growth, providing employment, providing market linkages across various sectors, promoting innovation, reducing poverty and contributing to GDP in both developed and developing countries (Cole *et al.*, 2010).

The growth rate of the informal economy considerably has outpaced that of the formal sector causing governments to take a serious look at the potential of the informal and micro and small enterprise (MSE) sectors for driving employment and economic growth as noted by Stevenson and St-Onge (2005). According to Malkamaki (2008) and Gugerty (2005), saving in groups serves many purposes like shared risks; it's a commitment mechanism, being disciplined in saving, ability to secure credit and acquire large assets. Well thought out and managed investment groups offer an opportunity for

members to maximize their returns and grow. The incentive to save is greater when one understand how those saving can reap attractive returns year after year through compounding. “Compounding in financial terms means the ability of an asset to generate earnings, which are then reinvested in order to generate more earning (Wainaina, 2012). Compounding he notes is generating earnings from previous earnings and it creates real value from savings. Investing as a group makes it easier to benefit from the power of compounding and this can lead to investment groups growing and creating wealth. Allowing savings to compound requires patience and taking a long-term view on your investment. Gakigi and Njeru (2015) posits that group approaches to saving can help members save more efficiently and also get quicker access to a larger amount of pooled resources than they would if they saved on their own.

According to Financial Sector Deepening Kenya, (2012) IGs play a vital role in the development of the capital markets and property development besides helping to cultivate a savings culture among the members which is essential to improve the capital base of the country. This leads to financial inclusion. As noted by Atkinson et al. (2012) financial inclusion leads to financial deepening which drives investment, growth, poverty reduction and total factor productivity in the economy. The growth of investment groups would hence lead to financial inclusion and financial deepening. In Kenya of late, there has been a huge uptake of the Investment groups concept by the government, youth, men and women in Kenya as noted by Ogutu (2014).

Investing in groups’ concept is a model that has been embraced by the Government of Kenya for sustainable development as indicated by Uwezo fund, Youth Enterprise Fund, Women Enterprises Fund. The state through the department of social security and services promoted sustainable development by registering community development groups to enable them access government development funds. In 2015 the Government of Kenya (GOK) increased Youth Enterprise Development Fund to Ksh 12.7 billion, WEF to Ksh 6.6 billion and Uwezo fund to Ksh 6.4 billion in the 2015/2016 financial year to be loaned to the youths at low interest rates GOK (2015). This is to assist the youth, women and people living disability to engage in business and thus generate

household incomes ultimately ensuring sustainable development. Wainaina (2012) posits that collective investments are better than individual ones as the risks are shared, and it is also much easier to spread the cost. Wainaina (2012) also noted that Investment groups phenomenon is a sleeping giant with far greater potential for economic growth Large businesses have emerged from these investment groups enabling the membership acquire large assets, undertake large projects that would not have been possible individually. Ogutu (2014) did a study on influence of investment groups on creation of Small and medium Size Enterprises in Nairobi County and found that investment groups highly influence the formation of small and medium enterprises (SMEs). (KNBS, 2013) reported that the microenterprises created over 50% of all jobs and contributed over 40% of the country's GDP. In line with the Vision 2030, the investment groups provide employment and help in the capital formation through encouraging the saving culture.

According to KNBS (2014) the economy gave rise to a total of 799.7 thousand new jobs, in both the formal and informal sectors. FSD (2009) identified four types of informal groups in Kenya as follows; the welfare groups, the Rotating savings and Credit associations, The Accumulating savings and Credit Associations (ASCAS) and Investment groups. Welfare Groups do not intermediate funds but provide financial support for members and their next of kin in the case of illness, death etc. ROSCAs and ASCAs facilitate saving and lending between members, they are similar to each other in the sense that there are both voluntary and independent groups with their own rules, and no outside organisation has control over them.

The central difference between ASCAs and ROSCAs is that each time a ROSCA group meets and savings are collected, the whole pot is then immediately redistributed in the same meeting to one or several members of the groups. ASCAs by contrast lend the funds to willing borrowers and charge interest. The interest paid on the loans then accumulates in the group fund. At the end of the year ASCA members often divide all or part of the profits (from interest payments) to the members. The investment groups are started to mobilize funds for investments. According to KAIG (2014), Investment groups can be registered in various forms. First as a limited liability company this is a

business entity incorporated under the Companies Act, which has a separate legal existence from management and its members (the shareholders). Most investment groups usually take this option usually where the shareholding is limited to a minimum of two members and a maximum of fifty members. Secondly, as general partnership, this is a type of business relationship that has a minimum of two members, and a maximum of thirty. It is recommended that the members register a business name for the group. This allows them to legally engage in any business activities, with minimal legal requirements. Thirdly, as self-help groups, this is where members with a common goal come together and form a self-help group that is aimed at improving their personal welfare.

(FinAccess, 2011) indicate that investment groups make common investments and may offer financial services such as savings and loans to their members. Fourthly, as Co-operative Society (SACCOs), this is where individuals come together with a common goal to pull resources together and bound by a common bond i.e. working from the same institution, are in similar careers or are in a similar locality. They opt to include members who are not in their inner circle and give life to a legal entity that can carry out large investment including lending to members. As financial intermediaries, Sacco's finance their loan portfolio by mobilising members savings and shares rather than using outside capital. The main investment carried out by Sacco's is lending to its members. Kimani (2009) noted that while investment groups are geared towards saving for investment, SACCOs and cooperatives, like pension funds, are legally restricted from pursuing business activities that could risk members' funds.

As noted by Kamau (2009), investment groups are a collection of individuals who come together to pull financial resources with a common goal of investing jointly and share inherent risks. This study will not focus on SACCOs and ASCAS or merry go rounds but investment groups which mobilise funds with the sole purpose of investing and growing wealth. Icharia (2014) notes that the raising costs of living and health care cost, inflation, insecurity of employment, unreliability of pension funds and systems, increase in levels of education, enlightenment on the importance of money and money

management have all resulted in greater attention being paid to wealth creation. Lack of employment alternatives has thrust a growing number of people into self-employment activities to ensure a livelihood. Icharia (2014) posits that Investment groups provide a supportive environment where investors can learn how to invest by sharing knowledge and experience, with the benefit of being in a social club with like-minded people. Investment groups' members typically bring together a diverse collection of people and members take on various roles and responsibilities depending on their strengths and weakness. Collectively investment groups and finance intermediaries control over 60 Billion (860m $) annually, equivalent to 3.7% of Kenya's GDP as noted by Ogutu (2014).

Kenya has the region's most successful investment groups. It is estimated that about KShs 60 billion has been accumulated in savings and investments. Investment groups in Kenya started as informal women groups that were set up as rotating savings and credit associations whereby the members of the Chama would each contribute a fixed amount of money during each meeting and then the total amount would be given to one member. They have since evolved to be more than just a rotating savings and credit association (ROSCAs). Muturi (2012) did a study on determinants of participation in rotating savings and credit associations in urban informal settlements. He noted that Participation in roscas is costly. For example there is the opportunity cost of time spent attending meetings. Moreover, members suffer from the risk of default from other members which could eventually lead to the breakdown of the ROSCA. In IGs the risk of opportunity cost is minimised since the money is invested to generate returns. Investment groups in Kenya have grown from being welfare groups to being investment groups with intent on creating wealth from pooled resources.

According to Capital Markets Authority Capital Markets Authority (2012), these groups have morphed into financial machines that have initiated multi-billion-shilling projects in various sectors of the economy and that Chamas and SACCOs control an estimated Kshs.100 Billion in bank deposits. Fin Access 2009 Survey, a report that provides information on the access of financial services to Kenyans showed 26.8 per cent of the

population sampled use informal financial service. Despite the importance of the investment groups as vehicles of economic growth, most of them unfortunately have a very short lifespan and do not live up to the expectations of founding members. Ogutu (2014) study found that investment groups highly influence the formation of small and medium enterprises (SMEs). This is achieved through resource mobilization, sharing of business ideas, spreading risks and taking advantage of social networks of the group members. SMEs hold the key to rapid technological development and full employment offers a means whereby new employment opportunities can be created (GoK, 2009). This shows that investment groups play a critical role in economic growth. Gakigi and Njeru (2015) did a study on performance of investment groups, their study focused on challenges affecting their performance specifically organisation structures, goal setting and legal frame work as the variables of study. Johnson, malkamaki and zarazua (2009) focused on the role played by informal savings groups in the financial markets in Kenya. FSD Kenya (2008 and 2010) studies highlighted the role of played by investment groups in poverty alleviation and their untapped potential but failed to address the determinants of growth.

Icharia (2014) did a study on factors influencing wealth creation in investment groups in Kenya. This study focused on strategic planning and management as factors influencing wealth creation. The issue of determinants of growth in wealth in investment groups is yet to be addressed despite the existing evidence that lack of growth in wealth threatens sustainability (Agrawal et al., 2002; Adeyemo and Bamire, 2005; Deji, 2005; Asher, 2007; Ogsi, 2001). Olado (2012) in his study on financial practice as a determinant of growth in wealth only focused on SACCOs while this study will focus on investment groups. By reviewing the previous studies no study has been done on the determinants of growth in wealth of investment groups in Kenya and this study will fill this research gap. It is against this background that this study assesses the determinants of growth in wealth of investment groups. This study attributes this to financial literacy, governance issues capital structure and portfolio diversification which are the main variables in this study for the following reasons.

Financial literacy remains an interesting issue in both developed and developing economies, and has elicited much interest in the recent past with the rapid change in the finance landscape. In the last few years, some authors have begun to explore the decision to acquire financial literacy and the links between financial knowledge, saving, and investment behavior including Delavande, Rohwedder, and Willis (2008), Jappelli and Padula (2011), Hsu (2011), and Lusardi, Michaud, and Mitchell (2013). The study by Delavande, Rohwedder, and Willis (2008) presents a simple two-period model of consumer saving and portfolio allocation across safe bonds and risky stocks, allowing for the acquisition of human capital in the form of financial knowledge (à la Ben-Porath, 1967, and Becker, 1975).

These studies note that individuals will optimally elect to invest in financial knowledge so as to gain access to higher-return assets: this training helps them identify better-performing assets and/or hire financial advisers who can reduce investment expenses. A financially literate person knows the most suitable financing and financial management options for his/her business at the various growth stages of his/her business; knows where to obtain the most suitable products and services and interacts with confidence with the suppliers of these products and services USAID (2009). Financially literate people manage resources more wisely; use financial information more astutely thereby improving the profitability of their enterprises (Berman *et al.,* 2008).

Financial literacy also influences the overall access and utilization of a variety of financial services (Nunoo *et al.,* 2010). According to Kimani (2009), ordinary persons understanding of markets is low and people's expectations about the returns are far higher than market can deliver. Most people are still new to investments tools such as the stock market. According to Gallery, Newton and Palm (2011) a deficiency in financial literacy is one of the causes of inertia and suboptimal financial decision-making, the level of financial literacy has a direct effect on the investment choice decisions.

Njoroge (2011) in his study concludes that there is a positive relationship between financial literacy and entrepreneurial success. It further suggests that financial literacy plays a key role in SMEs success both in formal and informal sectors. Eresia and Raath (2013) investigated a possible relationship between SMME owners' financial literacy and business growth, the study was unable to demonstrate that a statistically significant relationship existed between owners' financial literacy and the broad construct of business growth. The second variable of the study is capital structure. Modigliani and Miller (1963), suggests that capital structure can alter the value of a firm in the world of corporate tax and a firm can maximize it value by the use of debt which provides an interest tax shield. A firm has more value if it uses debt financing because debt reduces the corporate tax. The savings due to the use of debt adds to the value of the firm. The firm that uses more debt saves more in the form of corporate tax shield. This suggests that debt is a preferable source of financing for less taxation is laid on debt. Olando (2012) posits that the capital structure which optimizes the requirements of the shareholders and the financial requirement of the organisation needs to be maintained and should be compatible with the interest of other stakeholders. He adds that capital structure should be in a position to maximize returns without additional costs.

According to Pandey (2010) the best optimal capital structure is the one that yields the minimum weighted average cost of capital (WACC). In the investment group, capital is mainly from the contribution of members to the pool to be able to invest together. Disposal of assets is also a source of funds to the investment group. Debt capital is fund borrowed from other institutions or individuals such as banks, non-bank financial institutions and well-wishers. It normally carries a fixed rate of interest payable at specified times of the year. Debt capital requires some prudent management and the purpose of the loan must be clear**.** Importantly, debt capital is a cheaper source of finance though it involves a considerable risk in case the investment group is unable to meet the set obligations of repayment and financial commitment Olando (2012). The investment group may also get finances from other avenues like the Uwezo fund, Women enterprise fund and youth funds. Under this variable the objective was to

determine the effect of capital structure on the growth of investment groups' wealth. The other variable of study is governance. Klapper and Love (2004) have defined corporate governance as rules, practices and processes that direct and control an organization be it private or public. According to OECD (2004), corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders. The word governance is used in a variety of contexts, but at a general level, it refers to all forms of social coordination and patterns of rule (Bevir, 2013). Ali *et al.* (2003) noted that companies that demonstrate good corporate governance and have sustainable business policies will usually generate superior financial benefits for their shareholders. The appropriate measures required for good corporate governance would be based on good engagement with the organization, shares price monitoring, regular addressing of systemic risks and opportunities in order to align business objectives with long-term interests of investors.

Governance in this study shall be through the lenses of corporate governance which describes the manner in an investment group is governed to achieve its goals. This study will therefore find out the effect of governance on growth in wealth of investment groups. Optimal portfolio of assets is crucial to maximizing return and minimise risk. Informed decision making on investment would help avoid risky, low return yielding assets. Njiru (2006) observed that through proper risk management and portfolio management process an investor is able to maximize his returns through proper asset allocation and constant performance evaluation of his portfolio of assets.

According to Markowitz portfolio theory (1952, 1959), CAPM theory by Sharpe (1964), Litner (1965), Mossin (1966), it's possible to establish an optimal portfolio of assets that will maximize returns and minimize risk subject to an investor's utility function. This is done by combining risk free assets and risky assets and then operating on a security market line or the capital market line at the point of tangency with the Markowitz efficient frontier if the market is at equilibrium. According to Ikaria (2012) investment groups have diversified their investments from buying shares at the Nairobi Securities Exchange (NSE) to making other capital intensive investments in real estate, export and

import business, among others. The dependent variable of the study was growth in wealth. One of the objectives of any business organization is to maximize shareholders wealth Pandey (2010). All firms, including Investment groups, are established to achieve certain goals. John Pender, (2012) define wealth comprehensively, as the stock of all assets, net of liabilities, that can contribute to the well-being of an individual or group. Wickham (2008), views business growth from four interdependent perspectives: financial, strategic, structural and organisational. This study will focus on financial growth of the investment group and how it is influenced by the study variables.

1.2 Statement of the Problem

Investment clubs make up the backbone of the Kenya's economy and play a vital role in the development of the capital markets and property development, creation of employment amongst other things (FSD Kenya, 2012). In the Vision 2030 under the financial services sector of the economic pillar, capital mobilization to raise funds for investment is expected to play a critical role in the anticipated economic growth. Investment groups play a critical role in resource mobilisation and experience has shown that group approaches to saving can help members save more efficiently and get quicker access to a larger amount of pooled resources than if one saves on their own Gakigi and Njeru (2015). Investment groups as noted by Wainaina (2012) are such realistic, credible vehicles that can lead individuals to collectively save, mobilise local capital, invest and generate wealth.

In Kenya Lately, there has been a huge uptake of the Investment groups concept by the government, youth, men and women in Kenya as noted by Ogutu (2014). Investing in groups' concept is a model that has been embraced by the Government of Kenya for sustainable development as indicated by Uwezo fund, Youth Enterprise Fund, Women Enterprises Fund and Matatu SACCOs. The ministry of labour, Social security and services continued to improve livelihoods and social economic empowerment of the people of Kenya by registering 35,000 self- help groups that continue to benefit from funding opportunities. The ministry of interior and coordination of national government

facilitated disbursement of Ksh 3.2 Billion from Women enterprise fund to all 290 constituencies. The Ministry of devolution through the Uwezo fund issued interest free loans to 14,986 youth groups, 26,838 women groups and 977 groups of persons with disability in 290 constituencies totalling to Ksh 5,354,400,000 (GOK, 2015). The purpose of forming investment clubs according to Malkamaki (2008) study was business orientation 72.6%, to buy assets 35%, to exchange business ideas and network 26% and to receive lump sum finance 17.2%. Capital Markets Authority (CMA) observed that Investment groups have morphed into financial machines that have initiated multi-billion-shilling projects in various sectors of the economy and that Chamas and SACCOs control an estimated Kshs.100 Billion in bank deposits. Despite this importance, most of these groups have failed to grow their wealth which has threatened their sustainability. According to KAIG (2013), many Investment groups that are not successful and will fail within their first year or so of operation. The reasons for this according to Gichane (2012) include among others; lack of member commitment, failure to come up with new investment strategies, lack of capital, lack of trust among members, lack of proper guidance in investing and discord amongst members on the running of group, the lack of investing knowledge, differences over investment strategy and risk appetite, lack of managerial skills and dispute resolution mechanisms.

Ogutu (2014) did a study on Influence of Investment Groups on Creation of Small and medium Size Enterprises in Nairobi County and found that investment groups highly influence the formation of small and medium enterprises (SMEs). SMEs hold the key to rapid technological development and full employment offers a means whereby new employment opportunities can be created (GoK, 2009). This shows that investment groups play a critical role in economic growth. (Gakigi & Njeru 2015) did a study on performance of investment groups, their study focused on challenges affecting their performance specifically organisation structures, goal setting and legal frame work as the variables of study. Johnson, malkamaki and zarazua (2009) focused on the role played by informal savings groups in the financial markets in Kenya. FSD Kenya (2008 and 2010) studies highlighted the role of played by investment groups in poverty

alleviation and their untapped potential. Icharia (2014) did a study on factors influencing wealth creation in investment groups in Kenya, this study only focused on strategic planning and management as factors influencing wealth creation. Agrawal *et al*. (2002; Adeyemo and Bamire, (2005); Deji, (2005); Asher, (2007); Ogsi, (2001) observed that lack of growth in wealth threatens sustainability. Gichuru (2014) did a study on investment groups that focused on strategic planning aspects only. Olado (2012) in his thesis on financial practice as a determinant of growth in wealth only focused on SACCOs. From the reviewed empirical literature, it is evident that lack of growth in wealth threatens sustainability. Factors contributing to success or failure of investment groups are multifaceted. Moreover, these studies evaluated just a handful of determinants of growth. This study therefore will focus on determining the influence of financial literacy, portfolio diversification, capital structure and group governance on growth in wealth of investment groups in Kenya. If Investment groups build wealth this will have far reaching effects on economic growth of the country and achievement of vision 2030 and this study aims to contribute to this. The study focused on investment groups which are registered by KAIG which is the umbrella body and 364 groups were selected using stratified random sampling.

1.3 Objectives of the study

The study was directed by general objective and the specific objectives.

1.3.1 General objective

To establish the determinants of growth in wealth of investment groups in Kenya.

1. 3.2 Specific Objectives

The specific objectives were:

1. To establish the influence of financial literacy on growth in wealth of investment groups in Kenya.

2. To determine the influence of portfolio diversification on growth in wealth of investment groups in Kenya.
3. To establish the influence of capital structure on growth in wealth of investment groups in Kenya.
4. To examine the influence of group governance on growth in wealth of investment groups in Kenya.
5. To determine the moderating effect of group size on the relationship between the determinants of growth in wealth and growth in wealth of investment groups in Kenya.

1.4 Research Hypotheses

$H_{01:}$ Financial literacy has no significant influence on growth in wealth of investment groups in Kenya.

$H_{02:}$ Portfolio diversification has no significant influence of on growth in wealth of investment groups in Kenya.

$H_{03:}$ Capital structure has no significant influence of on growth in wealth of investment groups in Kenya.

$H_{04:}$ Group governance has no significant influence of on growth in wealth of investment groups in Kenya.

H_{05}: Group size has no significant moderating effect on the relationship between the determinants of growth and growth in wealth of investment groups in Kenya.

1.5 Significance of the Study

This is study is of significance to the following:

1.5.1 Investment Groups management

The findings and conclusions of this study are of significance to the Investment groups. They are able to appreciate how growth in wealth of their groups is influenced by the study variables. Based on the findings the management is also able to understand the strategies to be taken in order to improve the growth of the respective investment groups.

1.5.2 Investment group members

The group members can use the findings of this study to appreciate the factors affecting growth of their groups. This makes them more informed especially in their contributions on the directions they would desire the management to take in improving profitability and other performance indicators.

1.5.3 Government policy makers

The achievement of Vision 2030 is heavily dependent on the groups' empowerment through profitable investments. If investment groups growth in wealth has far reaching effect on the economic growth of the country. This study has policy implications and recommendations which can be used by government policy makers in structuring policies to create an enabling environment to investment groups operations in the country.. The study will also be useful to the government agencies that use the group approach to disperse funds. Organisations like KAIG, Uwezo Fund managers, Women Enterprise Fund Managers and Youth Enterprise Managers will have information that they can utilize to ensure better operations of the Investment groups.

1.5.4 Scholars

This study identified research gaps for further studies and Scholars will use this study for further research.

1.6 Scope of the Study

This study focused on the determinants of growth in wealth of investment groups in Kenya. The study covered the large investment groups, medium investment groups and small investment groups. The sample was drawn from 4020 investment groups registered by KAIG which is the umbrella body of all the investment groups. The scope was limited to the stated objectives of the study that is; financial literacy, Capital structure, Portfolio diversification and Governance. Stratified random sampling was used to select 364 investment groups proportionate to the size of the strata. The period for conducting the research was from November 2014 to October 2016.

1.7 Limitations of the study

The study had the following limitations; it focused on investment groups registered by KAIG and also considered five variables as the determinants of the growth in wealth of the investment groups whereas there could be other determinants. Also, the study was not able to carry out a census of all investment group members but instead sampling was used. Due to the limitations of using samples, care was taken to ensure that the sampled respondents are representative of the population in order to arrive at reliable generalizations.

Accessing information from the investment groups was a difficult task because they were not very willing to give information owing to the sensitivity of the information which is restricted to group members and some groups do not publish their financial statements. This was mitigated by re-assuring the investment groups' members that all the information derived from the study would be treated with courtesy and any information which would be shared would be strictly for academic purposes. Having had the introductory letter from the university and NACOSTI also mitigated the problem.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter contains a broad review of literature related to the issues and variables under study. It contains the theoretical review, conceptual framework, empirical review, critique of existing literature, research gap and the summary.

2.2 Theoretical Framework

A theory is a set of systematic interrelated concepts, definitions and propositions that are advanced to explain and predict phenomena (Cooper & Schindler, 2011). There are various challenges to growth in wealth. For the purpose of this study the determinants of growth in wealth assessed included financial literacy, portfolio diversification, capital structure and governance. These determinants are reviewed and guided by the following theoretical framework and model: financial literacy theory; capital structure theories; portfolio diversification theory and governance theories. These theories are summarized as follows:

2.2.1 The Dual –Process Theory.

This theory posits that financial decisions can be driven by both intuitive and cognitive processes which mean that financial literacy may not always yield optimal financial decisions. The Dual Process Financial literacy theory argues that the behavior of people with a high level of financial literacy might depend on the prevalence of the two thinking styles: intuition (system 1) and cognition (system 2) (Lusardi & Mitchell, 2011; Glaser & Walther, 2013). Intuition is the ability to acquire knowledge without inference or the use of reason. Intuition provides views, understandings, judgments, or beliefs that

cannot be empirically verified or rationally justified. Taylor (1981) as cited by Chan and Park (2013) asserts that individuals who rely on intuition prefer to use mental short cuts as they make decisions which tend to be largely influenced by their emotions. Glaser and Walther (2013) point out that the positive effect of financial literacy on reasonable investment decisions is diminished by a high prevalence of intuition. Therefore, increased use of intuition results to sub optimal investment decisions. Cognition on the other hand is the process by which the sensory input is transformed, reduced, elaborated, stored, recovered, and used. Cognition is the mental processing that includes the comprehending, calculating, reasoning, problem solving and decision making (Chan, & Park 2013). High cognition individuals enjoy thinking, are analytical and are better at retaining information and more likely to search out new information. They are more likely to be influenced by a relevant message and not by irrelevant information such as endorser's appearance or use of humor (Chan & Park, 2013). Since the need for cognition triggers the use of analytical process, it can directly shape investment portfolio composition. Such investors will therefore more likely use the systematic approach of capital budgeting when evaluating investment opportunities and are more likely to diversify investments compared to those with a low need for cognition.

Dual process theories imply that individuals who are high on cognition will seek out for information and are more likely to be influenced by a relevant message. This means that their decision making skills can be boosted by financial literacy training using simple easy to understand methodologies. Moreover, use of intuition may be reduced by provision of relevant information to support decision making through financial education since individuals tend to rely on intuition where relevant information is lacking. However optimal results may not be achieved where individuals trust their intuitions in decision making.

As operationalized in academic literature, financial literacy is a multi-dimensional construct addressing knowledge of financial products, knowledge of financial concepts, having the mathematical skills or numeracy necessary for effective financial decision making and financial behavior such as financial planning (Wise, 2013). Economic

psychologists posited that factors associated with retirement saving and asset ownership behaviors are both economic and psychological DeVaney *et al*. (2007). Several behavior theories have also been used in the study of financial literacy and financial behaviors. Hilgert *et al.* (2003) formed a financial practice index based upon self-benefiting behavior in cash-flow management, credit management, saving and investment practices and established that there was a positive correlation between financial literacy scores and 0 Index scores thus confirming that financial knowledge is related to determinants of growth. The theory of planned behavior, often used to understand and predict human behavior, has been applied to online shopping behavior, investment behavior and debt reducing behaviors (Xiao, 2008).

Literature has established a correlation between financial literacy and several different financial behaviors and outcomes such as paying bills on time, tracking expenses, budgeting, paying credit card bills in full each month, saving out of each paycheck, maintaining an emergency fund and diversifying investments (Hilgert et al., 2003). Other research has found that financial literacy is positively correlated with planning for retirement, savings and wealth accumulation, market participation and better financial diversification (van Rooij, et al., 2011, Lusardi et al., 2006; 2007). In this study, financial literacy theory was used to examine the effect of financial literacy on the growth in wealth of investment groups.

2.2.2 Trade-off Theory

The trade-off theory which clearly dominates the literature on capital structure claims that a firm‟s optimal financing mix is determined by balancing the losses and gains of debt financing. This theory that pioneered from the work of Modigliani and Miller (1963) followed the heavy criticism levelled against their irrelevance theory on account of their perfect market assumptions. By accepting that taxes exist in the real world arbitrage activities are not always sustainable, the authors showed that capital structure indeed affected the corporate market value. By incorporating the effects of corporate taxes and relaxing the assumption on existence of arbitrage, they argued that interest on

debt; being tax deductible provides extra cash flows to the levered firm in form of interest tax savings; that increases the market value of the firm. The theory therefore contended that in situations of permanent debt, constant cost of debt and static marginal tax rate, leveraged firms have more market value than unlevered firms. This is attributed to the present value of interest tax shield associated with debt financing. Jensen and Meckling (1976) introduced the agency costs dimension to this hypothesis by suggesting that although debt brings forth specific advantages to the firm, it also increases the associated agency costs. The author opined that agency costs emanate from the principal-agent conflicts that exist between the debt-holders, shareholders and managers. They argued that on one hand, the managers may not be fully dedicated to maximizing shareholders wealth but rather may serve their own interests; resulting to wastage of the free cash flow through perquisites and sub-optimal investments. On the other hand, shareholders may engage in unprofitable investment on account of their limited liability status to the firm. To mitigate upon the potential losses that may result from these activities, debt-holders constantly engage the services of professional analysts and introduce debt covenants and restrictions. These mechanisms constitute additional agency costs to the firm that offsets the benefits occasioned by debt financing and reduces the firm value.

Myers (1977) introduced the costs of bankruptcy dimension by suggesting that although debt financing benefits the firm through tax-shield cash flows, the benefits from use of debt are not infinite. The author argued that other than the agency costs, debt introduces the risk of bankruptcy which is associated with the possibility of defaulting on debt repayment. He theorized that as a firm uses more debt, the financial risk increases and equity-holders become less motivated to provide more capital to the firm. Further, stockholders demand higher rate of return in terms of dividends pay-out ratios as a compensation for bearing more risk. Similar to equity-holders, debt holders become are less enthusiastic to provide additional capital or demand high rates of interest on debt; which further increases the rate of cash outflow on the firm. By combining the theoretical effects of agency costs and bankruptcy risk, the theorist concluded that the

tax-shield benefits afforded by debt to the firm are offset by the present values of bankruptcy and agency costs.Effectively, the theory postulates that as debt levels increases, the firm value also increases proportionately until a certain point where further increase in debt use increases both agency costs and bankruptcy costs and reduces the firm value. In contrast to the irrelevance theory, the trade-off theory proposes moderate gearing levels. Furthermore, it plausibly substantiates the existence of an optimal or target capital structure that firms gradually try to achieve and maintain in order to increase shareholder wealth (Brounen, De Jong, & Koedijk, 2006). According to Hovakimian, Hovakimian, and Tehranian (2004), a value-maximizing firm facing a low probability of financial distress should use debt to full capacity. Different variations of trade-off models have been provided in literature taking even more factors into account. For example, Auerbach (1985) created and tested an adjusted trade-off model and arrived at the conclusion that risky and fast-growing firms should borrow less.

Furthermore, Fischer, Heinkel, and Zechner (1989) conducted a study with a variety of rich specifications arguing that capital structure also depends on restrictions in the debt-contracts, takeover possibilities and the reputation of management. However, none of these theoretical and empirical further developments have managed to fully replace the traditional version. So most researchers still refer to the original assumptions described above when testing the trade-off theory. The implication of the trade-off theory is that Modigliani and Miller (1963) showed that the benefit of debt is primarily the tax-shield effect that arises due to the deductibility of interest payments.

Myers (1977) combined this model with the bankruptcy cost framework of Kraus and Litzenberger (1973) and Scott (1976) to come up with the classic static trade-off theory where the costs of debt are mainly associated with direct and indirect costs of bankruptcy. These include legal and administrative costs and more subtle costs resulting from the loss of reputation among customers and the loss of trust among staff and suppliers due to uncertainties. However, the consensus view is that bankruptcy costs alone are too small to offset the value of tax shields and additional factors must be

included in a more general cost-benefit analysis of debt (Ju, Parrino, Poteshman, & Weisbach, 2005). For that reason, the agency costs framework of Jensen and Meckling (1976) that is also considered in the trade-off model. The relevance of this theory to the study is that it provides for explicit understanding of how debt financing increases the firm value through the tax-deductibility feature associated with borrowing. In addition, the theory introduces the of agency costs as well as costs of financial distress the capital structure concept and shows how capital structure may negatively influence the firm by increasing the agency costs associated with borrowing.

2.2.3 Pecking Order Theory

Myers and Majluf (1984) introduced the information asymmetry dimension to the pecking order hypothesis proposed earlier by Donaldson (1961). They argued that existence of information asymmetries between the firm and providers of capital causes the relative costs of financing to vary between the different sources. For instance, an internal source of finance where the funds provider is the firm will have more information about the firm than external financiers such as debt holders and equity holders thus, these outsiders will expect a higher rate of return on their investments. This means that it costs the firm more to obtain external capital than using internal funds. Another dimension of presenting the information asymmetry effect on financing is that in normal circumstances, the insiders who constitute the managers and directors have more knowledge about the firm than outsiders with regard to the firm‟s earning potential.

This inadequate information among the outsiders makes them to undervalue the firm. Based on the assumption that managers act in favor of the interest of existing shareholders, they refuse to issue undervalued shares unless the value transfer from existing to new shareholders is more than offset by the net present value of the growth opportunity. This leads to the conclusion that new shares will only be issued at a higher price than that imposed by the real market value of the firm. Therefore, investors interpret the issuance of equity by a firm as signal of overpricing. If external financing is

unavoidable, the firm will opt for secured debt as opposed to risky debt and firms will only issue common stocks as a last resort. Myers and Majluf (1984), maintain that firms would prefer internal sources to costly external finance. Thus, according to the pecking order hypothesis, firms that are profitable and therefore generate high earnings are expected to use less debt capital than those that do not generate high earnings. If internal funds are not sufficient, the managers will issue debt first so as to safeguard the existing shareholders against the diluting effect.

Hence, they will only issue external equity when they are convinced that the market has fully appreciated the firm‟s potential in which case the external equity would be overvalued. In contrast with the trade-off theory, this theory considers interest tax shields and the potential threat of bankruptcy to be only of secondary importance. The theory contend that gearing ratios are adjusted when there is a need for external funds which results from the imbalance between internal cash flow, net of dividends, and real investment opportunities (Shyam-Sunder & Myers, 1999). This means that only firms whose investment needs exceeded internally generated funds would borrow more debt.

According to Myers (2001), under the pecking order proposition, each firm's debt ratio is therefore a reflection of its cumulative requirement for external financing and profitable companies with limited growth opportunities would always use their cash surplus to reduce debt rather than repurchasing shares. The theoretical implication of pecking order theory is that there exists a clear financing hierarchy and there is no well-defined target debt ratio as suggested under the trade-off theory. This theory provides for preference to use of internal funds in place of external funds that encapsulate debt and equity in an effort to preserve value and firm stability. The implication is that increased use of external capital such as debt and equity influences the firm value negatively and increases the chances of financial distress.

2.2.4 Modern Portfolio Theory

This model was developed by Harry Markowitz (1952, 1959). His major contribution was that of showing the relationship between risks and returns unlike earlier research that treated the two separately. He showed that the expected risk measure of returns was the variance of expected returns by assuming that Investors seek to maximize one period expected utility subject to diminishing marginal utility, estimating their portfolio risks on the basis of variability of portfolios return that is variance or standard deviation of returns only. He also assumed that investment alternatives are represented by distribution of expected returns over some holding period and that Investors base decisions on expected returns and risks. For all levels of risks, investors prefer higher returns to lower returns given the level of risk or given the level of expected rate of return they prefer lower risks than higher risks. According to this theory, the expected return to a portfolio is the weighted average of expected return for individual investment in the portfolio. Standard deviation of a portfolio is the covariance of the rates of return for all the pairs of assets in the portfolio as shown below.

Covariance of return is the degree to which returns of the asset and another asset move together relative to their individual mean values over time. Balancing risk and returns is a cornerstone of modern portfolio theory. Markowitz's (1952) seminal work derived measures for calculating expected returns and expected risk of a portfolio. He presented variance as a meaningful measure of risk, and created a method of calculating the overall portfolio risk taking into account the imperfect correlation of price movements between assets.

Variance is a statistical measure of how widely disbursed a set of probability outcomes are around its mean value. When combining multiple assets that are less than perfectly correlated, the combined variance of the portfolio reduces. Markowitz's work into calculating these measures at a portfolio level allows today's investors to quantify the relationship between risk and return rather than relying on the investor's best guess. Markowitz makes a number of important assumptions Reilly and Brown (2009): Each

asset has a set of probable outcomes which can be thought of as a probability distribution. Investors aim to maximise their single period utility of wealth. Investors are risk averse that is, they have diminishing marginal utility of wealth. Investors can estimate risk based on the variability of returns. Investors only base their investment decisions on the first and second moments of the distribution expected return and variance.

For any given level of risk (or variance), the investor prefers a higher expected return. Similarly, for any given expected return, the investor prefers a lower level of risk. Markowitz (1952) proposed a set of quantitative tools for prescribing how investors should combine their financial assets to maximize return for a given risk as measured by the standard deviation thus emphasizing on the nature and mix of assets to be held. A central aspect of MPT is that every investor should hold an optimal portfolio that is well diversified. Diversification requires that investors randomly choose the assets they invest in. The theory has been criticized on the ground that investors evaluate an investment opportunity based on the value they are likely to get and not how it affects their overall wealth. Many investors do not know their total portfolio risk or the interrelationships among the assets and consider many factors other than risk diversification in building up their portfolio.

The development of MPT and the Capital Asset Pricing Model (CAPM) provided a theoretical framework that could be applied to meet the challenges of performance measurement. Treynor (1965), Sharpe (1966), and Jensen (1968) were the first to realize the potential applications of MPT and CAPM for investment performance. The Treynor index is calculated using excess returns on the fund where the excess return on the fund is scaled by the beta of the fund and not the funds' standard deviation of returns. The Jensen‟s Alpha is a reward to risk measure which borrows from the capital asset pricing model (CAPM) and it assumes that every investor holds a diversified portfolio therefore only the non-diversifiable market-related risk affects portfolio performance. Jensen‟s Alpha uses only systematic risk for scaling a portfolio's return.The Sharpe ratio is a risk-adjusted measure developed by the Nobel Laureate William Sharpe. The Sharpe ratio is

determined using standard deviation and excess returns to come up with the reward per unit of risk. In theory, any portfolio with a Sharpe index greater than one is performing better than the market benchmark. Unlike the other measures of performance above, the Sharpe ratio does not make any assumptions about the nature of the distribution of the portfolio returns and therefore it can be used even when the portfolio returns do not follow a normal distribution. According to Pandey (2005) an efficient allocation of capital is the most important finance function in the modern times. It involves decisions to commit the firm's funds to the long term assets. Investment decisions are of considerable importance to the firm since they tend to determine its value by influencing its growth, profitability and risks. Investment decisions require special attention because of the following reasons: they influence the firm's growth in the long run, they affect the risks of the firm, they involve commitment of large amount of funds, they are irreversible or reversible at substantial loss and they are among the most difficult decisions to make. In conventional financial theory, investors are assumed to be rational wealth maximisers, following basic financial rules and basing their investment strategies purely on the risk return consideration as the factors expected to influence investment decisions (Baker *et al.*, 1977).

In this study, portfolio theory was used to examine the effect of portfolio diversification on the growth in wealth of investment groups. This theory addresses the portfolio diversification variable. The modern portfolio theory demonstrates that organizations manage their businesses on a portfolio basis. With assumptions that investors are homogenous and risk averse, they have to be motivated to invest, they need a rate of return that will compensate them for taking on the risk at the end of period of holding given asset(s). It is therefore important for investment groups to deploy prudent investment practices in order to instill control within the various portfolios with a target of maximizing returns on each portfolio.

2.2.5 Agency Theory

Most studies on corporate governance have been based on agency theory perspective this is because corporate governance has a root in agency theory (Filatotchev & Wright 2011). The principal-agent relationship originates when a principal hires an agent to perform a service or to act on his behalf (Jensen & Meckling, 1976). Managers in a firm are agents of shareholders who assume that the principle guiding them are those geared towards maximization of shareholders wealth. However, there are three factors that disturb this relationship. In the first place, there is conflict of interest between the principal and the agent. The agents may strife to maximize their own utility at the expense of the principals, secondly, the presence of a high level of information asymmetry between the principal and the agent and the possibility that the agent can take advantage of this information asymmetry to enrich themselves and lastly the inability of the principal to ensure that the agent acts in compliance with his or her interests that makes it impossible or too expensive for him or her to monitor the efforts of the agent. The divergence behavior between the interests of the principle and those of the agent give rise to agency costs. The idea behind agency theory is to select whatever mechanism that will regulate the relationship between the agent and the principal in a manner that will ensure alignment of the interests of the two parties leading to reduction of agency costs. These mechanisms may take form of contracts that may be implied or written that are based on a number of assumptions about: people (self-interest, limited rationality and risk aversion), organizations (goal conflict between organizational members) and information (non homogeneous that can be acquired at a certain cost).

2.2.6 Stewardship Theory

Stewardship theory replaces absence of trust in agency theory with respect to authority and fondness to ethical behaviors geared at boosting firm performance (Clarke, 2004). The ultimate intention that drives managers to accomplish their jobs is underlined in their desire to perform satisfactorily. Managers are conjured up as being motivated by: the need to achieve, the need to gain intrinsic satisfaction through successfully

performing challenging tasks and the need to exercise responsibility and authority that makes them gain recognition from their peers and seniors (Donaldson & Davis, 1991). The main objective bestowed on managers in a firm is primarily to maximize shareholders wealth. It is widely acknowledged that, this objective can well be achieved when firms under their management perform exemplarily well.Davis *et al.* (1997) contend that managers left on their own will act as responsible stewards of the company's assets under their control. Stewardship theorists further argues that there is need for organizations to put in place structures that allow harmonization of objectives that managers and shareholders of firms need to achieve if superior performance is to be realized. From the theories above, the attitude towards risk is the same (risk aversion). Based on the objective of each of these theories, one realizes that they are all relevant as they are all geared towards shareholders wealth maximization- a classical objective of finance on which this study is anchored.

2.2.7 Growth in wealth theory

Growth in wealth can be based on endogenous growth theory or neo-classical growth model. The neo-classical growth theory argues that the rate of growth is exogenously determined using the Harrod Damar model or Solow model. Solow-Swan class growth theory focuses on capital and labour indicates that capital is added when the investors invest but is lost due to the depreciation. The conclusion is that there is capital growth in wealth only when the investment exceeds depreciation Gartner (2006). That increase in capital yields leads to an increase in growth in wealth of investors. The theory explains growth as a factor of accumulation of capital or increase in capital. This model is strongly supported by Harrod Damar (1946) Model of development economics which explains the growth rate in terms of saving and productivity of capital. It explains that increase in investment leads to accumulation of capital which leads to growth in wealth. Wainaina (2014) states that wealth can be created through compounding. Compounding works through re-investing all your profits to generate more returns. This creates a long-term return on wealth. It is also possible for an investment group to outlive the investor and benefit the next generation especially if it is a limited company. Wickham (2008)

views business growth from four interdependent perspectives: financial, strategic, structural and organisational. These are contained in Wickham's model of the dynamics of business growth (see figure 2.1). A business owner has to consider all of them when planning for growth. The neglect of one element could cause business failure or lead to other problems (Nieman and Nieuwenhuizen, 2009). Strategic growth relates to changes that take place in the way in which the organisation interacts with its environment as a coherent strategic whole. Primarily, this is concerned with the way the business develops its capabilities to exploit the market.

According to Wickham (2006) it is associated with the profile of opportunities which the business exploits and the assets, both tangible and intangible, it acquires to create sustainable competitive advantages. Structural growth relates to the changes in the way the business organises its internal systems, in particular, managerial roles and responsibilities, reporting relationships, communication links and resources control systems (Wickham).This study utilises measures of structural growth as proposed by Wickham (2006), that is: Changes in number of employees; and Changes in the size and/or location of business premises. Organisational growth relates to the changes in the business's processes, culture and attitudes as it grows and develops. It is also concerned with the changes that must take place in the owner's role and leadership style as the business moves from being a 'small' to 'large' firm (Wickham, 2006).

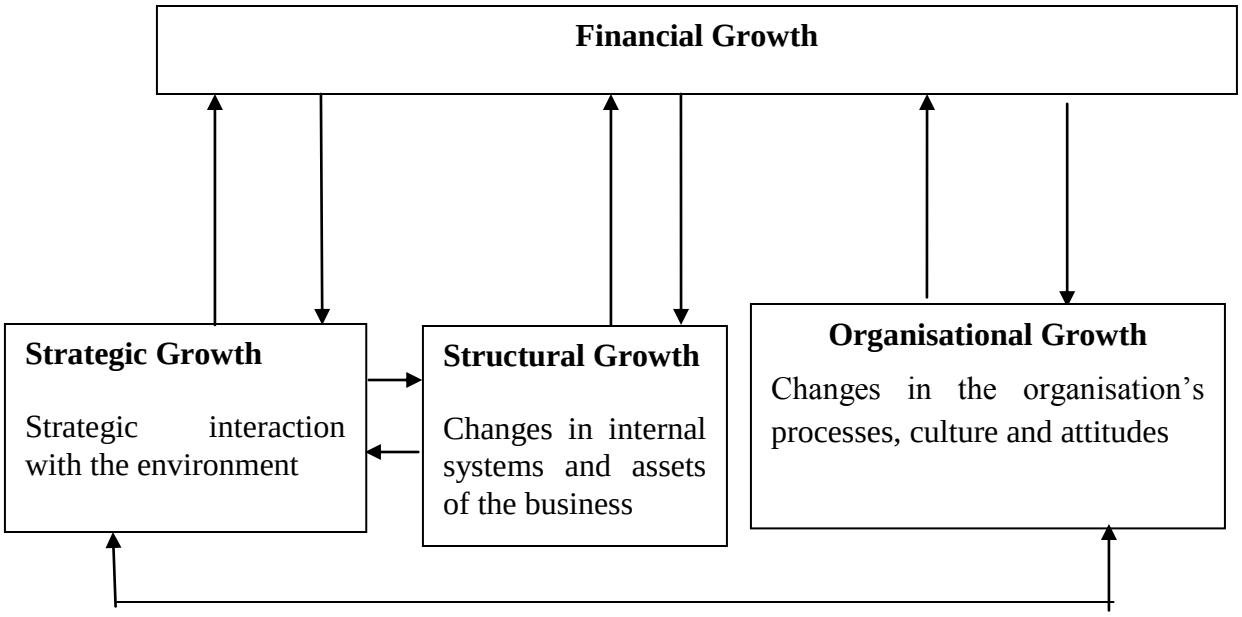

Figure 2.1: Dynamics of business growth (Wickham, 2008)

2.3 Conceptual Framework

Conceptual framework as explained by Kombo and Tromp (2009) is an abstract or a general idea inferred or derived from specific instances. In his contribution to the discourse on concept, Symth (2004) cited in Mark Saunders *et al.* (2009) advanced that, concept unlike theory; does not need to be discussed to be understood. Kombo and Tromp (2009) thus said, a conceptual framework is a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation. A conceptual framework explains the study variables and the presumed relationships among them (Miles *et al*., 1994).

Mugenda (2008) adds that it is a concise description of the phenomena under study accompanied by graphic or visual depiction of the major variables of the study. The conceptual framework developed for this study was drawn from various theoretical perspectives which include financial literacy, corporate governance theory, Modigliani and Miller and agency theory. The study sought to address one broad research objective

to investigate the determinants of growth in wealth of investment groups. To address this the main research objectives were formulated namely; To determine the influence of financial literacy on growth in wealth of investment groups; to determine the influence of Capital structure on growth in wealth of investment groups, to determine the influence of governance on growth in wealth of investment groups and to examine the Influence of portfolio diversification on growth in wealth of investment groups. The conceptual framework below shows that all the variables are conceptualized as multi-dimensional constructs. Multidimensional constructs are widely used to represent several distinct dimensions as a single theoretical concept. Multi-dimensional constructs provide holistic representations of complex phenomena, thus allowing researchers to match broad predictors with broad outcomes, and increase explained variance (Edwards, 2001).

The study sought to address one broad research objective to investigate the determinants of growth in wealth of investment groups. To address this the main research objectives were formulated namely; To determine the influence of financial literacy on growth in wealth of investment groups; to determine the influence of portfolio diversification on growth in wealth of investment groups, to determine the influence of capital structure on growth in wealth of investment groups and to examine the Influence of group governance on growth in wealth of investment groups.

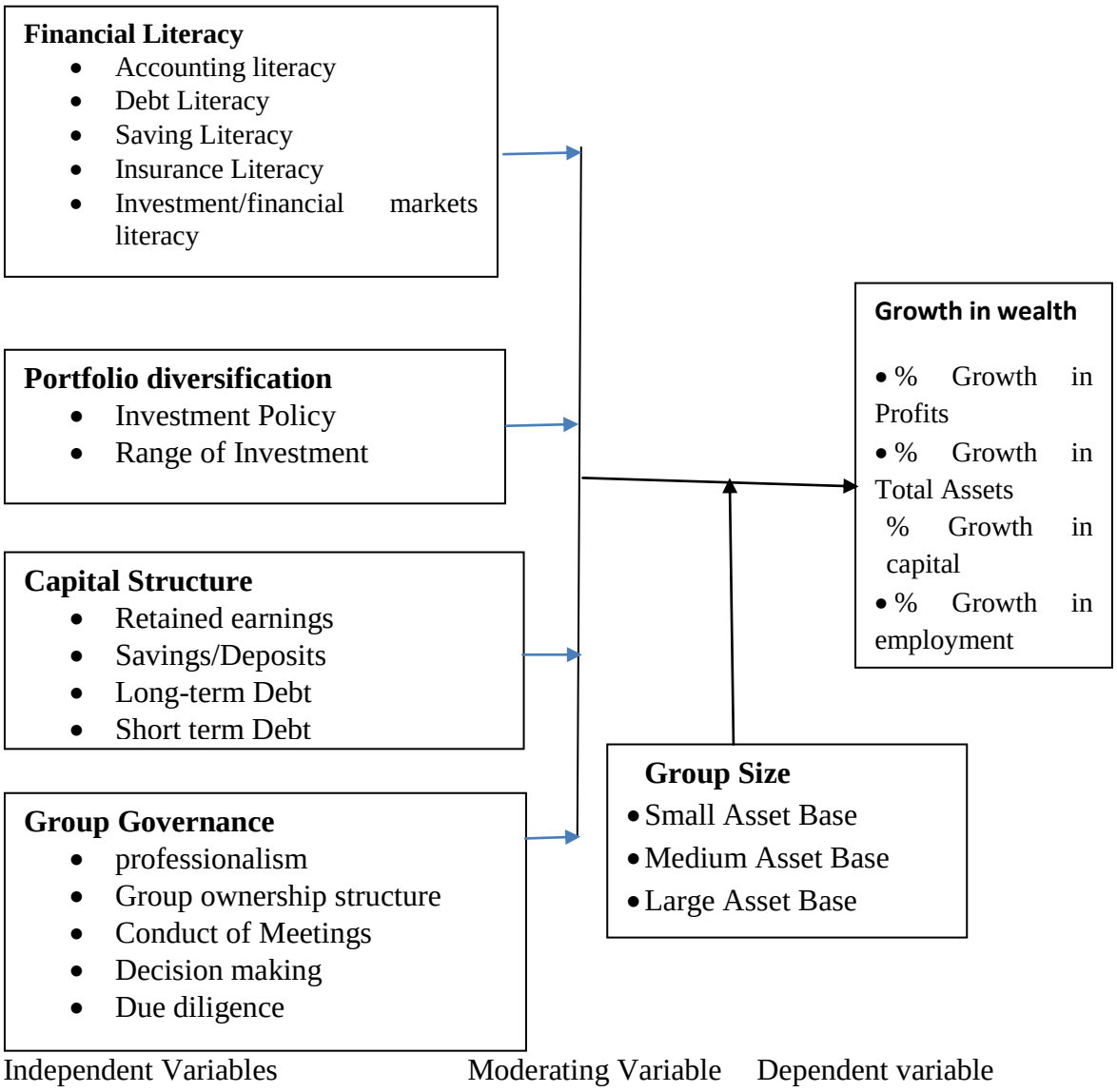

Figure 2.2: Conceptual Framework

2.4 Review of Literature on Variables

This section reviews studies previously done on determinants of growth in wealth. According to Zikmund *et al.* (2010), empirical literature review is a directed search of

published work which includes books and periodicals. It is a comprehensive survey of previous inquiries related to the research questions. Miller and Yang (2008) states that through the use of a systematic approach to previous scholarly work, literature review allows a researcher to place his research work into an intellectual and historical context, that is, it enables the researcher declare why his research matters.

2.4.1 Financial Literacy and Growth in Wealth

Financial literacy remains an interesting issue in both developed and developing economies, and has elicited much interest in the recent past with the rapid change in the finance landscape. In the last few years, some authors have begun to explore the decision to acquire financial literacy and the links between financial knowledge, saving, and investment behavior including Delavande, Rohwedder, and Willis (2008), Jappelli and Padula (2011), Hsu (2011), and Lusardi, Michaud, and Mitchell (2013). The study by Delavande, Rohwedder, and Willis (2008) which focused on Preparation for retirement, financial literacy and cognitive resources presents a simple two-period model of consumer saving and portfolio allocation across safe bonds and risky stocks, allowing for the acquisition of human capital in the form of financial.

These studies note that individuals will optimally elect to invest in financial knowledge so as to gain access to higher-return assets: this training helps them identify better-performing assets and/or hire financial advisers who can reduce investment expenses. A financially literate person knows the most suitable financing and financial management options for his/her business at the various growth stages of his/her business; knows where to obtain the most suitable products and services and interacts with confidence with the suppliers of these products and services as noted in USAID (2009) in their study An Analysis of Access to Finance by Micro, Small and Medium Enterprises. Financially literate people manage resources more wisely; use financial information more astutely thereby improving the profitability of their enterprises (Berman *et al.*, 2008). Financial literacy also influences the overall access and utilization of a variety of financial services (Nunoo *et al.*, 2010). According to Kimani (2009) in his study on

mobilizing money at the grass roots, ordinary persons understanding of markets is low and people's expectations about the returns are far higher than market can deliver. Most people are still new to investments tools such as the stock market. According to Gallery, Newton and Palm (2011) in their study on assessing financial literacy and superannuation investment choice decisions, a deficiency in financial literacy is one of the causes of inertia and suboptimal financial decision-making, the level of financial literacy has a direct effect on the investment choice decisions.Other studies indicate that financial literacy plays a key role in SMEs success both in formal and informal sectors. Eresia and Raath (2013) investigated a possible relationship between SMME owners' financial literacy and business growth, the study was unable to demonstrate that a statistically significant relationship existed between owners' financial literacy and the broad construct of business growth. Gouws and Shuttleworth (2009) in their study on financial literacy as an interface between financial information and decision-makers in organisations state that the term 'financial' refers to the information dimension; the term 'literacy' refers to the mental processes of individuals when using this information. This implies that in an organisational context, both the information system (matter) and the human behaviour system (mind), can only become more than their individual parts if they are linked by an interface that can enhance the feed forward (prediction) and feedback action between them (Gouws & Shuttleworth, 2009). McDaniel, Martin and Maines (2002) describe financial literacy as the ability to read and understand basic financial statements.

Nadler (2009) defines business financial literacy as the ability to Read and understand a balance sheet, income statement and cash flow statement, Seek feedback when financial statements are inaccurate or confusing, Use the information to improve decision-making, Understand the limits of financial information. Financial literacy affects the way people seek advice about financial concepts. Those with low financial knowledge tend to rely on family and friends for advice as more literate individuals rely on professional financial advisors, newspapers and financial information in books, in magazines and on the internet Jessen (2012). Van Rooij *et al*. (2011) observed that financial knowledge has

a positive influence on stock market participation. Financial literacy remains an interesting issue in both developed and developing economies, and has elicited much interest in the recent past with the rapid change in the finance landscape. In the last few years, some authors have begun to explore the decision to acquire financial literacy and the links between financial knowledge, saving, and investment behavior including Delavande, Rohwedder, and Willis (2008), Jappelli and Padula (2011), Hsu (2011), and Lusardi, Michaud, and Mitchell (2013).

The study by Delavande, Rohwedder, and Willis (2008) presents a simple two-period model of consumer saving and portfolio allocation across safe bonds and risky stocks, allowing for the acquisition of human capital in the form of financial knowledge (à la Ben-Porath, 1967, and Becker, 1975).These studies note that individuals will optimally elect to invest in financial knowledge so as to gain access to higher-return assets: this training helps them identify better-performing assets and/or hire financial advisers who can reduce investment expenses. A financially literate person knows the most suitable financing and financial management options for his/her business at the various growth stages of his/her business; knows where to obtain the most suitable products and services and interacts with confidence with the suppliers of these products and services USAID (2009). Financially literate people manage resources more wisely; use financial information more astutely thereby improving the profitability of their enterprises Berman *et al. (*2008). Financial literacy also influences the overall access and utilization of a variety of financial services (Nunoo *et al*., 2010).

Al-Tamimi and Kalli (2009) posit that financial literacy has gained the interest of various groups including governments, bankers, employers, community interest groups, financial markets and other organisations. The importance of improving financial literacy seems to have increased because of factors such as the development of new financial products and the complexity of financial markets, among others. A study by the OECD (2005) involving businesses in twelve countries including the USA, UK, Australia and Japan, concluded that financial literacy was very low for most respondents. Huston (2010) states that despite its importance, academic literature has

given little attention to financial literacy and how it is measured. The terms financial literacy, financial knowledge and financial education appear to be used interchangeably in literature and this does not help the emergence of a common understanding of the construct. There is no standardized measure of financial literacy; different studies have used different variables to measure financial literacy (Fatoki, 2014; Cole & Fernando 2008). The USAID (2009) used finance related knowledge that is, (awareness of sources of finance, awareness of business finance technology and consumer financial literacy), finance related business skills and information skills to measure financial literacy for an entrepreneur. Siekei *et al.* (2013) used competence in book keeping, credit management, budgeting skills and financial control to measure financial literacy.

Fatoki (2014) in his study the financial literacy of micro entrepreneurs in South Africa, used financial planning analysis and control, Book keeping, understanding of funding sources, Business terminology, use of technology and risk management (insurance) to measure the financial literacy of new micro entrepreneurs. Obago (2014) in a study on effect of financial literacy on management of personal finances among employees of commercial banks in Kenya used: money basics, budgeting, saving and planning, borrowing, debt literacy, financial products, recourse and self-help to measure financial literacy.

The Kenya Financial Sector Deepening report (FSD, 2009) identifies key themes of financial literacy education as; Savings Culture, Financial planning and budgeting, Debt Management, Bank Services and Investments management. In this study as indicated in the conceptual framework, the researcher used Accounting literacy, Debt Literacy, savings literacy, insurance literacy and investment literacy. According to a study by Kimani (2009) on the role of financial literacy in personal financial decisions, ordinary persons understanding of markets is low and people's expectations about the returns are far higher than market can deliver. Most people are still new to investments tools such as the stock market. According to Gallery, Newton and palm (2011) a deficiency in financial literacy is one of the causes of inertia and suboptimal financial decision-making, the level of financial literacy has a direct influence on the investment choice

decisions. Njoroge (2011) in his study the role of accounting education and work experience concludes that there is a positive relationship between financial literacy and entrepreneurial success

2.4.2 Portfolio Diversification and Growth in Wealth

According to studies by Markowitz portfolio theory (1952, 1959), CAPM theory by Sharpe (1964), Litner (1965), Mossin (1966), it's possible to establish an optimal portfolio of assets that will maximize returns and minimize risk subject to an investor's utility function. This is done by combining risk free assets and risky assets and then operating on a security market line or the capital market line at the point of tangency with the Markowitz efficient frontier if the market is at equilibrium. If the investor is a risk averse his utility curves will be steeper thus settling at a point with lower expected returns and risks compared with a risk averse investor. Construction of a portfolio based upon the investor‘s objectives, constrains, preferences for risk and return and liability (Merton, 1973). Evaluation of the portfolio is done by continuous overview of the market conditions, company‘s performance and investor‘s circumstances, (Campbell, 2002).

Portfolio management process according to Merton (1973) entails a six stage process, that is: Determine optimal investment mix followed by creating a customized investment policy statement, and then Selecting an investments, after which Monitoring of progress is necessary. These processes are explained as follows: Merton (1973) explains and Identifies goals and objectives as the stage under which several questions like: When will an investor need the money from his/her investments? How much does the investor have in terms of saving? Among other questions that may be of relevance. This is necessary as it will assist in properly identification and determination of optimal investment mix (Merton, 1973) argues that it involves asset allocations which eventually create an optimal mix. This step represents one of the most important decisions in a portfolio construction, as asset allocation has been found to be the major determinant of long-term portfolio performance (Campbell, 2002). The third stage which is creating a customized investment policy statement, which is necessary after the optimal investment mix, is determined. This help to formalize the goals and objectives in order to utilize them as a benchmark to monitor

progress and future updates (Campbell, 2002). After all the above is done, selection of investment is done so as to customize portfolio with a view of matching the optimal investment mix. For this to succeed there is need for monitoring the progress so that the mix of asset classes stays in line with investor‘s unique needs, the portfolio will be monitored and rebalanced back to the optimal investment mix (Fama, 1992).

Risk and return is a key element in evaluating a portfolio. Risk refers to the probability that the return and therefore the value of an asset or security may have alternative outcomes (Sharpe, 1964). Return-yield or return differs from the nature of instruments, maturity period and the creditor or debtor nature of the instrument and a host of other factors. The efficiency of the profitability position or operating activities can be identified by studying the following factors. Gross profit margin ratio: Dividend policy is determined in the general body meeting of the company, for equity shares at the end of the year.

The dividend payout ratio is determined as per the dividend paid. Dividend policies are divided into two types (Tobin, 1958):-Stable dividend policy, unstable dividend policy. Capital structure of a company that necessitates portfolio management. Portfolios or combinations of securities are thought of as helping to spread risk over many securities may specify only broadly or nebulously. Auto stocks are, for examples, recognized as risk interrelated with fire stocks, utility stocks display defensive price movement relative to the market and cyclical stocks like steel, and so on. This is not to say that traditional portfolio analysis is unsuccessful. It is to say that much of it might be more objectively specified in explicit terms. They are: Determining the objectives of the portfolio and Selection of securities to be included in the portfolio. Normally this is carried out in four to six steps (Fischer, 1972).In order to achieve growth there is need for investors to develop an optimal portfolio of assets that will maximize his rate of return subject to his risk preference. Informed decision making on investment would help avoid risky, low return yielding assets. Njiru (2006) in his study on development of an optimal portfolio of assets for a teacher investor subject to risks observed that through proper risk management and portfolio management process, an investor is able to maximize his returns through proper asset allocation and constant performance evaluation of his

portfolio of assets. According to Icharia (2012) investment groups have diversified their investments from buying shares at the Nairobi Securities Exchange (NSE) to making other capital intensive investments in real estate, export and import business, among others. Before formulating the objectives, the constraints of the investor should be analyzed within the given frame work of constraints, objectives are formulated.

Then based on the objectives securities are selected. After that risk and return of the securities should be studied. The investor has to assess the major risk categories that he or she is trying to minimize. Compromise of risk and non-risk factors has to be carried out. Finally relative portfolio weights are assigned to securities like bonds, stocks and debentures and the diversification is carried out. The key tenet of modern portfolio theory is that if one wishes to increase the performance and reduce the risk in an overall investment portfolio, they should combine investments that are non-correlated with one another. The traditional theory of finance assumes that people are guided by reason and logic and therefore view investment decisions through the transparent and objective lens of risk and return.

2.4. 3 Capital Structure and Growth in Wealth

Studies on capital structure have erupted since Modigliane and Miller theorized in 1958 (Flannery & Hankins, 2007) in M-M theory. The most popular theories are trade-off theory, pecking order and market theory (Small Stocks, 2008). The first theory, trade off theory encourages borrowing for the firm to enjoy the tax advantage. The trade-off theory takes a common sense approach by encouraging firms to gain from the tax advantage in debt financing (Small Stocks, 2008; Ahmed & Hisham, 2009). The second theory, Pecking order theory, encourages debt financing for the capital structure (Ahmed & Hisham, 2009). In fact, the internal financing is preferred to external financing and debt financing is preferred to other external options. The theory supports the suggestion that debt is cheapest and most attractive of the external sources of financing (Flannery &Hankins, 2007 and Small Stocks, 2008). The third theory, market thoery emphasizes that a firm would prefer equity financing when the perceived cost of equity is low and

prefer debt financing when cost of debt financing is low. The financial managers should make security issuance decisions based on the cost of equity capital and cost of debt capital (Huang & Ritter, 2008). Modigliani and Miller (1963), suggests that capital structure can alter the value of a firm in the world of corporate tax and a firm can maximize its value by the use of debt which provides an interest tax shield. A firm has more value if it uses debt financing because debt reduces the corporate tax. The savings due to the use of debt adds to the value of the firm. The firm that uses more debt saves more in the form of corporate tax shield. This suggests that debt is a preferable source of financing for less taxation is laid on debt.

Olando (2012) posits that the capital structure which optimizes the requirements of the shareholders and the financial requirement of the organisation needs to be maintained and should be compatible with the interest of other stakeholders. He adds that capital structure should be in a position to maximize returns without additional costs.Capital structure constitutes the mix of the different forms of financing employed by the firm to fund operations (Fabozzi & Drake, 2009). According to Pandey (2009), equity and debt comprise the principal components of capital structure and represents the major claims on the corporations‟ assets. Capital structure is the mix of the long-term sources of funds used by the firm (Shim & Siegel, 2007).

They further explain that the capital structure decisions aims at maximizing the market value of the firm through employment of the optimal capital structure which minimizes the firms overall cost of capital and maximises the market price per share of the firm. David Durand provided the net income approach of capital structure (Danielson & Scott, 2006). This approach states that a firm can increase its value by using the debt capital. Net operating income approach is the inverse to this approach. It contends that the value of a firm and cost of capital are independent of capital structure, thus the firm cannot increase its value by judicial mixture of debt and equity capital alone. Solomon developed the intermediate approach to the capital structure. This rather traditional theory of capital structure pleads that value of the firm goes on increasing to a certain level of debt capital and finally the value of the firm decreases (Goldstein *et al*., 2001).

This theory holds the concept of optimal capital structure. Jensen and Meckling developed the capital structure theory based on the agency costs (Bauer *et al*., 2008). They postulate that firms incur two types of agency costs; costs associated with the outside equity holders and the cost associated with the presence of debt in capital structure. Studies on this issue have not been consistent rather it has been quite controversial. Myer and Majluf (1984) suggest the concept of information asymmetry. Information asymmetry accounts for the cause of positive relationship between leverage and growth, because high growth rate will tell outside financer that the borrowing firms are now in a growing market and is less likely to go bankruptcy.

Hall *et al.* (2004) also posit that ‘‘growth is likely to put a strain on retained earnings and push the firm to borrow and thus be positively related to leverage”. On another side, Myer (1977) counter-argued that if a company, with high growth prospect, borrows, it will lead to wealth-transfer from equity investor to debt financer. Thus, companies with growth opportunities will try to avoid the profit generated from its high growth prospect to be taken away by loan providers through restraining on using debt. Small firms are managed by their owners who would not be willing to lose their control as the exchange of loan from outside financers. According to Pandey (2010) the best optimal capital structure is the one that yields the minimum weighted average cost of capital (WACC). In the investment group, capital is mainly from the contribution of members to the pool to be able to invest together.

Abor (2005) examined connection amid of capital structure and profitability of registered companies on the Ghana Stock Exchange. The research used a descriptive research. Panel data for a period of ten years was used, this covered between (1995-2004). The regression results concluded that there was a affirmative connection amid the proportion of short-term debt to total assets and ROE and negative connection amid proportion of long-term debt to total assets and ROE. Chiang et al. (2009) piloted a research on the effect of capital structure on profitability of registered companies in Hong Kong. The research adopted a descriptive research design. The study used as sample of 35 firms and panel data was used for investigation. The consequences of the

investigation found there was a significant connection amid capital structure and profitability of non-financial registered companies on Islamabad Stock Exchange. Gill and Nahum (2013) examined the influence of capital structure on profitability of the American service and manufacturing firms. A sample of 272 American listed companies on New York Stock Exchange for a period of 3 years from 2005 – 2007 was selected.

The correlations and regression analyses were used to approximate the purposes connecting to profitability (measured by return on equity) with measures of capital structure. The consequences display a affirmative connection among short-term debt to total assets and profitability and between total debt to total assets and profitability in the service industry. The results of this paper illustrate also a optimistic relationship between short-term debt to total assets and profitability, long-term debt to total assets and profitability, and among entire debt to total assets and profitability in the manufacturing industry.

Kuria (2013) studied on the effect of capital structure on the financial performance of commercial Banks in Kenya. The study was piloted on 35 commercial banks in Kenya which were in operation in Kenya for five years of study from 2008 to 2012. The various ratios of these commercial banks were computed from the various data collected from the data extracted from their financial statement for the period. The data was analyzed using a linear regression model using to establish if there is any significant relationship of capital structure and the financial performance of these commercial banks. The finding of the analysis concluded that there was no significant relationship between the capital structure and the financial performance of commercial banks in Kenya. Disposal of assets is also a source of funds to the investment group. Debt capital is fund borrowed from other institutions or individuals such as banks, non-bank financial institutions and well-wishers. It normally carries a fixed rate of interest payable at specified times of the year. Debt capital requires some prudent management and the purpose of the loan must be clear**.** Importantly, debt capital is a cheaper source of finance though it involves a considerable risk in case the investment group is unable to meet the set obligations of repayment and financial payments Olando (2012).The investment group may also get

finances from other avenues like the Uwezo fund, Women enterprise fund and youth funds which they have to apply as a group. Under this variable the objective was to determine the influence of capital structure on the growth of investment groups' wealth.

2.4.4 Group Governance and Growth in Wealth

Corporate governance has been defined in different ways; Shleifer and Vishny (1997) define corporate governance as ways in which suppliers of finance to corporations assure themselves of getting a fair return on their investment. Rezaee (2009) on the other hand, defines corporate governance as a process through which shareholders induce the management to act in their best interest by providing a degree of investor confidence that is necessary for the firm and capital market to function effectively. Cadbury (1992), define corporate governance as: the system by which companies are directed and controlled and is concerned with the distribution of rights and responsibilities among stakeholders, such as the board, management, shareholders and other stakeholders.

Klapper and Love (2004) have defined corporate governance as rules, practices and processes that direct and control an organization be it private or public. According to OECD (2004), corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders. The word governance is used in a variety of contexts, but at a general level, it refers to all forms of social coordination and patterns of rule (Bevir, 2013). Of importance to this study is how Constitution/Agreement Committees, members' diversity, conduct of Meetings, legal documents and due diligence affect growth in wealth in the investment groups. Ali *et al.* (2003) noted that companies that demonstrate good corporate governance and have sustainable business policies will usually generate superior financial benefits for their shareholders. Brown (2004) carried out a study to measure corporate governance and firm performance. Brown then found that better-governed firms were relatively more profitable, more valuable, and paid out more dividends to their shareholders. This study noted that good governance was associated with the firm performance. Isabel (2004) carried out another study and found that Estimated Value Added performance was

influenced by effective management (stewardship). Isabel then recommended that Estimated Value Added was not very sensitive to the changing betas.

The concept of governance has existed for centuries but many African economies began to pay particular attention to its ideals in the beginning of the 1980s.The term corporate governance was first mentioned in a 2012 World Bank report on sub-Saharan Africa and Since then, many donor agencies have been putting a lot of emphasis on its adoption both in the public and private sectors (Qudrat-IElachi, 2009). The first African country to embrace corporate governance principles in its private sector was South Africa. The practice was adopted in the public sector much later. Kings (1994) while studying on corporate governance in South Africa's public sector noted that compliance with laws and regulations were essential for public sector performance and efficient functioning of systems. The central problem in corporate governance has been construction of rules and putting in place incentives that effectively align the behavior of agents with the desires of principals (Hawley & Williams, 1996).

Firms are considered to be nexus of contracts between different parties. The most important of these contracts being that between managers and shareholders (Watts & Zimmerman, 1986). The effect of separating management and ownership; and the resulting governance problems have been recognized in finance theory, in the work of (Berle & Means, 1932; Jensen & Meckling, 1976). This is commonly referred to as principal-agent problem. This problem may lead hired managers to maximize their own utility rather than that of the firm. Due to the extent of business relationships that give rise to agency relationships, investors are sceptical that managers make decisions which are of benefit to them (Mansourinia *et al*., 2013). Agrawal and Chadha (2005) and Agrawal and Cooper (2007) conducted a study to examine whether certain corporate governance mechanisms were related to the probability of a firm restating its earnings. In this study, they found that the key governance characteristics such as independence of boards and audit committees, and the provision of non-audit services by outside auditors were unrelated to the probability of a company restating earnings. They recommended that independent directors with financial expertise were valuable in providing oversight

of a firm‟s financial reporting practices. The main objective of good governance framework is to maximize contributions of firms to the overall economy including other stakeholders (Claessens, 2003). With the driving force behind success being though not limited to: private market investment based activities that are anchored on technological progress, opening up of financial markets and undertaking trade liberalization among other structural reforms. This is because long outstanding institutions on corporate governance arrangements have been characterized by inconsistencies and gaps hence necessitating the need for good corporate governance that would help create decision structures that can prevent the agent from engaging in activities that expose the principal to higher risk than desired (Matengo, 2008; Ciancanelli & Gonzalez, 2000). Different modes of firm ownership influence firm‟s corporate governance which in turn affects performance in different ways.

According to Mork *et al.* (1988) higher block ownership positively impact on firm performance. However, Denis (2001) find that as block holders seek to increase the value of the firm, they may enjoy benefits that are not available to other shareholders hence reducing the liquidity of stock and supply of information to the market that subsequently impact on firm performance negatively. The above findings are in line with those of Mohammad and Shahid (2012) that there is a negative relationship between institutional ownership and bank performance. Ramzi (2008) and Le *et al*. (2006) all agree on the important role of institutional shareholders in monitoring the activities of managers in firms. There are findings in finance literature to the effect that independence of the companies‟ boards enhances firm value and performance though they have significant negative relationship with short term debt (Coleman, 2007). Morck (2007) further find that independent directors rarely blow the whistle on mismanagement to the firms' assets perpetrated by executives. This in effect negatively impacts on firm performance. The appropriate measures required for good corporate governance would be based on good engagement with the organization, shares price monitoring, regular addressing of systemic risks and opportunities in order to align business objectives with long-term interests of investors. Governance in this study shall be through the lenses of

corporate governance which describes the manner in an investment group is governed to achieve its goals. This study will therefore find out the influence of governance on growth in wealth of investment groups.

2.4.5 Group Size and Growth in Wealth

Empirical results on the impact of the size of an organisation on growth in wealth yield mixed findings. A positive relationship is expected from this relationship because large organisations are able to develop financial, human and technical capacities that can enhance efficiency and foster growth in wealth. From the wider asset base it can be argued that organisations can be able to source funds at competitive rate and lend it to its customers at favourable interest rates enabling them make high returns.

Pasiouras and Kosmidou (2007) contend that larger organisations might have a wide range of products and loans diversification than smaller banks leading to improved returns and performance. In this study the size of group is used as the moderating variable. For a firm to grow, it means that its assets have to generate income which is important for investments and meeting short-term financial responsibilities. There exists substantial evidence that firm size is instrumental in contributing towards firm profitability. Stable firms opt to diversify their products lines and investment and thus minimize their risk of bankruptcy. So, an optimistic link is anticipated between company scope and leverage (Graham, 2000). Institutional stockholders opt to capitalize hugely in stable companies in the trust that they possess lower peril of insolvency since big companies have access to resources needed and ability to minimize risks of their stock investment. Therefore, they are fewer susceptible to monetary suffering and insolvency peril (Wald, 1999). Mugenda and Mugenda (2012) define moderating variable as a variable that has an effect on the relationship between the independent and dependent variables, but is not related to or affected by the independent variable. Moderating variables tend to be demographic in nature and come between other variables and moderate their relationships. The moderating variable is a variable that has an effect on the relationship between the independent and dependent variables, but it is not related to or affected by the

independent variable. The moderating variable will came between other variables and moderated their relationships. Studies on the impact of size on performance yield mixed findings. A positive relationship is expected from this relationship because large oranisations are able to develop financial, human and technical capacities that can enhance efficiency and foster performance. From the wider asset base it can be argued that large organisation interms of size like banks can be able to source funds at competitive rate and lend it to its customers at favorable interest rates enabling them make high returns (Wepukhulu 2016).

This position was also supported by Pasiouras and Kosmidou (2007) who posit that larger banks might have a wide range of products and loans diversification than smaller banks leading to improved returns and performance. Ayadi and Boujelbene, (2012) in their study of bank performance in Tunisia between 1995 -2005, find a significant positive relationship between bank size and return on average assets; a prove that even investment groups would enjoy economies of scale when they grow their asset base. Similar, findings are made by Sinkey and Greenawalt, (1991) that larger banks are more profitable than smaller ones. The demographic characteristics of the group which is group size in this study can influence the growth in wealth and hence will moderate the cause effect relationship between the dependent and independent variables in the study. The investment groups are divided into the large investment groups, Medium investment groups and small investment groups. The classification was based on the asset base. The large investment groups are the ones with an asset base of over 20 Million, the medium are the ones with an asset base of over 1 million and below 20 million and the small are the ones with an asset base of below 1 million.

2.4.6 Growth in Wealth of Investment Groups

Enterprise growth can be measured in various ways. Gupta ,Guha, & Shiva (2013) suggests the use of quantitative features such as; value addition, revenue generation, volume of assets and volume of business or qualitative features like market position, quality of product, and goodwill of the customers, on the contrary Mateev and

Anastasov (2010) opines that financial structure, productivity, sales revenue and total assets have a more direct impact on growth but caution that the number of employees, investment in R & D, and other intangible assets have minimal influence on the enterprise's growth prospects. Chaston and Mangles (1997) suggest that if an enterprise adopts multi-strategy transformation initiatives, the probability of achieving the growth objective increases. Moreover, corporate growth is an important precondition for the achievement of other financial goals of business (Coad, 2009). From the point of view of corporations, growth is usually a critical precondition for its longevity. Cressy (2009) notes that young firms that grow have twice the probability of survival as young non-growing firms.

The dependent variable of the study was growth in wealth. One of the objectives of any business organization is to maximize shareholders wealth. Pandey (2010). All firms, including Investment groups, are established to achieve certain goals which mainly are to maximize wealth for the shareholders. Investment groups' wealth is the accumulation of enough capital (retained earnings) to finance non withdrawable capital funded assets, provide cushion to absorb losses and impairment of members' savings. Specifically, institutional capital is intended to absorb their operational losses (Ndiege *et al*., 2013).

Pender (2012) define wealth comprehensively, as the stock of all assets, net of liabilities, that can contribute to the well-being of an individual or group.Wickham (1998) views business growth from four interdependent perspectives: financial, strategic, structural and organisational. This study will focus on financial growth of the investment group and how it is influenced by the study variables. Wickham (2006) defines financial growth in wealth as the development of the business as a commercial entity. It is concerned with increases in turnover, the costs and investment needed to achieve that turnover, and the resulting profits. It is also concerned with increases in the assets of the business. This study utilises measures of financial growth as proposed by Wickham (2006), particularly: Changes in total assets; Changes in capital; Changes in turnover; and Changes in profit. Strategic growth relates to changes that take place in the way in which the organisation interacts with its environment as a coherent strategic whole.

Primarily, this is concerned with the way the business develops its capabilities to exploit the market. According to Wickham (2006) it is associated with the profile of opportunities which the business exploits and the assets, both tangible and intangible, it acquires to create sustainable competitive advantages. Structural growth relates to the changes in the way the business organises its internal systems, in particular, managerial roles and responsibilities, reporting relationships, communication links and resources control systems (Wickham). This study utilises measures of structural growth as proposed by Wickham (2006), that is: Changes in number of employees; and Changes in the size and/or location of business premises. Organisational growth relates to the changes in the business's processes, culture and attitudes as it grows and develops. It is also concerned with the changes that must take place in the owner's role and leadership style as the business moves from being a 'small' to 'large' firm (Wickham, 2006). For the purpose of this study the organisational growth dimension is looked at in terms of group governance.

2.5 Empirical Review

Bruhn et al (2011) studied the impact of business and financial literacy training for young entrepreneurs in Bosnia and Herzegovina, and concluded that improvements in basic financial knowledge had a significant impact on the growth of surviving firms. Barte (2011) studied the effect of financial literacy on microenterprises in the fishing subsector in the Philippines and established that the fish vendors had low levels of financial literacy which negatively affected their enterprises. The study used descriptive research survey design. Data was analyzed using descriptive statistics and simple regression analysis. Entrepreneurs had low levels of financial literacy as demonstrated by lack of financial records, lack of monitoring of profit and losses and lack of cash management Practices. Study used a uni-dimensional model and assumed a direct relationship between financial literacy and performance of microenterprises. It did not look at growth but performance. In a study on microenterprises in Sri Lanka, Del Mel (2008) established that financial literacy improved the usage of financial products by the enterprises, which in turn improved their performance. Nunoo et al (2012) studied

utilization of financial services by SMEs in Ghana and confirmed that financially literate entrepreneurs were more likely to access and utilize financial services which in turn improved the performance of their enterprises. Gakigi and Njeru (2015) did a study on investment groups and their performance. The study employed descriptive research design. The variables of the study were organisation structures, Goal setting and legal framework and the study sought to find out their influence on the performance of investment groups. The study focused on the challenges faced by IGS on performance but failed to study the determinants of growth.

Ichara (2014) carried out a study on factors influencing wealth creation in investment groups in Kenya a case of Nairobi County. The study used descriptive statistics. The target population were investment groups in Nairobi County, working with various micro-financial institutions like KWFT, SMEP and Opportunity International. The study variables were corporate governance, strategic objectives, situational analysis and strategic choice. The study objectives were to assess the influence of strategic planning and management and execution of investments on wealth creation among investment groups in Kenya. The study found out that strategic planning affects wealth creation among the investment groups in Kenya.

Chowdhury and Chowdhury (2010) conducted a study to find out the impact of Financial Structure on the wealth of a firm using comparative analysis, correlation and regression analysis. It was found that maximizing the wealth of a firm requires a perfect combination of debt and equity, whereas cost of capital has a negative correlation in this decision and it should to be as minimum as possible. From the study, changing the Financial Structure composition a firm can increase its wealth in which the finance managers could utilize debt to form optimal Financial Structure to maximize the wealth of shareholders. This study focused on SACCOs and not investment groups. Eresia and Raath (2013) investigated a possible relationship between SMME owners' financial literacy and business growth, the study was unable to demonstrate that a statistically significant relationship existed between owners' financial literacy and the broad construct of business growth. Ogutu (2014) did a study on Influence of Investment

Groups on Creation of Small and Medium Size Enterprises in Nairobi County. Descriptive survey design was used. From the study findings, this study concluded that investment groups highly influences the formation of small and medium enterprises in Nairobi County. This is achieved through resource mobilization, sharing of business ideas, spreading risks and taking advantage of social networks of the group members.

Kamau and Kagiri (2014) studied the effect of Capital Structure on Financial Performance of Banking Institutions Listed in Nairobi Securities Exchange. The study used descriptive survey design. Study used a uni-dimensional model and assumed a direct relationship between Capital structure and performance of Banking Institutions Listed in Nairobi Securities Exchange. Therefore, generalizations cannot adequately extend to other sectors like the investment groups. Current study uses an integrative model to investigate the determinants of growth in wealth of investment groups and governance is only one of the variables. Abor (2005) examines connection amid of capital structure and profitability of registered companies on the Ghana Stock Exchange. The research used a descriptive research. Panel data for a period of ten years was used, this covered between (1995- 2004). The regression results concluded that there was a affirmative connection amid the proportion of short-term debt to total assets and ROE and negative connection amid proportion of long-term debt to total assets and ROE.

In another study, Obwori *et al*. (2012) investigated and assessed the effect of funding constraints on the growth of small scale enterprises using descriptive statistics. The study found that amount earned does not effectively support the growth of firm. This study did not include investment groups. Olando (2005) carried out a thesis on assessment of financial practice as a determinant of growth of savings and credit co-operative societies' wealth in Kenya, the case of Meru County. The study focused on SACCOS in Meru County. The study variables were capital structure, funds allocation strategy and financial stewardship. This study used descriptive design in soliciting information and data was collected from the census of 44 SACCOs using a questionnaire and document review tool. The study found that SACCOs inadequately complied with their By-laws and incomes from investments did not adequately cover their costs. The

study recommends that the Government should review legal framework to ensure that institutional capital is used to grow SACCOs wealth. The study found the relationship between savings and growth of SACCOs wealth was weak. Institutional capital showed a significant positive relationship with Growth of SACCOs Wealth. The study also showed that there is a significant relationship between capital structure and growth of SACCOs wealth. Proper capital structure mix can lead to growth of SACCOs wealth. The study did not explore governance and financial literacy. The study only focused on SACCOS in Meru County which have a different model than other investment groups.

Muturi (2012) did a study on determinants of participation in rotating savings and credit associations (ROSCAs) in urban informal settlements evidence from Mathare Slums Nairobi. The study used a multi-dimensional model. The study found that participation in roscas is for varied motives the main ones being saving, insurance, keeping away money from spouses and socialization. The study did not focus on investments groups' growth which the current study will determine.

Sabana (2014) studied entrepreneur financial literacy, financial access, transaction costs and performance of micro enterprises in Nairobi City County. The study uses a multidimensional model which examines the relationship between financial literacy, financial access, transaction costs and performance of microenterprises. Entrepreneur financial literacy had a statistically significant influence on the on the performance of Microenterprises. Relationship between financial literacy and financial access was positive and statistically significant. The study focused on Micro enterprises. Muinde (2014) conducted a study on relationship between financial structure and growth of saving and credit cooperative societies' wealth in Machakos County.

This study used a descriptive survey in soliciting information in the area of research of Financial Structure and growth of SACCOs' wealth. The target population was 33 SACCOs which were active in Machakos County in the year 2012. The study used census and data was collected from secondary sources. The study found that; increase internal financing increase led to an increase in Growth of SACCOs wealth. Hezron

(2015) did a study on the effect of corporate governance on financial performance of investment managers in Kenya. The study used a descriptive survey research design. Data analysis was done using both descriptive and simple regression analysis. The study found that corporate governance influences the financial performance of investment managers. The study was un-idimensional and assumed a direct relationship between corporate governance and financial performance of investment Managers. Empirical results on the impact of size on performance yield mixed findings. A positive relationship is expected from this relationship because large oranisations are able to develop financial, human and technical capacities that can enhance efficiency and foster performance. From the wider asset base it can be argued that large organisation in terms of size like banks can be able to source funds at competitive rate and lend it to its customers at favourable interest rates enabling them make high returns (Wepukhulu, 2016).

This position was also supported by Pasiouras and Kosmidou (2007) who contended that larger banks might have a wide range of products and loans diversification than smaller banks leading to improved returns and performance. Ayadi and Boujelbene (2012) in their study of bank performance in Tunisia between 1995 -2005, find a significant positive relationship between bank size and return on average assets; a prove that even investment groups would enjoy economies of scale when they grow their asset base.

Similar, findings are made by Sinkey and Greenawalt, (1991) that larger banks are more profitable than smaller ones. Hughes and Mester, (2013) did a study on banks and found that an increase in bank size by 1 percent increases costs by only 0.95 percent for both small and large banks implying that the cost of making banks even smaller would be higher. Majority of studies on the relationship between size and bank performance point to the fact that there is an estimated U-shape average cost curve. Implying that; the costs of operation in banking firms will decrease with increase in bank size up to a certain level beyond which they start increasing, hence impacting on performance negatively. Drake and Hall (2003), Wheelock and Wilson (2009) and Feng and Serlitis (2010) all find some evidence on existence of economies of scale in banks that come along with

increase in total assets (bank size) which subsequently impacts on their performance positively.

Berger and Mester (1997), found that large banks show a slightly higher efficiency than small ones, when efficiency is perceived from the cost perspective though such advantages can only be translated into good performance when high levels of efficiency are manifested. The current study will incorporate size as a moderator will examine how it influences the relationship between the independent variables and the dependent variables. The current study uses an integrative model to investigate the determinants of growth in wealth of investment groups and governance is one of the variables. Remezani *et al.* (2002) conducted a study associating corporate performance and SACCOs value creation to growth in earnings and found that; EVA, ROE and ROI would rise earnings and sales growth; firms with moderate growth in earnings showed highest rates of returns and value creation for their shareholders. They concluded that; growth should not be the input to strategic planning but an outcome of sound investment strategy that is geared towards accepting value creating projects; and managers needed to shift their strategic goals from creating growth at the moment and waiting for surpluses later to enhancing profitable growth now. This study focused on SACCOs and not investment groups.

2.6 Critique of Existing Literature

Gakigi and Njeru (2015) conducted a study on investment groups and their performance. The study employed descriptive research design. The study focused on the challenges faced by IGS on performance but failed to study the determinants of growth which the current study will focus on. Ichara (2014) conducted a study on factors influencing wealth creation in investment groups in Kenya a case of Nairobi County. The study used descriptive statistics. The study objectives were to assess the effects of strategic planning and management and execution of investments on wealth creation among investment groups in Kenya. The study found out that strategic planning affects wealth creation among the investment groups in Kenya.

Ogutu (2014) conducted a study on Influence of Investment Groups on Creation of Small and Medium Size Enterprises in Nairobi County. Descriptive survey design was used. From the study findings, this study concluded that investment groups highly influences the formation of small and medium enterprises in Nairobi County. This is achieved through resource mobilization, sharing of business ideas, spreading risks and taking advantage of social networks of the group members.

Kamau and Kagiri (2014) conducted a study on the effect of Capital Structure on Financial Performance of Banking Institutions Listed in Nairobi Securities Exchange. The study used descriptive survey design. Study used a uni-dimensional model and assumed a direct relationship between Capital structure and performance of Banking Institutions Listed in Nairobi Securities Exchange. Therefore, generalizations cannot adequately extend to other sectors like the investment groups. Current study uses an integrative model to investigate the determinants of growth in wealth of investment groups and governance is only one of the variables.

Muturi (2012) conducted a study on determinants of participation in rotating savings and credit associations (ROSCAs) in urban informal settlements evidence from Mathare Slums Nairobi. The study used a multi-dimensional model. The study found that participation in roscas is for varied motives the main ones being saving, insurance, keeping away money from spouses and socialization. The study did not focus on investments groups' growth which the current study will determine. Sabana (2014) studied entrepreneur financial literacy, financial access, transaction costs and performance of micro enterprises in Nairobi City County. The study uses a multidimensional model which examines the relationship between financial literacy, financial access, transaction costs and performance of microenterprises. Entrepreneur financial literacy had a statistically significant influence on the on the performance of Microenterprises. Relationship between financial literacy and financial access was positive and statistically significant. The study focused on Micro enterprises. The current study focuses on determinants of growth in wealth of investment groups and not performance and financial literacy being one of the variables.

Barte (2012) study was on financial literacy in microenterprises the case of Cebu fish vendors. The study used descriptive research survey design. Data was analysed using descriptive statistics and simple regression analysis. Entrepreneurs had low levels of financial literacy as demonstrated by lack of financial records, lack of monitoring of profit and losses and lack of cash management Practices. Study used a uni-dimensional model and assumed a direct relationship between financial literacy and performance of microenterprises. It did not look at growth but performance. Current study uses a multidimensional model which examines the determinants of growth in wealth financial literacy being one of the variables.

Hezron (2015) conducted a study on the effect of corporate governance on financial performance of investment managers in Kenya. The study used a descriptive survey research design. Data analysis was done using both descriptive and simple regression analysis. The study found that corporate governance influences the financial performance of investment managers. The study was uni-dimensional and assumed a direct relationship between corporate governance and financial performance of investment Managers. The current study uses an integrative model to investigate the determinants of growth in wealth of investment groups and governance is one of the variables.

Olando (2012) carried out a thesis on the assessment of financial practice as a determinant of growth of SACCO wealth in Kenya. This was a case of Meru County. This study used descriptive design in soliciting information and data was collected from the census of 44 SACCOs. However the study was narrow in scope and the results cannot be generalised to investment groups.Olando (2013) researched on the contribution of SACCO financial stewardship to growth of SACCOs in Kenya. This study was restricted in scope as it was based in Meru County. The study cannot also be generalised to investment groups since the business model is different. Muinde (2014) conducted a study on relationship between financial structure and growth of saving and credit cooperative societies' wealth in Machakos County. This study used a descriptive survey in soliciting information in the area of research of Financial Structure and growth

of SACCOs' wealth. The target population was 33 SACCOs which were active in Machakos County in the year 2012. The study used census and data was collected from secondary sources. The study found that; increase internal financing increase led to an increase in Growth of SACCOs wealth. This study was limited in scope as it only focused on SACCOs in Machackos County and cannot be genaralised to investment groups.

2.7 Research Gaps

Many studies have been done on growth and performance but have failed to give investment groups full attention despite their critical role in economic development. Gakigi and Njeru (2015) conducted a study on investment groups and their performance. The study employed descriptive research design. The study focused on the challenges faced by IGS on performance but failed to study the determinants of growth which the current study focused on. Ichara (2014) conducted a study on factors influencing wealth creation in investment groups in Kenya a case of Nairobi County. The study used descriptive statistics. The study objectives were to assess the effects of strategic planning and management and execution of investments on wealth creation among investment groups in Kenya. The study found out that strategic planning affects wealth creation among the investment groups in Kenya. Ogutu (2014) conducted a study on Influence of Investment Groups on Creation of Small and Medium Size Enterprises in Nairobi County. Descriptive survey design was used. From the study findings, this study concluded that investment groups highly influences the formation of small and medium enterprises in Nairobi County. This is achieved through resource mobilization, sharing of business ideas, spreading risks and taking advantage of social networks of the group members.Olando (2013) researched on the contribution of SACCO financial stewardship to growth of SACCOs in Kenya. This study was restricted in scope as it was based in Meru County. The study cannot also be generalised to investment groups since the business model is different. Kamau and Kagiri (2014) studied the effect of Capital Structure on Financial Performance of Banking Institutions Listed in Nairobi Securities Exchange. The study used descriptive survey design. Study used a uni-dimensional

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Isik and Hassan (2002) in a study of Turkish banks find a strong negative relationship between bank size and efficiency which may negatively impact on the performance of these banks. Allen and Rai (1996) found that the largest banks have been marked by higher levels of inefficiency for the majority of the 15 countries they have studied. Drake and Hall (2003), Wheelock and Wilson (2009) and Feng and Serlitis (2010) all find some evidence on existence of economies of scale in banks that come along with increase in total assets (bank size) which subsequently impacts on their performance

positively. Berger and Mester (1997), find that large banks show a slightly higher efficiency than small ones, when efficiency is perceived from the cost perspective though such advantages can only be translated into good performance when high levels of efficiency are manifested. The current study will incorporate size as a moderator will examine how it influences the relationship between the independent variables and the dependent variables.

2.8 Summary

This chapter has reviewed theoretical, empirical and secondary literature on growth in wealth. While many investment groups have grown to big companies, sustainability of many is still a challenge. Literature in this study used the financial literacy theory, Modigliani and Miller relevance theories. These theories were found appropriate in the study as they guide on the issue of growth in investment group. From the literature it is evident that various challenges affect growth in wealth such as governance, financial literacy, portfolio diversification and capital structure. In addition the variables in the study were derived from the theoretical framework. This study shall thus contribute to the theories of financial management by testing

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research design and the methodology used in the study. The chapter begins with the research design and population. The chapter also looks at the sampling frame, sample size and sampling technique. This is followed by the data collection instruments, pilot study, reliability and validity of data collection instruments. Lastly the chapter looks at the data analysis and processing.

3.2 Research Philosophy

A research philosophy is a belief about the way in which data about a phenomenon should be gathered, analyzed and used (Easterby-Smith et al., 1997). The choice of research philosophy is often influenced by the researcher's basic ontological and epistemological positions (Thorpe *et al*., 2008). Ontology describes one's view on the nature of reality, and specifically, whether this is an objective reality that really exists, or only a subjective reality, created in one's mind (Easterby-Smith et al., 1997). Epistemology is described as the theory or science of the method or grounds of knowledge and assumptions about the ways in which it is possible to gain knowledge of reality, how what exists may be known, what can be known, and what criteria must be satisfied in order to be described as knowledge (Blaikie, 1993).

Ontological and epistemological positions are not always explicit, but show themselves in the matter of methodology and approach because they shape the approach to theory and the methods utilized (Marsh *et al.,* 2002). Positivism and phenomenology/interpretivism are the two widely acknowledged research philosophies. Positivistic approaches seek to establish causal links and relationships between the different elements (or variables) of the subject and relate them to a particular theory or practice (Hammersley *et al*., 2006).Positivism believes that reality is stable and can be

observed and described from an objective viewpoint that is without interfering with the phenomena being studied ((Levin, 1988). This often involves manipulation of reality with variations of a single independent variable so as to identify regularities and to form relationships between some of the constituent elements of the social world (Levine, 1988). Predictions can then be made on the basis of the previously observed and explained realities and their inter-relationships (O'Leary, 2004). However, there has been some debate on whether or not the positivist paradigm is entirely suitable for the social sciences (Hirschheim, 1985). Smith (1983) argues that complete objectivity and neutrality are impossible to achieve since the values of the researchers and participants become an integral part of the research and therefore the researchers cannot be divorced from phenomenon under study. In contrast to the positivism paradigm phenomenology or interpretivism, developed by Husserl, (1962) focuses on how human phenomena are experienced in consciousness, in cognitive and perceptual acts, as well as how they may be valued or appreciated aesthetically. Husserl argued that the positivistic paradigm was inappropriate for studying phenomena because it could not describe the essential phenomena of the human world.

Patton (1990) described phenomenology as a paradigm that seeks to describe what people experience and how it is that they experience what they experience. This study adopted the positivism philosophy due to ontological, epistemological and methodological considerations. These considerations influenced the assumptions and hypothesis about relationships among study variables, the operationalization of constructs and testing of the hypotheses in order to discover relationships that will be generalized to the study population.

3.2 Research Design

A research design is the logical sequence or blue print that connects the empirical data to a study's initial research questions and ultimately to its conclusions (Yin, 2003). There is lack of consistency in classification of different types of research designs. Some classify based on the type of research question being addressed (exploratory, descriptive,

explanatory.), others focus on the data collection tools; survey; quantitative; qualitative, while others focus on the scope case study and survey designs (Jalil, 2013). This study employed a mixed research design. A cross-sectional survey research design was used which provides a quick and accurate means of accessing information about the population and more appropriate where there is a lack of secondary data as observed by (Oso & Onen 2005). The design also adopted a descriptive and correlational approach that aided on drawing conclusions on the research objectives. This research strategy was preferred because it allows for the collection of data through questionnaires administered to the respondents and that the data collected by this design can be used to suggest possible reasons for particular relationships between variables and produce models for these relationships (Saunders & Thornhill, 2007)

3.3 Population

The population for this study comprised of all investment groups registered by KAIG as at December 2015. For purposes of establishing a more comprehensive population register of IGs KAIG database was used. This enabled to draw a representative sample since Kenya Association of Investment groups is the body that brings together investment groups in Kenya. The population comprised of the 4020 groups registered by the Association as at December 2015. A population is the universe of individuals, events or objects having a common observable characteristic that conforms to a given specification in the target or accessible population (Mugenda & Mugenda, 2003; Kitchenham & Pfleeger, 2002; Borg &Gall, 2007).

Burns and Grove (2003) state that population includes all elements that meet certain criteria for inclusion in a study. Target population consists of all members of a real or hypothetical set of people, events or objects from which a researcher wishes to generalize the results of their research while accessible population consists of all the individuals who realistically could be included in the sample (Borg and Gall, 2007). Newing (2011) describes a population as the set of sampling units or cases that the

researcher is interested in. According to Kothari (2004), a population refers to all items in any field of inquiry and is also known as the 'universe'.

3.4 Sampling Frame

Sampling frame is a physical representation of all the elements in the population from which the sample is drawn (Sekaran & Bougie, 2011). Turner (2003) defines a sampling frame as the set of source materials from which the sample is selected. The definition also encompasses the purpose of sampling frames, which is to provide a means for choosing the particular members of the target population that are to be interviewed in the survey. More than one set of materials may be necessary and this is generally the case in a multiple survey with a multi-stage nature. Upagade & Shende (2012) also refer to a sampling frame as a source list containing all names of the universe. Specifying the sample frame is crucial as it itemizes all items in the population from which a sample is obtained for analysis so as to test the research hypotheses. The sampling frame of this study was derived from the database of KAIG as at December 2015. A sample frame of 4020 investment was used for this study.. This data was reliable since KAIG is the umbrella association for all investment groups in Kenya.

3.5 Sampling Technique

Sampling is the procedure a researcher uses to gather people, places or things to study. It is a process of selecting a number of individuals or objects from a population such that the selected group contains elements representative of the characteristics found in the entire group (Orodho, 2002).

3.5.1 Sample Size

While generally, the larger the sample, the more representative the scores on the variables were with regard to the population scores, researchers, as a rule of thumb, recommend a minimum sample size of 15 in experimental/exploratory research, 30 in correlational research and 100 in survey research (Borg & Gall, 2007; Scott & Wild,

1986; Lenth, 2001; Ader, Mellenbergh, & Hand, 2008). A minimum sample size of 10% for large populations or 20% for small populations is considered adequate for descriptive surveys (Gay & Diehl, 1992). The list of investment groups to be availed by KAIG was comprehensive as it contains all relevant details of the group including size, type of investment, physical and telephone contacts. The sample size of this study was calculated using the formula for finite population as proposed by Israel (2009). Since the population is not homogenous, stratified random sampling was then be used in allocation of samples proportionate to size of the strata.

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

Where:

n= desired sample size

N= Population

e = margin of error at 5% (standard value of 0.05)

The sample size for the study was calculated as:

$$n = \frac{4020}{1 + 4020(0.05^2)} = 364$$

The proportionate sample size of each stratum was computed using the following formula

$$Pn = n\frac{N_1}{N}, n\frac{N_2}{N}, \ldots, n\frac{N_n}{N}$$

Where: N=Number of investment groups (population)

$N_1 \ldots N_n$ = proportionate population in each strata

Pn= proportion of sample to be selected in each strata

Table 3.1: Sampling Distribution

Strata	**Source**	**$N_{1..n}$**	**P_n**
Small IGs	KAIG	3136	284
Medium IGs	KAIG	552	50
Large IGs	KAIG	331	30
Total		**4020**	**364**

3.5.2 Sampling Technique

Sample selection from each cluster was done using simple random sampling after stratified method was done to determine the stratas. This entailed first assigning consecutive numbers to the groups in each of the clusters, then selecting random numbers for the sample. Since the population was heterogeneous, the random numbers were selected in each stratum. This sampling technique was an appropriate technique because it ensured that groups of different sizes sampled had an equal chance of being included in the samples that yielded the data that was generalized within minimal margin of error and determined statistically Borg (1987); Mugenda & Mugenda (2003).

3.6 Data Collection Instruments

The study sought to investigate the influence of financial literacy, portfolio diversification, Capital structure and group governance on growth in wealth of investment groups registered by KAIG. A questionnaire was adequate for this study since questionnaires are commonly used to collect important information about a population Orodho (2004) and each parameter in the questionnaire was developed to address a specific objective Mugenda & Mugenda (2003).

The questionnaire was divided into seven sections: Section A on group size, Section B financial Literacy, Section C capital structure, Section D Portfolio diversification, Section E group governance, Section F growth in wealth. The unit of analysis was the investment group Chairman or treasurer or secretary or active member of the group who understand the operations of the group well. They were selected as the respondents based on the fact that they have the information at hand and entrusted by others in handling the affairs of the group hence play a critical role in determining the performance of the investment group. Questionnaires were used in the data collection.

The study also used secondary data which was collected from the firms records. In secondary data analysis, data is analyzed by parties who did not do the actual data collection. Secondary data collection may be from published records or it may be based on the original data. This study used original collected secondary data on proxies used to measure the dependent variables. The dependent variable growth in wealth was measured by indicators growth from the quantitative variables profit after tax, retained profits, total assets, capital, loans borrowed and Number of employees. All these measurements were collected from existing databases of the investment groups which is more reliable than questionnaire responses which would be biased based on perceptions of the respondents. Growth being a financial measure of change in a quantitative variable required collection of data on the measurements over a period to compute the percentage of change in the variables. The secondary data was therefore collected using a data collection sheet for the variables which was emanated from the firms existing records.

3.7 Data Collection Procedure

A questionnaire was developed. The aim of the questionnaire was to collect information relating to determinants of growth in wealth of investment groups. The drop and pick later method was used. This information was collected from either group treasurer, secretary, chairperson or a group member who understand the operations of the group

very well. Quantitative and qualitative methods were employed in data collection. Qualitative responses were then quantified and conclusions drawn from them. Qualitative method enables the researcher to collect data in the actual context in which the actual phenomenon occurs. It is usually an exploratory activity in which data is collected in a real-life natural setting and is therefore rich, descriptive and extensive (Wellington, 2000).

3.8 Pilot Study

Pilot study is carried out in order to establish the accuracy and appropriateness of the research design and data collection instruments (Saunders *et al*., 2009). According to Golafshani (2003) a pilot study can reveal deficiencies in the design of a proposed experiment or procedure and these can then be addressed before time and resources are expended on large scale studies. Sekaran (2008) notes that pilot test is necessary for testing the reliability of instruments and the validity of a study. A pilot test is an evaluation of the specific questions, format, question sequence and instructions prior to the main survey. Questions answered by the pilot test include: Is each of the questions measuring what it is intended to measure? Are questions interpreted in a similar way by all respondents? Do close-ended questions have a response which applies to all respondents? Are the questions clear and understandable? Is the questionnaire too long? How long does the questionnaire take to complete? Are the questions obtaining responses for all the different response categories or does everyone respond the same? (Polit & Beck, 2003).

The researcher ensured that the research instrument measures what it was supposed to measure. Tests of validity and reliability of the study instrument were undertaken. The research instruments were pre-tested as per recommendations by Mugenda & Mugenda (1999) who observed that a successful pilot study uses 1% to 10% of the actual sample size. In this study, 10% of the sample that is 36 (thirty six) questionnaires were used in the pilot test. The questionnaire pre-testing was done using randomly selected investment groups which were not included in the final data collection.

3.8.1 Validity

Validity is defined as the degree to which a test or measuring instrument actually measures what it purports to measure or how well a test or a meaning instrument fulfills its function (Anastasi *et al.*, 1997). Whiston (2005) also views validity as the degree to which evidence and theory support the interpretation of test scores entailed by proposed uses of tests. (Abbott & McKinney, 2013) notes that Validity is the extent to which a research measure actually captures the meaning of the concept it is intended to measure. Bryman (2012) adds that validity refers to the degree to which an instrument measures what it purports to measure. Mugenda and Mugenda (2003) further define validity as the degree to which results obtained from the analysis of the data actually represent the phenomenon understudy. Validity can be measured using content validity and construct validity measures (Messick, 1995). Content validity considers whether or not the items on a given test accurately reflect the theoretical domain of the latent construct it claims to measure. Items need to effectively act as a representative sample of all the possible questions that could have been derived from the construct Golafshani (2003)

According to Mugenda and Mugenda (1999), content validity is a measure of the degree to which data collected using a particular instrument represents a specific domain of indicators or content of a particular concept. Construct validity of a measure is concerned with the theoretical relationship of a variable to other variables or the extent to which a measure behaves the way that the construct it purports to measure should behave with regard to established measures of other constructs (DeVellis, 1991). Construct validity was ensured by testing convergent and discriminant validity. In addition to construct validity, content validity was also ensured. A construct is an attribute being studied that is defined by established theories. It exists in theory and has been explored and observed to exist in practice through proxy indicators. Constructs are latent variable unobservable directly but through indicators thus the importance to explore the unidimensionality and relationships between the proxies and the latent

construct they are purported to measure (Schweizer, 2012; Ziegler, Booth, &. Bensch, 2013). Content validity of the questionnaire in this study was tested and enhanced by giving the questionnaire to two senior officials from the Kenya Association of investment groups and three managers from amalgamated chama. Their views and responses about the questionnaire were reviewed and were used to improve the study instruments where appropriate.

3.8.2 Reliability

Joppe (2000) defines reliability as the extent to which results are consistent over time and an accurate representation of the total population under study and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable. To assess the reliability and validity of the study instrument, the questionnaire was pretested in a pilot study involving investment groups who have similar characteristics to the study respondents but were not included in the sample. The results of the pilot survey necessitated improvement and clarity of the questions. For reliability analysis Cronbach alpha was used to measure internal consistency. This was calculated by application of SPSS software. Cronbach alpha ranges between 0-1. A higher value shows more reliable generated scale. Nunnaly (1978) and Grayson (2004) have indicated 0.7 and above to be an acceptable reliability coefficient. The research instruments were pre-tested using a sample size of 36 respondents as per recommendations by Mugenda and Mugenda (1999) who observe that a successful pilot study uses 1% to 10% of the actual sample size.

3.9 Data analysis and Presentation

The data collected was analyzed, with respect to the study objectives, using both descriptive and inferential statistics. According to Zikmund *et al*. (2010) data analysis refers to the application of reasoning to understand the data that has been gathered with the aim of determining consistent patterns and summarizing the relevant details revealed in the investigation. Kombo and Tromo (2009) adds that data analysis refers to

analyzing what has been collected and making deductions, and interferences. It is extracting significant variables, detecting anomalies, and testing any assumptions. Data processing entails editing, classification and tabulation of data collected so that they are amenable to analysts (Kothari, 2009). SPSS 21 and advanced Microsoft excel were used to analyze the data. According to Quintero *et al.* (2012) SPSS is a software package used for statistical analysis. Collected data were checked for errors of omission and commission. A mix of tools was used since the data to be collected will both be qualitative and quantitative. For the qualitative data was measured using the Likert scale, content analysis was carried out to understand the relationship of each of the independent variable with the dependent variable. Both descriptive and inferential statistics were used to analyze the data collected from Investment groups.

Descriptive statistics involved computation of various descriptive statistics including measures of central tendency. Nominal qualitative data were analysed and presented in graphical pie-charts and bar charts. Ordinal data was analysed in frequency tables and computation of the mode as the measure of central tendency. Items measured on a continuous scale were analysed by producing the arithmetic mean as the measure of central tendency and computation of the standard deviation as measures of dispersion. A combination of various inferential statistics were used to determine the influence of financial literacy, Investment policy, Capital structure, Governance on growth of investment group as well as testing the hypotheses. Variables that were proven statistically significant at univariate analysis level were retained to be included in the final model during Multivariate analysis.

The study used Pearson's correlation test to test dependence of growth of investment groups' wealth on Financial Literacy, Capital structure, Portfolio diversification and Governance. Thus, the study employed multiple linear regressions in the multivariate analysis. Multiple linear regression analysis was done in order to establish the influence of Financial Literacy, Capital structure, Governance and Portfolio diversification on growth in wealth of the investment group. A statistical modelling process was initiated to choose the best model between the full and reduced model that explains the

influence of the independent variables (predictor/explanatory variables) on the dependent variable. The model adopted the use of Ordinary least squares regression technique to estimate the parameters of the equation model. The tests were done at 95% level of significance. The assumptions made by using the OLS model were tested using diagnostic tests to ensure that the model fitted met the normality, homoscedasticity and non-autocorrelation of the residuals and non-multicollinearity of the predictor variables in the model. Analysis of data using regression model has been used previously by Njeru (2016) in his study on effect of liquidity management on financial performance of deposit taking saving and credit co-operative society in Kenya, Aduda (2011) in a study which investigated the relationship between executive compensation and firm performance in the Kenyan banking sector. Also Ngugi (2001) used a regression analysis in a study on the empirical analysis of interest rates spread in Kenya while Khawaja and Mulesh (2007) used regression analysis to identify the determinants of interest rates spread in Pakistan.

3.9.1 Statistical Model

$$\mathbf{Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 \varepsilon}$$

Where Y = Growth in wealth of Investment Group

β_0=Intercept

β_1 - β_4 = Slopes coefficients representing the influence of the associated independent variables over the dependent one.

X_1 = Financial literacy

X_2 = Capital structure

X_3 = Portfolio diversification

X_4 = Governance

ε = Error term

To draw conclusions on the moderating influence of group size on the relationship between determinants of growth and growth of wealth, a moderated multiple regression model was fitted and tested for significance. The model included interaction variables of the moderating variable and the determinants of growth. The change statistics (R-square change and F-change were calculated on a step wise regression to determine the effect of addition of the interaction variables to the equation. The hypothesis on the moderating variables was tested based on the significance of the change statistics. The MMR model equation is given by;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 Z * X_1 + \beta_6 Z * X_2 + \beta_7 Z * X_3 + \beta_8 Z * X_4 + e$$

Where Y = Growth in wealth of Investment Group

β_0=Intercept

β_1 - β_4 = Slopes coefficients representing the influence of the associated independent variables over the dependent one.

X_1 = Financial literacy

X_2 = Capital structure

X_3 = Portfolio diversification

X_4 = Governance

Z = Group size

$Z * X_i$ Interaction variable between group size and an independent variable {=1,2,3,4}

e = Error term

3.9.2 Operationalization of the Study Variables

Study variables are sometimes abstract constructs. In order to capture and measure them it is necessary to determine their representations in reality; the process of operationalization of the study variable attempts to determine the representations in reality. The table 3.2 presents the operationalization of variables for this study.

Table 3.2: Operationalization of Study Variable

S/N	Variable	Indicators	Operationalization	Measurement scale	Hypothesis
1.	Financial Literacy	Accounting literacy	Training in book keeping Use of books of accounts and accounting packages	5 point Likert type scale	**H_{01}:** Financial Literacy has no significant influence on the relationship between the determinants of growth and growth in wealth of investment groups in Kenya
		Saving literacy	Knowledge of savings products saving regularly, having a savings plan maintaining money in a bank savings account	5 point Likert type scale	
		Debt Literacy	Attitude towards debt Knowledge of types interest rate calculation Knowledge of credit rating Perception of debt burden	5 point Likert type scale	
		Investment literacy	Investment planning Knowledge of stock markets and the products	5 point Likert type scale	

			Knowledge of investment risks and returns		
		Insurance literacy	Attitude towards insurance Knowledge of insurance concepts Type of insurance taken	5 point Likert type scale	
2.	Portfolio diversification	Investment Policy Range of investments	Alertness to profit opportunities Source of investment information	5 point Likert type scale	**H_{02}:** Portfolio diversification has no the relationship between the determinants of growth and growth in wealth of investment groups in Kenya
		Diversification of Investments portfolio	purchase fixed assets real estate capital and money markets	ratio scale	
3.	Capital structure	Share Capital/savings loans Retained earnings	•The mix of each in the capital structure •Percentage of retained earnings	ratio scale	**H_{03}:** Capital Structure has no significant influence on the relationship between the determinants of growth and growth in wealth of investment groups in Kenya
		Funds from government and funding agencies	percentage of funds from Uwezo fund, women enterprise fund and youth fund	ratio scale	
		Debt Capital	percentage of loans from banks or other institutions	ratio scale	
4.	Governance of the group	Legal Documents	Constitution and agreements	5 point Likert type scale	**H_{04}**: Group governance has no significant influence on the relationship between the determinants of growth and growth in

					wealth of investment groups in Kenya
		Conduct of meetings	formal or informal	5 point Likert type scale	
		governing board	Availability	5 point Likert type scale	
		Due diligence	sale Agreements		
		Group diversity	having members from different regions/tribes	5 point Likert type scale	
5.	Size of the group	Large Medium Small	Asset Base of over 20 million Asset base of over 1 million and below 20 million Asset base of below 1 million	ratio Scale	**H_{05}**: Group size has no moderating effect on the relationship between the determinants of growth and growth in wealth of investment groups in Kenya
6.	Growth in wealth	Growth in assets	Percentage Growth in Assets/Capital	ratio scale	
		Growth in capital	Percentage growth in retained earnings	Ratio scale	
		Growth in Capital/ Savings	percentage increase in capital	Ratio scale	
		Growth in retained Earnings	return in dividend/capital gain/profits	Ratio Scale	
		Number of employees		ratio scale	

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This study assessed the determinants of growth in wealth of investment groups in Kenya. Specifically, the study investigated the influence of financial literacy, portfolio diversification, capital structure and governance on growth in wealth of investment groups in Kenya. This chapter presents an analysis of data that was collected, interpretation and discussion of the findings. Presentations of the results are on tables and figures where appropriate. The choice of presentation depends on the best suitable method that will have a first impression on the reader giving clear indication of the data being presented. Both descriptive and inferential analysis techniques have been employed in the analysis. The results are presented according to the research objectives and the chapter is organized according to the themes derived from the research questions. The response rate and the demographic characteristics of the study are also given as a background to the analysis.

4.2 Response Rate

The section presents the results on the response rate. This is an illustration of how the researcher managed to collect data from the respondents who were sampled as a representative of the target population. The response rate shows the level of achievement the researcher obtained in collecting data for the study. In table 4.1, it is shown that the response rate was 87% of the targeted sample. Orodho (2009) stated that a response rate above 50% contributes towards gathering of sufficient data that can be generalized to have sufficient representation of the population.

Table 4. 1: Response Rate

Strata	Sampled	Response	Response rate
Small IGs	284	251	88%
Medium IGs	50	43	86%
Large IGs	30	21	70%
Total	**364**	**315**	**87%**

The number of questionnaires that were administered to all the respondents was 364 questionnaires. However, the study did not achieve a response of 100% as there were some non-response incidences where the researcher could not access all the respondents of the study. Therefore, out of the 364 targeted respondents, 315 gave adequate information through answering the questionnaires completely and returned the questionnaires accordingly. However, 49 respondents did not give response to the study making a non-response of 13%. Thus, the study realized a response rate of 87% (315 / 364) as shown in Table 4.1. This response is good according to Mugenda and Mugenda (2003) who posit that a response rate of 50% is adequate, 60 % is good and above 70% is very good. Saunders, Lewis and Thorn (2007) suggested that an average response rate of 30 % to 40% is reasonable for a deliver and collect survey method. Babbie (2004) also asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good. Although the results may be interpreted to indicate a very good response rate, but a failure of 13% to respond may be explained by inaccessible records of some of the dormant investment groups. Some of these dormant investment groups did not maintain up-to-date record hence the difficulty in responding to the questionnaire.

4.2.1 Missing Data Analysis

Table 4.2 shows the percentage of responses that were not responded to on the questionnaire. Researchers have suggested and accepted up to 10% of missing despondence thereby deleting respondents that had more than 10% missing data.

Tabachnick and Fidel (2007) suggested that allowance can be given for respondents that had less than 10% missing data. Table 4.2 shows the missing data analysis for this study. From the 315 respondents, 92% had up to 2% of the questionnaire not answered, 5% of the respondents had up to 6% of the questionnaire not responded to, 9% had up to 9% of the missing data while 7 (2%) respondents had up to 12% of the questions unanswered. The 7 respondents who left out more than 10% of the questionnaire unanswered were deleted leaving 308 respondents. Further analysis were based on the responses from 308 respondents that formed 85% of the originally sample size of 364. The missing responses from respondents that had less than 10% non-response were adjusted using the measures of central tendency.

Table 4. 2: Missing Data Analysis

Missing responses	Respondents	Percentage	Cumulative percentage	Action
2%	290	92%	92%	Retained
6%	15	5%	97%	Retained
9%	3	1%	98%	Retained
12%	7	2%	100%	deleted

4.3 Pilot Study Tests

Pilot analysis was done using factor analysis, sampling adequacy using KMO and Bartlett's tets, construct validity using convergent validity and Discriminant validity and reliability tests to test the reliability of the instrument of data collection.

4.3.1 Factor Analysis

Factors are a smaller set of underlying composite dimensions of all the variables in the data set, while loadings are the correlation coefficients between the variables and the factors (Mugenda & Mugenda, 2012). Factor analysis can be applied in order to explore a content area, structure a domain, map unknown concepts, classify or reduce data, illuminate causal nexuses, screen or transform data, define relationships, test hypotheses,

formulate theories, control variables, or make inferences. Factor loading assumes values between zero and one, of which loadings of below 0.3 are considered weak and unacceptable (Nachmias & Nachmias, 2008). The pilot study assumed factor loadings of 0.4 as acceptable. Most of the indicators in the study had at least factor loading greater than 0.4. The indicators that had factor loadings less than 0.4 were expunged. See Appendix III. The idea in factor analysis is finding a set of latent variables that essentially contain the same information with the manifest variables. From factor analysis, the indicators under investigation were placed under precision and the correct variables they belong to and built confidence on retention of indicators to their respective variables. According to Hare (1998), factor analysis helps in grouping variables with similar characteristics together.

4.3.2 Sampling Adequacy

To measure the sampling adequacy of the data, Kaiser-Meyer-Olkin test (KMO) and Bartlett's test of sphericity were used. The KMO is a statistic that indicates the proportion of variance in variables that might be caused by underlying factors. A value of zero indicates that the sum of partial correlation is large relative to the sum of correlations indicating diffusions in the patterns of correlations, and hence, factor analysis is likely to be inappropriate (Costello & Osborne, 2005). A value close to 1 indicates that the patterns of correlations are relatively compact and so factor analysis should yield distinct and reliable factors (Cooper & Schindler, 2011).

Bartlett's test of sphericity tests whether the relationship among indicators is significant or not. It tests the hypothesis that a correlation matrix is an identity matrix, which would indicate that variables are unrelated and therefore unsuitable for structure detection. Small values (< 0.05) of the significance level indicate that factor analysis may be useful with one's data. The obtained Kaiser-Meyer-Olkin measures of sampling adequacy shows that the value of test statistic is 0.914 which is greater than 0.5 (see table 4.3) implying that factor analysis should yield distinct and reliable factors.

For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5 (Field, 2000). The test results also show that the scales had values above the threshold of 0.7 as established by Williams et al, 2012). Bartlett's test of sphericity is used to test whether the data is statistically significant or not. With the value of test statistic and the associated significance level, it shows that there is a relationship among variables.

Table 4.3: KMO and Bartlett's Tests

Test	**Value**	
Kaiser-Meyer-Olkin measure of sampling adequacy.		0.914
Bartlett's test of sphericity	Approx. Chi-square	3535.7
	Df	465
	sig.	0

4.3.3 Construct validity

To measure construct validity, the pilot study used factor analysis results to measure both convergent and discriminant validity. Convergent validity tests if constructs that are expected to be related are related while discriminant validity tested to confirm that constructs that are expected to have no relationships are actually not related.

Convergent Validity

Convergent validity was tested by measuring the average extracted variance within each construct. Convergent validity is implied if constructs have average variance extracted above 0.5. The table 4.4 results on the average variance extracted for this pilot study shows

that from the retained factors, all the constructs have an average variance extracted above 0.5 implying convergent validity Fornell and Larcker (1981).

Table 4. 4 Average Variance Extracted

Construct	AVE
Financial Literacy	0.545
Capital Structure	0.556
Portfolio Diversification	0.762
Group Governance	0.762
Growth in Wealth	0.541
Group size	0.773

Discriminant Validity

To measure discriminant validity, a comparison of the average variance extracted for each construct and the squared correlations were computed and tabulated. The table 4.5 shows the correlations and then in table 4.6 the comparison of the correlations with the AVE is done on the diagonal and is highlighted. On comparison, all the AVEs are greater than the squared correlations between the constructs implying that the instrument exhibits discriminant validity Segars (1997)

Table 4. 5: Correlations

	Financial Literacy	Portfolio diversification	Capital Structure	Group Governance	Growth in Wealth
Financial Literacy	1	0.085	0.024	0.019	0.608
Portfolio diversification	0.085	1	0.06	0.015	0.543
Capital Structure	0.024	0.06	1	-0.004	0.389
Group Governance	0.019	0.015	-0.004	1	0.308
Growth in Wealth	0.608	0.543	0.389	0.308	1

Table 4. 6: Squared Correlations and AVE

	Financial Literacy	Portfolio diversification	Capital Structure	Group Governance	Growth in Wealth
Financial Literacy	0.545	0.007	0.001	0.000	0.370
Portfolio diversification	0.007	0.762	0.004	0.000	0.295
Capital Structure	0.001	0.004	0.556	0.000	0.151
Group Governance	0.000	0.000	0.000	0.762	0.095
Growth in Wealth	0.370	0.295	0.151	0.095	0.541

4.3.4 Reliability Test

Reliability of the questionnaire was assessed based on Cronbach's Alpha where values greater than 0.7 indicate that the construct is reliable otherwise it is unreliable. According to George and Mallery (2003), Cronbach Alpha value greater than 0.7 is regarded as satisfactory for reliability assessment. Results for the reliability test are presented under this section for each construct. Financial literacy, Capital structure, portfolio diversification, group governance, growth in wealth and perceived relation were all reliable as shown below. The reliability alpha statistics all the variables was obtained as 0.754. All the constructs were reliable as shown in table 4.7 below.

Table 4.7: Reliability Test Results

Variable	Number of Items	Cronbach's Alpha	Comment
Financial Literacy	10	0.754	Accepted
Capital Structure	5	0.829	Accepted
Portfolio Diversification	5	0.776	Accepted
Group Governance	11	0.926	Accepted
Growth in Wealth	5	0.758	Accepted
Group size	3	0.748	Accepted

4.4 Descriptive Analysis of Growth in Wealth

The study sought to investigate the growth in wealth in the investment groups as a dependent variable influenced by determinants of growth. The respondents' perception on their groups' performance in relation to wealth growth was sought by asking the respondents their level of agreements to various items as shown in table 4.8. On profit growth, 0% of the respondents strongly disagreed that their Profits have been growing steadily since the group began while 35% just disagreed. On the other hand, 47% agreed

that Profits have been growing steadily since the group began and 7% of the respondents strongly agreed with the statement. 11% of the respondents were however neutral to the question. Majority (47%) of the respondents were in agreement as also implied by the modal class which was found to be 4. The mode of 4 implies that on average, the investment groups in Kenya agree that their Profits have been growing steadily since the group began. The respondents were also asked about steady growth in their groups total assets. To this, 1% of the respondents strongly disagreed that their Total assets have been growing steadily since the group began while 9% just disagreed.

On the other hand, 67% agreed that their Total assets have been growing steadily since the group began and 8 of the respondents strongly agreed with the statement. 15 of the respondents were however neutral to the question. Majority (67%) of the respondents were in agreement as also implied by the modal class which was found to be 4. The mode of 4 implies that on average, the investment groups in Kenya agree that their Total assets have been growing steadily since the group began. On average, the investment groups in Kenya agree that their retained profits have grown steadily since the group began. This is implied by the modal class of 2 from the responses on their level of agreement on steady growth of their retained earnings. Majority (43%) of the respondents were in agreement. Only 1% of the respondents strongly disagreed that their Retained profits have grown steadily since the group began while 43% just disagreed. On the other hand, 38% agreed that their Retained profits have grown steadily since the group began and 8 of the respondents strongly agreed with the statement. 10 of the respondents were however neutral to the question.

Regarding borrowing, 12% of the respondents strongly disagreed that the amounts of loans borrowed by their group have increased since the group began while 45% just disagreed. There were 29% of the respondents who however agreed that the amount of loans borrowed by the group have increased since their group began and 7% of the respondents strongly agreed with the statement. There were a 7% of the respondents who were neutral. Majority (45%) of the respondents were in disagreement as also implied by the modal class which was found to be 2. The mode of 2 implies that on

average, the investment groups in Kenya agree that the amount of loans borrowed by their group have increased since the group began. Only 7% of the respondents strongly disagreed that their number of employees has increased since the group begun while 18% just disagreed. On the other hand, 36% agreed that their number of employees has increased since the group begun and 9 of the respondents strongly agreed with the statement. 30 of the respondents were however neutral to the question. Majority (36%) of the respondents were in agreement as also implied by the modal class which was found to be 4. The mode of 4 implies that on average, the investment groups in Kenya agree that their number of employees have increased since the group begun.

Table 4.8: Perception in Growth in Wealth

	Strongly Disagree (1)	**Disagree (2)**	**Neutral (3)**	**Agree (4)**	**Strongly Agree (5)**	**Modal class**
Profits have been growing steadily since the group began	0%	35%	11%	47%	7%	4
Total assets have been growing steadily since the group began	1%	9%	15%	67%	8%	4
Retained profits have grown steadily since the group began	1%	43%	10%	38%	8%	2
The amount of loans borrowed by the group have increased since the group began	12%	45%	7%	29%	7%	2
The number of employees have increased since the group begun	7%	18%	30%	36%	9%	4

To further measure growth in wealth the respondents were asked to state actual measures of profits after tax, retained profits, total assets, capital, borrowed loans and number of employees for the years 2010 to 2015 presented in table 4.9. The actual entries per year were then used to calculate annual growth rates for the indicators and further used to calculate the mean growth rates for each indicators growth. The results for the descriptive analysis for the averages are presented in table 4.10 below. The researcher sought to determine the growth in wealth in the investment groups. The mean growth in profit after tax was found to be 1.505 implying that on average the investments group have over 100% growth rates in profits after tax. The variability of the growth rate across the groups is however high with a standard deviation of 11.997, a minimum of -0.571and a maximum of 199.241. The mean growth in retained profits was found to be 14.406. On average the investment group also experience over 100% growth rates retained profits which also have high variability of the growth rate across the groups with a standard deviation of 217.918, a minimum of -0.908 and a maximum of 3541.001. All the other indicators also experience high growth rates above 100% except capital and number of employees that showed averages of 44.5% and 6.1% growth rates respectively. The growth in number of employees had the lowest dispersion of 0.105 across the groups.

Table 4.9: Growth in Wealth

	Minimum	**Maximum**	**Mean**	**Std. Deviation**
Mean growth in Profit after tax	-0.571	199.241	1.505	11.997
Mean growth in retained profits	-0.908	3541.001	14.406	217.918
Mean growth in total Assets	-0.333	499.250	2.745	31.991
Mean growth in capital	-0.321	26.865	0.445	2.178
Mean growth in loans borrowed	-0.977	29.498	1.040	2.945
Mean growth in Number of employees	-0.117	0.667	0.061	0.105

4.5 Determinants of Growth in Wealth

This section attempts to analyze the findings of the various determinants of growth in wealth of investment groups in Kenya as were hypothesized by the researcher. They include; Financial literacy, portfolio diversification, capital structure and group governance.

4.5.1 Descriptive Analysis for Financial Literacy

Whereas capacity building of groups is one of the main mandates of Government agencies such as Women Enterprise Fund and Youth Enterprise Fund (ILO,2008), these agencies rank low comparatively which means that these agencies have not done much on their capacity building mandate. As shown in the table 4.10, KAIG has ranked highest in terms of offering the financial trainings. Moreover findings reveal that micro finance institutions rank second. Banks rank third in terms of providing training services. Most of these financial trainings were offered by financial institutions (banks and microfinance institutions) which were ranked as the main service providers. These institutions offer training as a component of their products and are mainly pre- financing trainings only accessible to those that have qualified for loans (Mastercard, 2011).This limits access to financial education by investment groups who may want to acquire financial knowledge but are not interested in loans.

Table 4.10: Awareness about institutions training of financial literacy

Name of the organisation	Frequencies
KAIG	110
Uwezo fund	23
YEDF	21
WEDF	34
Banks	38
Microfinance Institutions	84

The study also sought to test the respondents' knowledge of assets, capital and liability. The results obtained, shown in table 4.11 below, indicate that the respondents had a high level of knowledge on assets, capital and liabilities. On cash, 92.6% (289) of the respondents identified cash as an asset, 6.7% (21) identified it as capital while 0.6% (2) identified it a liability. 98.7% (304) of the respondents said loan was a liability while 0.6% (2) said it was an asset, a similar number on those who said it was a form of capital. On land, the majority of the respondents identified it as an asset forming 99% (308) of the responses, while 0.6% (2) and 0.3% (1) identified land as a liability and capital respectively. All the respondents identified vehicle and furniture as assets. On member's contribution, the majority of the respondents identified it capital forming 97.1% (300) of the responses, while 2.3% (7) and 0.6% (2) identified member's contribution as an asset and liability respectively. Siekei et al. (2013) studied the effect of financial literacy education on performance of small firms in Njoro, Kenya and established that training in financial analysis, budgeting and credit management improved the performance of microenterprises.

Table 4.11: Knowledge on Assets, Capital and Liability

	Asset	Capital	Liability
Cash	289	21	2
Loan	2	2	304
Land	308	1	2
Vehicle	311	0	0
Furniture	311	0	0
Member's contribution	7	300	2

The researcher also wanted to find out whether the respondents understood that compound interest is interest calculated on the initial principal and also on the accumulated interest of previous periods of a deposit or loan. The findings obtained

show that the majority of the respondents agreed forming 98.7% (293) of the responses while 1.3% (4) did not agree as shown in figure 4.2 below.

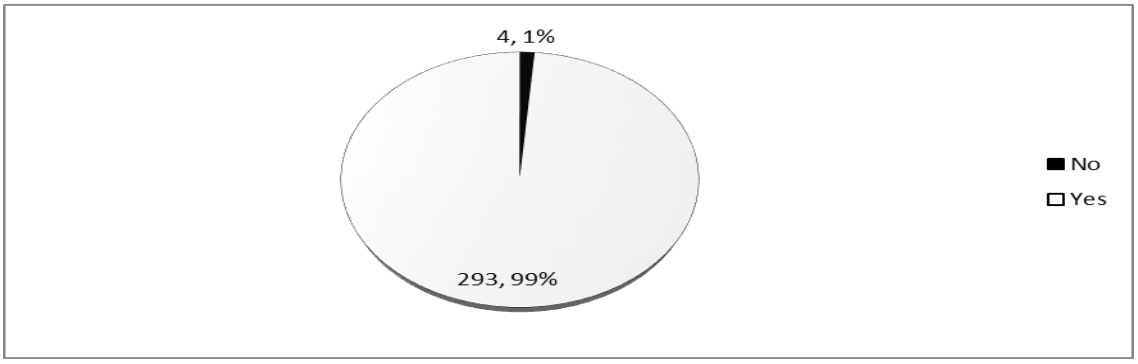

Figure 4.1: Compound interest is interest calculated on the initial principal

The respondents were asked to give their level of agreement on the given statements on financial literacy. The results shown in table 4.12 below indicate that the majority of the respondents agreed that they are sufficiently competent in book keeping forming 68.8% (214) of the responses, followed by those who strongly agreed at 19.6% (61), those who were neutral at 7.1% (22) while those who disagreed and strongly disagreed formed 3.9% (12) and 0.6% (2) of the responses respectively. Ezejiofor et al. (2014) in a study to establish the relevance of accounting records in small business performance in Nigeria found that MSEs that kept proper books of account were able to measure accurately the performance of their businesses. On whether the group had received adequate training on bookkeeping, majority of the respondents agreed forming 63.3% (197) of the responses followed by those who strongly agreed at 15.8% (49) of the responses. No respondent strongly disagreed. This confirms findings by the G20 Seoul Summit (2010) and Gordon & Brayden (2014) that a low level of literacy on book keeping skills has contributed to lost opportunities for a large number of MSEs worldwide. The study determined that the groups always prepared budgets every year where the majority of the respondents at 62.7% (193) agreed and 33.1% (102) strongly agreed. Budgeting has been found to be an important tool for financial planning and

control particularly in growth oriented businesses (Churchill & Lewis,1986; Fatoki, 2014) and a basis for setting performance targets(Siekei et al., 2012) which ultimately results to increased sales , business profitability and growth. These results are consistent with the findings of FSD (2009) and Warue and Wanjira (2013) who found that there is limited use of budgeting among MSEs which impacts negatively on their business performance. Findings also show that the majority of the respondents agreed that group members could interpret the contents of the financial statements forming 45.8% (142) of the responses followed by those who strongly agreed at 27.4% (85) of the responses. The study determined that books of accounts for our group were always prepared by professionals where 57.7% (179) agreed and 27.4% (85) strongly agreed.

This result is also consistent with findings by Zindiye (2008) established that financial skills, particularly book keeping skills, financial statements preparation, debit and credit control, budgeting skills and tax calculation influenced the performance of the enterprises. Findings from the study also indicate that the groups experienced irregular savings by some group members since 50.0% (155) of the respondents agreed and 20.0% (62) of the respondents strongly agreed. The study also determined that the groups had effective savings plans shown by the number of respondents who agreed and strongly agreed at 43.4% (135) and 27.0% (84) respectively. In addition, the study found that the group members interrogated the bank statements frequently since the majority of the respondents at 49.8% (155) strongly agreed. The study however determined that insurance is not considered too costly and group can afford it. This is shown by the number of respondents who strongly disagreed and those who disagreed that insurance is too costly and the group cannot afford it forming 34.4% (108) and 35.9% (113) respectively. This finding is consistent with findings from the FSD et al (2013) Fin Access Survey which indicated that only 16.6% of business owners have insurance. The study determined that the groups had annual saving target that was adequate; knew the types of securities traded in the Nairobi Securities Exchange; followed the trends in securities traded in the securities exchange and updated themselves with current information on business news.

Table 4. 12: Financial Literacy

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Modal class
I'm sufficiently competent in book keeping	1%	4%	7%	69%	20%	4
Our group has received adequate training on bookkeeping	0%	11%	16%	63%	10%	4
The group always prepares budgets yearly	0%	1%	3%	63%	33%	4
The group members can interpret the contents of the financial statements	0%	7%	19%	46%	27%	4
Books of accounts for our group are always prepared by professionals	0%	8%	6%	58%	27%	4
Our group experiences irregular savings by some group members	12%	12%	6%	50%	20%	4
Our group has an effective savings plan	3%	18%	9%	43%	27%	4
Our group members interrogate the Bank statements frequently	2%	1%	2%	45%	50%	5
Borrowing is considered risky by the members in our group	22%	24%	6%	18%	30%	5
Insurance is too costly and our group cannot afford it	34%	36%	12%	11%	7%	2
Our group has annual saving target that is adequate	10%	25%	14%	40%	11%	4
I know the types of securities traded in the Nairobi Securities Exchange	5%	10%	26%	53%	7%	4
I follow the trends in securities traded in the securities exchange	5%	11%	23%	53%	9%	4
I update myself with current information on business news	2%	4%	2%	24%	67%	5

Financial literacy influences the way individuals look for exhortation about financial ideas. Those with low financial knowledge have a tendency to depend on family and companions for guidance as more literate people depend on expert financial advisors, daily papers and financial data in books, in magazines and on the web. These findings obtained in this study agree with those arrived by Jessen (2012). Van Rooij *et al*. (2011) in line with the findings of the study observed that financial knowledge impacts stock market support. In the most recent couple of years, researchers have started to investigate the choice to secure financial literacy and the connections between financial knowledge, saving, and investments including Delavande, Rohwedder, and Willis (2008). These studies take note that people will ideally choose to invest in financial knowledge to access higher-return assets as this preparation helps them distinguish better-performing assets and/or employ financial advisors who can cut down investment expenses. These findings are in line with the findings obtained in the study.

A financially literate individual knows the most reasonable financing and financial management choices for his/her business at the different growth phases of his/her business as well as knows where to acquire the most appropriate items and services and connects with certainty with the suppliers of these items and services. Similar results had also been posited by USAID (2009). Financially literate individuals oversee assets more carefully; utilize financial data more insightfully in this way enhancing the benefit of their enterprises. In line with these findings, Berman *et al*. (2008) observed that financial literacy impacts the general access and usage of an financial services; similar to the findings of Nunoo *et al.* (2010) as well. A number of people are still new to investments tools, for example, the stock market. As indicated by Gallery, Newton and palm (2011) a lack in financial literacy is one of the reasons for inertia and imperfect financial basic leadership, the level of financial literacy affects the investment decision choices. Njoroge (2011) in his study concludes that there is a positive relationship between financial literacy and entrepreneurial achievement. The study also has determined a positive influence by financial literacy on growth of wealth in the investment groups.

4.5.2 Descriptive Analysis for Capital structure

The researcher sought to find out the principal source of funds used to finance assets in the groups. The findings indicate that the majority of the respondents identified group members' contribution as the principal sources of funds forming 92.21% (284) of the respondents, followed by government agencies uwezo fund youth enterprises fund and Women enterprises fund forming 6.82% (21) while 0.65% (2) identified commercial banks, and 0.32% (1) identified government agencies and non-governmental organizations. Table 4.13 below shows results of principal source of funds by the respondents.

Table 4.13: Principal Source of Funds

	Frequency	**Per cent**
Group members contribution	284	92.21%
Government agency Uwezo Fund, Women Enterprise Fund, Youth Fund	21	6.82%
Non-governmental organization	1	0.32
Commercial bank	2	0.65
Total	**308**	**100.0**

The study also sought to find out why the investment groups had not applied for a loan. The findings obtained show that the majority of the respondents identified interest rate being too high as the reason why the firm has never applied for bank loan forming 51% (162) of the responses, followed by inadequate collateral at 16% (51), the group not needing it at 15% (46). 12% (37) of the respondents indicated that the group does not want to incur debt while the process being too difficult formed 6% (19) of the responses as shown in table 4.14 below.

Table 4.14: Reason for not applying for a loan

Question	Frequency	Percentage
Inadequate collateral	51	16%
The group does not want to incur debt	37	12%
The process is too difficult	19	6%
The group does not need the loan	46	15%
Interest rate is too high	162	51%
Total	315	100%

Table 4.15 shows further analysis of indicators used to measure capital structure. On the loans borrowed for investments purposes, 19% of the respondents strongly disagreed that in the last one year their group has borrowed a loan for investment purposes while 2% just disagreed. Another, 28% agreed that in the last one year their group has borrowed a loan for investment purposes and 45% of the respondents were in strong agreement. There was a 6% of the respondents that were however neutral to the query. Majority (45%) of the respondents were in agreement as also implied by the modal class which was found to be 5. The mode of 5 implies that on average, the investment groups in Kenya agree that in the last one year their group has borrowed a loan for investment purposes. To measure the construct capital structure, the groups were also required to respond on whether they have a documented policy on debt and finance. 18% of the respondents strongly disagreed that their group has a documented policy on debt finance while 21% just disagreed. On the other hand, 39% agreed that their group has a documented policy on debt finance and 11% of the respondents agreed strongly. There were also 10% of the respondents who neutral about having such a policy or not. The modal class was found to be 4 which implied that on average, the investment groups in Kenya agree that their group has a documented policy on debt finance.

The item on investment of proportions of profits reinvested was also measured on an ordinal scale of 5.28% of the respondents strongly disagreed that their group reinvest a portion of the profits made while 5% just disagreed. On the other hand, 36% agreed that their group reinvest a portion of the profits made and 29% of the respondents strongly

agreed with the statement. 1% of the respondents were however neutral to the question. Majority (36%) of the respondents were in agreement as also implied by the modal class which was found to be 4. The mode of 4 implies that on average, the investment groups in Kenya agree that their group reinvest a portion of the profits made. Findings also indicated that 3% of the respondents strongly disagreed that the decision to borrow a loan for financing an investment is based on the expected return on investment while 2% just disagreed. There were 41% who were in agreement that the decision to borrow a loan for financing an investment is based on the expected return on investment while 46% of the respondents strongly agreed to that. Majority (46%) of the respondents were in agreement as also implied by the modal class which was found to be 5. The mode of 5 implies that on average, the investment groups in Kenya agree that the decision to borrow a loan for financing an investment is based on the expected return on investment. 8% of the respondents remained neutral.

Beck *et al* (2014) also established that savings is a common habit among entrepreneurs since savings represent the principal source of funding used by entrepreneurs to start and grow their entrepreneurial ventures when they are unable to obtain loans. This finding is in line with Robb and Robinson (2009) who depict a positive linkage between leverage and profitability. The respondents were also required to respond to their views on whether their groups rely on member savings to invest where majority (57%) were found to be in strong agreement. 19% of the respondents strongly disagreed that the group relies only on members' savings to invest while 5% just disagreed. On the other hand, 17% agreed that the group relies only on members' savings to invest and 57% of the respondents strongly agreed with the statement. 2% of the respondents were however neutral to the question.

In a study of the Malaysian microenterprises, Tang, Chuna (2009) assert that high levels of saving indicate a business that is in good condition. The modal class which was found to be 5 which implies that on average, the investment groups in Kenya strongly agree that the group relies only on members' savings to invest. Regarding profit share among the members, 5% of the respondents strongly disagreed that the members of the group

share all the profits made every year while 2% just disagreed. On the other hand, 19% agreed that the members of the group share all the profits made every year and 74% of the respondents strongly agreed with the statement. 0% of the respondents were however neutral to the question. Majority (74%) of the respondents were in agreement as also implied by the modal class which was found to be 5. The mode of 5 implies that on average, the investment groups in Kenya agree that the members of the group share all the profits made every year.

Table 4.15: Capital Structure

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mode
In the last one year their group has borrowed a loan for investment purposes	19%	2%	6%	28%	45%	5
their group has a documented policy on debt finance	18%	21%	10%	39%	11%	4
their group reinvest a portion of the profits made	28%	5%	1%	36%	29%	4
The decision to borrow a loan for financing an investment is based on the expected return on investment	3%	2%	8%	41%	46%	5
The group relies only on members savings to invest	19%	5%	2%	17%	57%	5
The members of the group share all the profits made every year	5%	2%	0%	19%	74%	5

The findings obtained in this study are in line with those posited by Modigliani and Miller (1963), who recommend that capital structure can modify the estimation of a firm in the realm of corporate tax and a firm can augment its esteem by the utilization of debt which gives an interest tax shield. A firm has more esteem in the event that it utilizes debt financing since debt lessens the corporate tax. The firm that utilizes more debt spares more as corporate tax shield. This debt is a best wellspring of financing for less taxation is laid on debt. Olando (2012) also found out that the capital structure which streamlines the necessities of the shareholders and the financial prerequisite of the organization should be kept up and ought to be good with the enthusiasm of different partners. These findings are similar to the findings obtained in the study. Disposal of assets is also a source of funds to the investment group. Importantly, debt capital is a less expensive source of finance however it includes an extensive risk on the fact that the investment group cannot meet the set commitments of financial instalments as observed by Olando (2012).

The investment group may likewise get finances from different places like the Women enterprise fund which they need to apply as a group. This is supported by the assertion made by Wachira and Kihiu (2012) and Siekei et al.,(2013) who argue that failure to compare options, ask questions and negotiate effectively with financial providers depicts a low level of financial literacy. Knowledge of inflation and interest rates further reveal that majority of the respondents do not understand the effects, which coincide with the findings by Lusardi and Mitchell (2014) and Atkison and Messy (2014) that majority of the adult population do not understand inflation, interest rates and terms and conditions of consumer loans and mortgages which could negatively affect their financial decisions and ultimately business performance in terms of the capital structure.

4.5.3 Descriptive Analysis for Portfolio Diversification

The researcher sought to determine the portfolio of investments the groups had invested on. The findings shown in figure 4.8 below indicate that real estate was the main portfolio of investment in the groups forming 43% (136) of the responses, followed by

service business at 23% (73), product business at 13% (40), equity shares at 8% (26), and farming at 9% (26) while commercial paper formed the least responses as shown in figure 4.4 below.

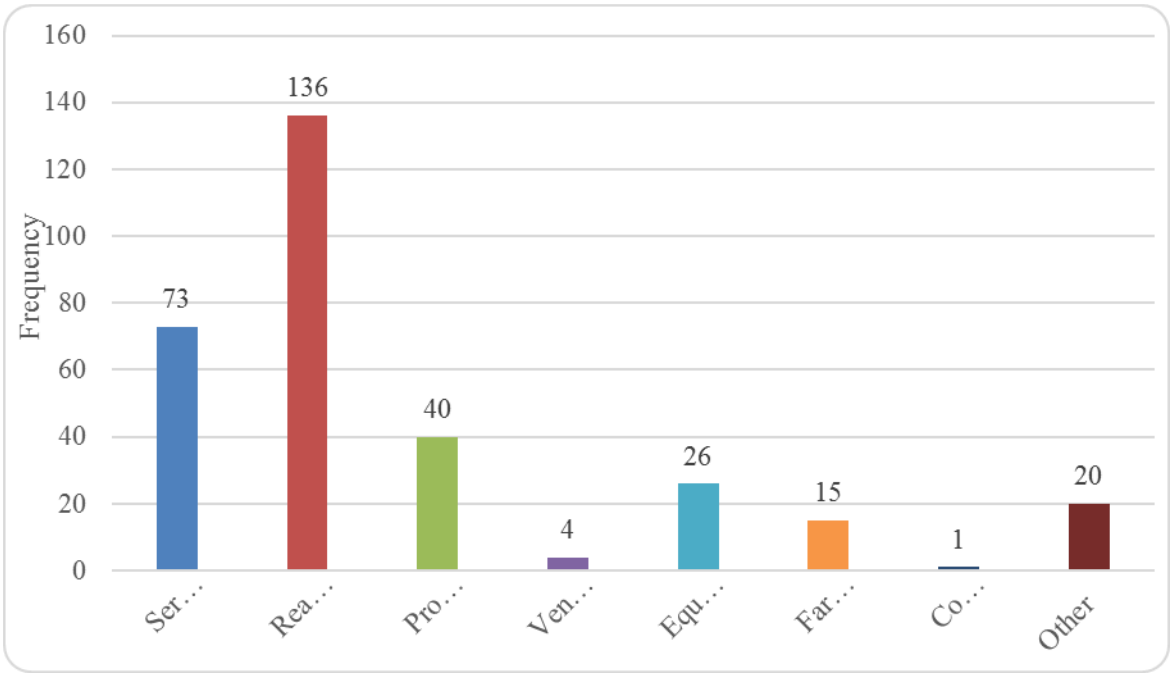

Figure 4.2: Portfolio of investments

Table 4.16 is a frequency table showing analysis of various indicators used to measure portfolio diversification. A large percentage (71%) of the respondents strongly disagreed that investment in Government securities is highly preferred by their group while 13% just disagreed. On the other hand, 5% agreed that investment in Government securities is highly preferred by their group and 7% of the respondents strongly agreed with the statement. 3% of the respondents were however neutral to the question. The modal class which was found to be 1 to imply that on average, the investment groups in Kenya strongly disagreed that investment in Government securities is highly preferred by their group. The study also sought to find put the possibility of reducing risks of investing in stock shares. Only 1% of the respondents strongly disagreed that it is possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares.

There were 38% who agreed that it is possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares and 49% of the respondents were in strong agreement. 12% of the respondents were however neutral to the question. Majority (49%) of the respondents were in agreement as also implied by the modal class which was found to be 5. The mode of 5 implies that on average, the investment groups in Kenya agree that It is possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares. On further analysis, there were only 7% of the respondents who strongly disagreed that long term investments are more preferred by their group members while 2% just disagreed.

On the other hand, 24% agreed that long term investments are more preferred by their group members and 64% of the respondents strongly agreed with the statement. 3% of the respondents however remained neutral to the question. Majority (64%) of the respondents were in agreement as also implied by the modal class which was found to be 5. The mode of 5 implies that on average, the investment groups in Kenya agree that Long term investments are more preferred by their group members. Regarding the groups carrying out appraisals, 1% of the respondents strongly disagreed that their group carries out an appraisal of value addition to the portfolio before investment decision is made while 0% just disagreed. However, 38% agreed that their group carries out an appraisal of value addition to the portfolio before investment decision is made and 61% of the respondents strongly agreed with the statement. Majority (61%) of the respondents were in agreement as also implied by the modal class which was found to be 5.

The mode of 5 implies that on average, the investment groups in Kenya strongly agree that their group carries out an appraisal of value addition to the portfolio before investment decision is made. Only 4% of the respondents considered strongly disagreed that their group has a substantial investments in the financial markets with 18% just agreeing. There was also 52% of them who agreed that their group has substantial investments in the financial markets and 11% of the respondents strongly agreed with the statement. 14% of the respondents were however neutral to the question. The modal

class which was found to be 4 implying that the majority (52%) of the respondents was in agreement. This further implies that on average, the investment groups in Kenya agree that their group has substantial investments in the financial markets. Majority (77%) of the respondents were in strong disagreement that their group regularly invests in mutual funds while 5% just disagreed. On the other hand, 12% agreed that their group regularly invests in mutual funds and 1% of the respondents strongly agreed with the statement. 5% of the respondents were however neutral to the question. The mode of 1 implies that on average, the investment groups in Kenya agree that their group regularly invests in mutual funds. Majority (68%) of the respondents also strongly disagreed that Short term investments are more preferred by their group while 7% just disagreed. Regarding the same item, 8% agreed that Short term investments are more preferred by their group and 13% of the respondents strongly agreed with the statement. 4% of the respondents were however neutral to the question. The mode of 1 implies that on average, the investment groups in Kenya agree that Short term investments are more preferred by their group.

On setting aside funds to take advantage of unexpected opportunities, only 1% of the respondents strongly disagreed that their group often sets aside funds to take advantage of unexpected investment opportunities while 2% just disagreed. On the other hand, 48% agreed that their group often sets aside funds to take advantage of unexpected investment opportunities and 46% of the respondents strongly agreed with the statement. 4% of the respondents were however neutral to the question. Majority (48%) of the respondents were in agreement as also implied by the modal class which was found to be 4. The mode of 4 implies that on average, the investment groups in Kenya agree that their group often sets aside funds to take advantage of unexpected investment opportunities.

Table 4.16: Portfolio Diversification

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Modal class
Investment in Government securities highly preferred by our group	71%	13%	3%	5%	7%	1
It is possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares	1%	0%	12%	38%	49%	5
Long term investments are more preferred by our group members	7%	2%	3%	24%	64%	5
Our group carries out an appraisal of value addition to the portfolio before investment decision is made	1%	0%	0%	38%	61%	5
Our group has a substantial investments in the financial markets	4%	18%	14%	52%	11%	4
Our group regularly invests in mutual funds	77%	5%	5%	12%	1%	1
Short term investments are more preferred by our group	68%	7%	4%	8%	13%	1
The group often sets aside funds to take advantage of unexpected investment opportunities	1%	2%	4%	48%	46%	4

Keeping in mind the objective to accomplish growth, there is requirement for investors to build up an ideal portfolio of assets that will expand their rate of return subject to their risk preference. Informed decision making on investment would help avoid risky, low return yielding assets. Njiru (2006) in line with the findings of the study observed that through appropriate risk management and portfolio management, investors can boost his returns through legitimate resource allocation and constant performance assessment of their portfolio of assets. It's possible to establish an optimal portfolio of assets that will maximize returns and minimize risk subject to an investor's utility function. This is done by combining risk free assets and risky assets and then operating on a security market line or the capital market line at the point of tangency with the Markowitz efficient frontier if the market is at equilibrium. As noted by Icharia (2012) the study found out that the investment groups have enhanced their investments by making short term investments and have substantial investments in the financial markets.

4.5.4 Descriptive Analysis Group Governance

The study sought to find out how the groups were managed. The findings obtained in the study show that 95.8% (300) of the respondents said their groups had a schedule for meetings, 72.8% (228) said the groups had ethnic diversity, 61.6% (191) said the groups had professional diversity, 72.4% (226) said the groups held annual general meeting yearly, 98.4% (306) said the groups had a constitution, 97.7% (304) said the groups had a record for all meetings minutes and 98.4% (307) said sometimes the groups experienced conflicting investment goal. The scales were developed on a nominal and ordinal scaling and therefore the main measure of central tendency used was the modal response as recommended by O'Leary (2011) and Kothari (2004). The results on group governance are as shown in table 4.17 below.

Table 4. 17: Group management

	Yes (%)	No (%)
The group has a schedule for meetings	95.8	4.2
Our group has ethnic diversity	72.8	27.2
Our group has professional diversity	61.6	38.4
Our group holds an annual general meeting (AGM) yearly	72.4	27.6
Our group has a constitution	98.4	1.6
Our group has a record of all the meetings minutes	97.7	2.3
Sometimes in the group we experience conflicting investment goal	98.4	1.6

Further analysis on group governance is presented in table 4.18. None of the respondents strongly disagreed or just disagreed that before purchase of property due diligence is always carried out. On the other hand, 34% agreed that before purchase of property due diligence is always carried out and 66% of the respondents strongly agreed with the statement. 0% of the respondents were however neutral to the question. Majority (66%) of the respondents were in agreement as also implied by the modal class which was found to be 5. The mode of 5 implies that on average, investment groups in Kenya agree that before purchase of property due diligence is always carried out. The study also found out that no respondent disagreed or strongly disagreed that Disposal or sale of assets is done in a transparent and well laid out procedure. On the other hand, 30% agreed that disposal or sale of assets is done in a transparent and well laid out procedure while majority (70%) of the respondents strongly agreed with the statement. There weren't any respondents remaining neutral. The mode of 5 implies that on average, the investment groups in Kenya agree that Disposal or sale of assets is done in a transparent and well laid out procedure. None of the respondents disagreed or strongly disagreed that Group members attend more than 80% of the meetings in a year. However, 46%

agreed that Group members attend more than 80% of the meetings in a year and 53% who were the majority strongly agreed with the statement with only 1% of the respondents remaining neutral.

The mode of 5 implies that on average, the investment groups in Kenya agree that Group members attend more than 80% of the meetings in a year. On the matter of democratic decision making, none of the respondents disagreed or strongly disagreed that decisions are arrived at democratically in their group. 32% agreed that decisions are arrived at democratically in their group while 68% of the respondents strongly agreed with the statement. The 68% majority of the respondents who were in agreement are also implied by the modal class which was found to be 5. The mode of 5 implies that on average, the investment groups in Kenya agree that decisions are arrived at democratically in their group. 1% of the respondents strongly disagreed that they have transparency in decision making their group while 1% just disagreed. On the other hand, 43% agreed that they have transparency in decision making their group and 55% of the respondents strongly agreed with the statement. 0% of the respondents were however neutral to the question. Majority (55%) of the respondents were in agreement as also implied by the modal class which was found to be 5. The mode of 5 implies that on average, the investment groups in Kenya agree that they have transparency in decision making their group. All the respondents either agreed or strongly agreed that that their group has a clear communication channels. 30% of the respondents agreed while 70% strongly agreed with the statement. no respondents disagreed, strongly disagreed or remained neutral when asked whether their group has a clear communication channels The mode that was found to be 5 implies that on average, the investment groups in Kenya agree that their group has a clear communication channels. 0% of the respondents strongly disagreed that their group has a clear organizational structure while 1% just disagreed.

On the other hand, 20% agreed that their group has a clear organizational structure and 77% of the respondents strongly agreed with the statement. 2% of the respondents were however neutral to the question. Majority (77%) of the respondents were in agreement

as also implied by the modal class which was found to be 5. The mode of 5 implies that on average, the investment groups in Kenya agree that their group has a clear organizational structure. 1% of the respondents strongly disagreed that their group is run and managed by adequately trained professionals while 3% just disagreed. On the other hand, 28% agreed that their group is run and managed by adequately trained professionals and 66% of the respondents strongly agreed with the statement. 2% of the respondents were however neutral to the question. Majority (66%) of the respondents were in agreement as also implied by the modal class which was found to be 5. The mode of 5 implies that on average, the investment groups in Kenya agree that their group is run and managed by adequately trained professionals. 0% of the respondents strongly disagreed that their group has a well laid schedule of meetings while 0% just disagreed.

On the other hand, 27% agreed that their group has a well laid schedule of meetings and 72% of the respondents strongly agreed with the statement. 1% of the respondents were however neutral to the question. Majority (72%) of the respondents were in agreement as also implied by the modal class which was found to be 5. The mode of 5 implies that on average, the investment groups in Kenya agree that their group has a well laid schedule of meetings. This is in line with a study by Wainaina (2012) on two Kenyan investment groups found that formal management including development of strategic plans was necessary in improving performance and attaining success in enterprises. 0% of the respondents strongly disagreed that their group meets regularly as per the schedule of meeting while 0% just disagreed.

On the other hand, 23% agreed that their group meets regularly as per the schedule of meeting and 76% of the respondents strongly agreed with the statement. 1% of the respondents were however neutral to the question. Majority (76%) of the respondents were in agreement as also implied by the modal class which was found to be 5. The mode of 5 implies that on average, the investment groups in Kenya agree that their group meets regularly as per the schedule of meeting. 57% of the respondents strongly disagreed that their group members only meet when there is need while 31% just

disagreed.On the other hand, 5% agreed that their group members only meet when there is need and 3% of the respondents strongly agreed with the statement. 5% of the respondents were however neutral to the question. Majority (57%) of the respondents were in agreement as also implied by the modal class which was found to be 1. The mode of 1 implies that on average, the investment groups in Kenya agree that their group members only meet when there is need. 0% of the respondents strongly disagreed that Voting of office bearers is always done democratically while 0% just disagreed. On the other hand, 32% agreed that Voting of office bearers is always done democratically and 68% of the respondents strongly agreed with the statement. 0% of the respondents were however neutral to the question. Majority (68%) of the respondents were in agreement as also implied by the modal class which was found to be 5. The mode of 5 implies that on average, the investment groups in Kenya agree that Voting of office bearers is always done democratically.

Table 4. 18: Group Governance

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Modal class
Before purchase of property due diligence is always carried out	0%	0%	0%	34%	66%	5
Disposal or sale of assets is done in a transparent and well laid out procedure	0%	0%	0%	30%	70%	5
Group members attend more than 80% of the meetings in a year	0%	0%	1%	46%	53%	5
In our group decisions are arrived at democratically	0%	0%	0%	32%	68%	5
In our group there is transparency in decision making	1%	1%	0%	43%	55%	5
Our group has a clear communication channels	0%	0%	0%	30%	70%	5
Our group has a clear organizational structure	0%	1%	2%	20%	77%	5
Our group is run and managed by adequately trained professionals	1%	3%	2%	28%	66%	5
The group has a well laid schedule of meetings	0%	0%	1%	27%	72%	5
The group meets regularly as per the schedule of meeting	0%	0%	1%	23%	76%	5
The group members only meet when there is need	57%	31%	5%	5%	3%	1
Voting of office bearers is always done democratically	0%	0%	0%	32%	68%	5

As indicated by OECD (2004), corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders. In line with the findings of the study, Ali *et al*. (2003) argued that organizations that demonstrate great corporate administration and have manageable business approaches will more often generate superior financial advantages for their shareholders. The proper measures required for good corporate administration would be founded on good engagement with the women groups, shares price monitoring, regular addressing of systemic risks and opportunities in order to align business objectives with long-term interests of investors. Group governance should be through the focal points of corporate administration which depicts the way which an investment group is represented to accomplish its objectives.

4.5.5 Descriptive Analysis Group Size

The study sought to determine the size of the group in terms of the total assets base. The findings are as shown in figure 4.5 below. The findings obtained show that the majority of the investment had a total asset base of more than Kshs. 7.5 Million forming 39% of the groups, followed by those which had less than Kshs. 2.5 Million at 23%, those with an asset base of above Kshs. 2.5 Million formed 22% while those above Kshs. 5 Million to 7.5 Million formed 16% as shown below.

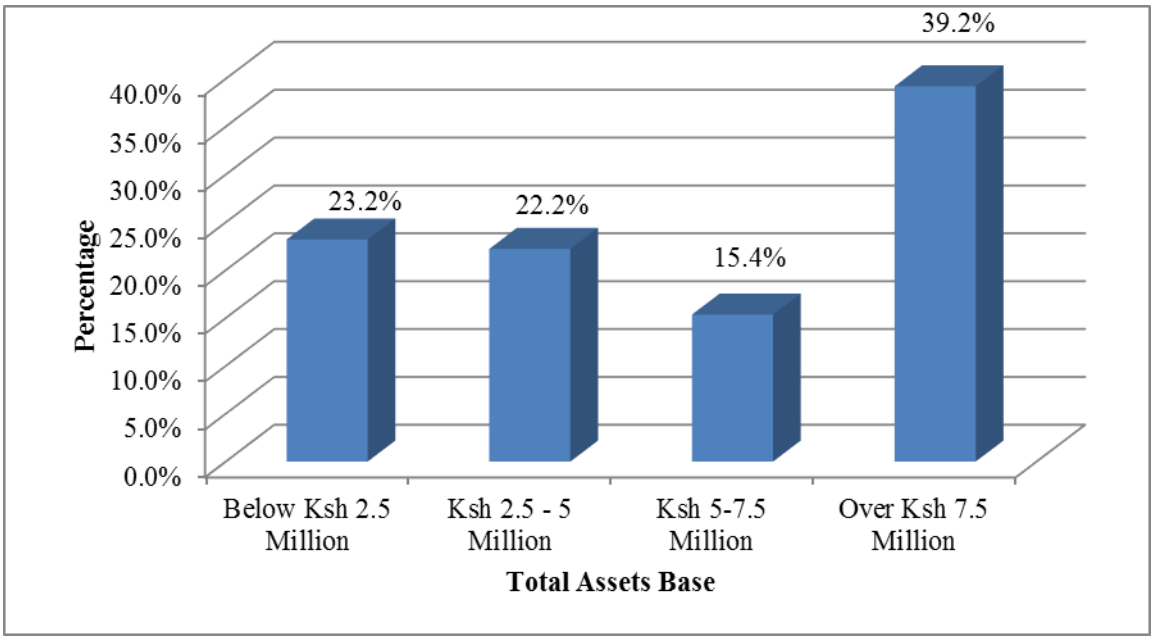

Figure 4. 3: Total Assets Base

The study also sought to determine number of group members in the groups. The item was measured on a continuous scale thus the mean was used as the measure of central tendency. The findings obtained are as shown in table 4.19 below. On average the groups were found to have 32.174 group members with a standard deviation of 24.985. The largest group had 201 members and the smallest had 10 members.

Table 4.19: Number of group members in the group

Mean	Standard deviation	Max	Min
32.17363	24.985	201	10

The study also sought to find out the members who are involved in key investment decision making for the group. The findings obtained in the study, shown in table 4.20 below, show that 98.4% (n=251) said all the group members were involved in decision making while 1.6% (n=4) said the office elected by members does it on behalf of the members.

Table 4.20: Members involved in key investment decision making

	Frequency	Valid Percent
All the group members are involved	251	98.4
The office elected by members does it on behalf of the members	4	1.6
Total	**255**	**100.0**

Group size was also measured by the number of employees in the group. Table 4.21 shows the findings obtained. On average the groups were found to have 4 group members with a standard deviation of 3. The maximum number of employees found was 20 and minimum 1. This confirms the findings of the Sessional paper No 2 of 2005 that Kenya has a very small number of MSEs employing 11-50 employees.

Table 4.21: Number of Employees in the Groups

Mean	Standard deviation	Max	Min
4	3	20	1

4.5.6 Descriptive Analysis Perceived Relation

Table 4.22 shows descriptive analysis for the measured indicators of perceived relation. Majority (70%) of the respondents strongly agreed that Engagement of professionals in the group leads to growth in wealth and 28% agreed with the statement. 2% of the respondents were however neutral while none disagreed or strongly disagreed. The mode found to be 5 implies that on average, the investment groups in Kenya agree that Engagement of professionals in the group leads to growth in wealth. None of the respondents strongly disagreed or disagreed that financial literacy of the group leads to growth in wealth of investment groups. Majority (55%) agreed that financial literacy of

the group leads to growth in wealth of investment groups while 42% of the respondents strongly agreed with the statement. Only 3% of the respondents were however neutral to the question. The modal class which was found to be 4 which implies that on average, the investment groups in Kenya agree that financial literacy of the group leads to growth in wealth of investment groups. 34% agreed that Good group governance leads to growth in wealth of investment groups and 65% of the respondents strongly agreed with the statement. Only 1% of the respondents were however neutral but no respondent disagreed or strongly disagreed. Majority (65%) of the respondents were in agreement as also implied by the modal class which was found to be 5. The mode of 5 implies that on average, the investment groups in Kenya agree that Good group governance leads to growth in wealth of investment groups.

8% of the respondents strongly disagreed that Group size affects growth in wealth of the investment group while 7% just disagreed. On the other hand, 41% agreed that Group size affects growth in wealth of the investment group and 17% of the respondents strongly agreed with the statement. 27% of the respondents were however neutral to the question. Majority (41%) of the respondents were in agreement as also implied by the modal class which was found to be 4. The mode of 4 implies that on average, the investment groups in Kenya agree that Group size affects growth in wealth of the investment group. 5% of the respondents strongly disagreed that Having more people in decision making position leads to better investment opportunities while 13% just disagreed. On the other hand, 24% agreed that having more people in decision making position leads to better investment opportunities and 51% of the respondents strongly agreed with the statement. 6% of the respondents were however neutral to the question. Majority (51%) of the respondents were in agreement as also implied by the modal class which was found to be 5. The mode of 5 implies that on average, the investment groups in Kenya agree that having more people in decision making position leads to better investment opportunities. 2% of the respondents strongly disagreed that having several investments leads to growth in wealth of investment groups while 2% just disagreed. On the other hand, 41% agreed that having several investments leads to growth in wealth of

investment groups and 43% of the respondents strongly agreed with the statement. 13% of the respondents were however neutral to the question. Majority (43%) of the respondents were in agreement as also implied by the modal class which was found to be 5. The mode of 5 implies that on average, the investment groups in Kenya agree that having several investments leads to growth in wealth of investment groups. 9% of the respondents strongly disagreed that if group members double their savings there would be growth in wealth while 10% just disagreed. On the other hand, 31% agreed that if group members double their savings there would be growth in wealth and 22% of the respondents strongly agreed with the statement. 28% of the respondents were however neutral to the question. Majority (31%) of the respondents were in agreement as also implied by the modal class which was found to be 4. The mode of 4 implies that on average, the investment groups in Kenya agree that if group members double their savings there would be growth in wealth. 7% of the respondents strongly disagreed that larger films do not mind doing risky investments because the gains of doing this exceed the costs of investing while 10% just disagreed. On the other hand, 43% agreed that larger films do not mind doing risky investments because the gains of doing this exceed the costs of investing and 16% of the respondents strongly agreed with the statement. 24% of the respondents were however neutral to the question. Majority (43%) of the respondents were in agreement as also implied by the modal class which was found to be 4. The mode of 4 implies that on average, the investment groups in Kenya agree that larger films do not mind doing risky investments because the gains of doing this exceed the costs of investing.

On the respondents' perception on influence of group size on performance, 9% of the respondents strongly disagreed that larger groups grow their wealth more than small firms while 7% just disagreed. On the other hand, 38% agreed that larger groups grow their wealth more than small firms and 19% of the respondents strongly agreed with the statement. 27% of the respondents were however neutral to the question. Majority (38%) of the respondents were in agreement as also implied by the modal class which was found to be 4. The mode of 4 implies that on average, the investment groups in Kenya

agree that larger groups grow their wealth more than small firms. The respondents were also asked about skills and education influence performance. 2% of the respondents strongly disagreed that skills and education level of group members influences growth in wealth of the group while 0% just disagreed. On the other hand, 32% agreed that Skills and education level of group members influences growth in wealth of the group and 64% of the respondents strongly agreed with the statement. 2% of the respondents were however neutral to the question. Majority (64%) of the respondents were in agreement as also implied by the modal class which was found to be 5.The mode of 5 implies that on average, the investment groups in Kenya agree that Skills and education level of group members influences growth in wealth of the group.

The study revealed that 31% of the respondents strongly disagreed that Small groups usually have little if any access to financial markets while 14% just disagreed. On the other hand, 28% agreed that Small groups usually have little if any access to financial markets and 20% of the respondents strongly agreed with the statement. 6% of the respondents were however neutral to the question. Majority (31%) of the respondents were in agreement as also implied by the modal class which was found to be 1. The mode of 1 implies that on average, the investment groups in Kenya agree that Small groups usually have little if any access to financial markets. The study found out that only 1% of the respondents strongly disagreed that use of debt and capital in the capital structure can lead to growth in wealth of investment groups while 4% just disagreed. On the other hand, Majority (53%) agreed that use of debt and capital in the capital structure can lead to growth in wealth of investment groups and 24% of the respondents strongly agreed with the statement. 18% of the respondents were however neutral to the question. The mode of 4 implies that on average, the investment groups in Kenya agree that Use of debt and capital in the capital structure can lead to growth in wealth of investment groups.

Table 4.22: Perceived Relation

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Modal class
Engagement of professionals in the group leads to growth in wealth	0%	0%	2%	28%	70%	5
Financially literacy of the group leads to growth in wealth of investment groups	0%	0%	3%	55%	42%	4
Good group governance leads to growth in wealth of investment groups	0%	0%	1%	34%	65%	5
Group size affects growth in wealth of the investment group	8%	7%	27%	41%	17%	4
Having more people in decision making position leads to better investment opportunities	5%	13%	6%	24%	51%	5
Having several investments leads to growth in wealth of investment groups	2%	2%	13%	41%	43%	5
If group members double their savings there would be growth in wealth	9%	10%	28%	31%	22%	4
Larger films do not mind doing risky investments because the gains of doing this exceed the costs of investing	7%	10%	24%	43%	16%	4
Larger groups grow their wealth more than small firms	9%	7%	27%	38%	19%	4
Skills and education level of group members influences growth in wealth of the group	2%	0%	2%	32%	64%	5
Small groups usually have little if any access to financial markets	31%	14%	6%	28%	20%	1
Use of debt and capital in the capital structure can lead to growth in wealth of investment groups	1%	4%	18%	53%	24%	4

4.6 Inferential Analysis

Under inferential analysis, the study used a set of statistical techniques to explore the nature of the relationship that exists between the independent variables and the dependent variable. The study used correlation and regression analysis where a model was of the form to explore the influence that the determinants had on wealth creation. The model fitted was of the form given below;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

where

β_0 = constant

β_i = coefficient of X_i for $i = \{1,2,3,4\}$

X_1= financial literacy, X_2= portfolio diversification, X_3= capital structure, X_4= group governance simultaneously affected the dependent variable Y= growth in wealth

e = error term

4.6.1 Diagnostic Tests for Model Assumptions

The model fitted was based on classical assumptions of Ordinary least squares which assume that the residuals follow a normal distribution, are not autocorrelated and are homoscedastic and that the model predictors do not exhibit multicollinearity. Diagnostic tests were therefor carried out to ensure that the model used met the assumptions.

4.6.1.1 Test for Normality

The regression model is fit based on the assumptions that the residuals follow a normal distribution. The figure 4.6 clearly shows a normal distribution curve. The curve is not

skewed to either side of the plot implying a normal distribution with a mean of 0.000 and a standard deviation of 0.994.

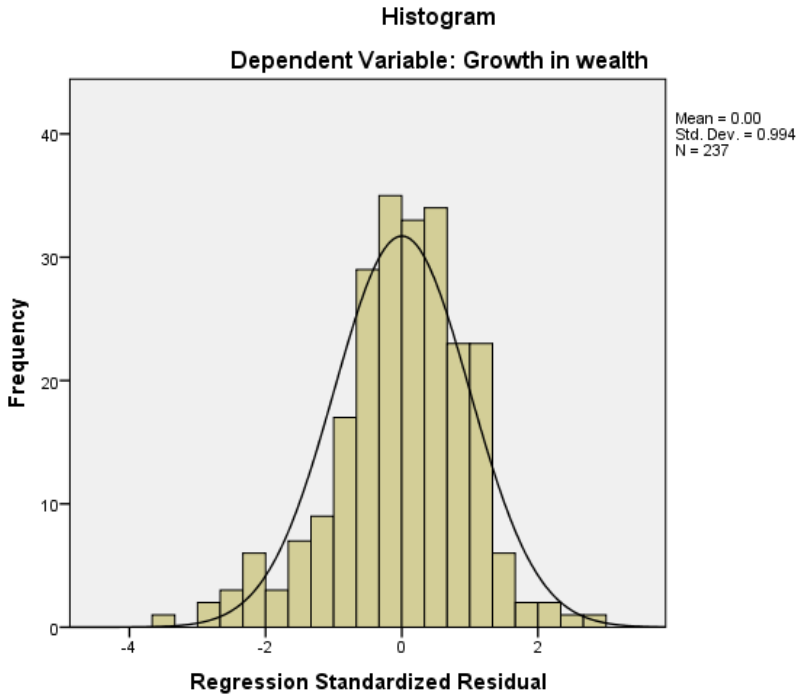

Figure 4. 4: Normality Histogram

For further normality histogram, table 4.23 represents key statistics for this test. The Kolmogorov-Smirnov normality test for the standardized residuals is significant with a significance of 0.200 which is greater than 0.05 hence fail to reject the null hypothesis that data is not normally distributed. This implies that the residuals follow a normal distribution as required for a linear regression.

Table 4.23: Normality Test

	Kolmogorov-Smirnov	Df	Sig.
Standardized Residual	0.033	308	.200*

*. This is a lower bound of the true significance.

4.6.1.2 Test for Autocorrelation

It is also required that the residuals should not be auto correlated. Autocorrelation implies that adjacent observations are correlated. If the regression model violates the assumption of no autocorrelation then the predictors may be significant even though the model will have underestimated the standard errors of the predictors. The Durbin Watson value is 1.968, the upper limit for 4 predictors excluding the intercept and 310 sample size at 0.05 level of significance is 1.874 and the lower limit is 1.788. Durbin-Watson statistic should be in the range of 1.5 and 2.5 an indication that there is no concern of autocorrelation (Velnampy, 2011). A Durbin Watson table is depicted in (Appendix V). The calculated Durbin Watson value 1.968 is higher than the upper limit so we conclude that the residuals are not auto correlated. The Darbin Watson results are shown in table 4.24 below.

Table 4. 24: Autocorrelation

Durbin-Watson statistic	Tabulated lower limit	Tabulated Upper limit
1.968	1.788	1.874

4.6.1.3 Test for Homoscedasticity

The fitting of OLS models assume that the residual terms of the model has constant variance thereby exhibit homoscedasticity. A situation where the variance of the error term is not constant is referred to as heteroscedasticity. The fitted model was therefore examined to confirm that it meets the assumption of homoscedasticity of OLS models. A presentation of the residuals of the model showed on a scatter plot against the predicted values shows a virtual position of homoscedasticity as in figure 4.7. The residuals are randomly distributed and do not depict any pattern of increase or decrease implying constancy. The line of best fit is constant at zero with a zero gradient which shows that

the residuals are constantly equal to zero with increasing predictions of growth in wealth.

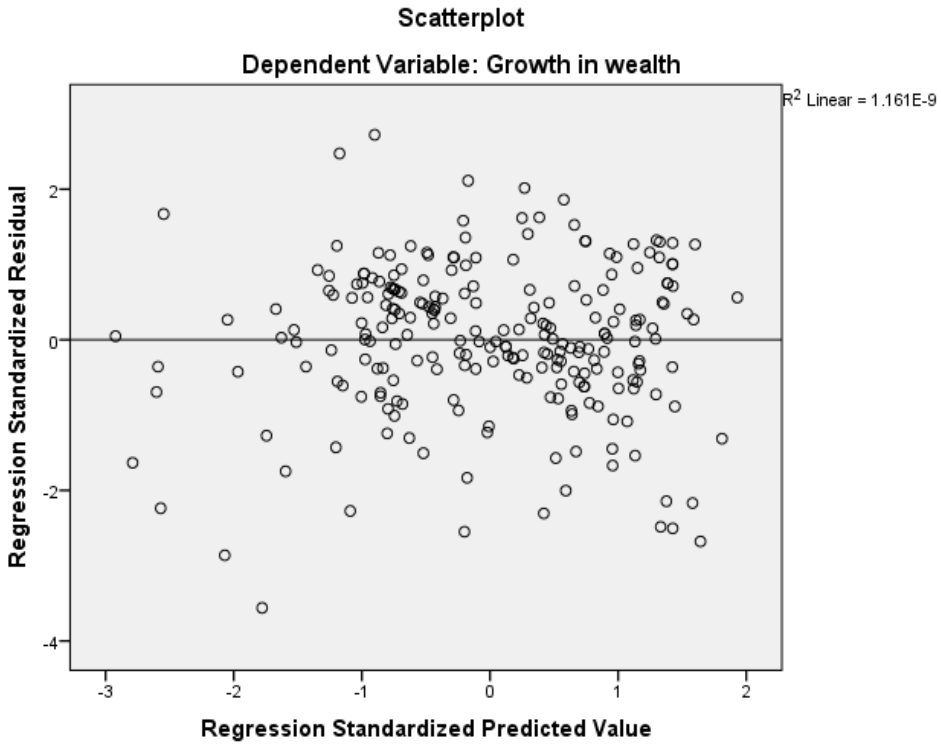

Figure 4. 5: Standardized residual scatter plot

To test the existence of either hetero or homoscedasticity with statistical significance, a Breusch-Pagan test was performed on the residual terms of the overall model. This test tries to find out equality in the variance of the residuals. It tests the null hypothesis that there is a constant variance of the residual terms form an OLS regression where a small p-value of the Chis-quare indicates Heteroscedasticity. Table 4.25 presents the results of the homoscedasticity test on the residuals of the overall regression model. From the results the P-value of the Breusch-pagan Chi-square statistic is 0.081 which is greater than 0.05 thus we fail to reject the null hypothesis and conclude that the error terms exhibit homoscedasticity. H_0: The Residuals exhibit homoscedasticity.

Table 4. 25: Homoscedasticity

	Breusch-Pagan statistic	P-value	Conclusion
Residuals	8.311	0.081	Fail to reject H0

4.6.1.4 Test for Multi-Collinearity

Multicollinearity was tested by computing the Variance Inflation Factors (VIF) and its reciprocal, the tolerance. A situation in which there is a high degree of association between independent variables is said to be a problem of multi-collinearity which results into large standard errors of the coefficients associated with the affected variables. According to Mugenda and Mugenda (2012) multi-collinearity can occur in multiple regression models in which some of the independent variables are significantly correlated among themselves.In a regression model that best fits the data, independent variables correlate highly with dependent variables but correlate, at most, minimally with each other. The multicollinearity assumption has a VIF threshold value of 10 maximum (Robinson et al, 2009).

A variance inflation factor of greater than 10 is an indication that there is concern of multicolinearity problem (Myers, 1990) Multi-collinearity can also be solved by deleting one of the highly correlated variables and re-computing the regression equation. The model was tested for multi-collinearity. From the table 4.26 the tolerances are all above 0.2 if a variable has collinearity tolerance below 0.2 implies that 80% of its variance is shared with some other independent variables. All tolerance figures were above .20 an indication that there was no concern of multicollinearity problem in line with (Menard, 1995). The Variance Inflation Factors (VIFs) are all below 5. The VIF is generally the inverse of the tolerance. Multi-collinearity is associated with VIF above 5 and tolerance below 0.2. The accepted variables were therefore determined not to exhibit multi-collinearity and acceptable for collection and analysis.

Table 4. 26: Multicollinearity

	Tolerance	VIF
Financial Literacy	0.777	1.287
Portfolio diversification	0.521	1.918
Capital Structure	0.620	1.614
Group Governance	0.946	1.057

4.6.1 Correlation Test Results

The study sought to establish correlation between the dependent variable and each of the independent variable. The dependent variable for the study was growth in wealth while the independent variables were financial literacy, portfolio diversification, capital structure and group governance. Correlation which is a statistical technique employed to show the strength of pairs of variable is used to examine the association between the independent variables above with the dependent variable.

Correlation analysis results give a correlation coefficient which measures the linear association between two variables (Crossman, 2013).The correlation test was conducted at the 5% level of significance with a 2-tailed test. Thus, the significance critical value is 0.025 above which the association is deemed to be insignificant and vice versa. The strength of the correlation is measured based on the Pearson correlation scale. The correlation coefficient ranges from -1.0 to +1.0 and the closer the coefficient is to +1 or -1, the more closely the two variables are related. A correlation of +1 implies that there is perfect positive linear relationship between variables (Sekran, 2003).

The findings illustrated in table 4.27 below show that, financial literacy, portfolio diversification, capital structure and group governance have a positive and significant association with growth in wealth of the investment groups. The correlation coefficient for financial literacy to growth in wealth is 0.608 with a significance value of 0.000 which is less than 0.025 at the 5% level. The coefficient for the association between

portfolio diversification and growth in wealth is 0.543 with a p-value of 0.000 which is also less than 0.025. From the table also, the correlation coefficient for the association between capital structure and growth in wealth is 0.389 with a p-value of 0.000 less than 0.025 depicting a significant correlation between the variables. High growth firms require additional financing for expansionary purposes, hence are more likely to go for debt finance, thus positive correlation between growth and debt (Chieyoe, 2012). Finally, the correlation coefficient for the association between group governance and growth in wealth is 0.308 with a p-value of 0.000 which is less than 0.025 indicating a significant relationship between group governance and growth in wealth.

Table 4.27: Correlation Test Results

		Growth in wealth	Financial Literacy	Portfolio diversification	Capital Structure	Group Governance
Growth in wealth	Pearson's ρ	1	0.608**	0.543**	0.389**	0.308**
	Sig		0.000	0.000	0.000	0.000
	N	308	308	308	308	308
Financial Literacy	Pearson's ρ	0.608**	1	0.085	0.024	0.019
	Sig	0.000		0.137	0.675	0.740
	N	308	308	308	308	308
Portfolio diversification	Pearson's ρ	0.543**	0.085	1	0.06	0.015
	Sig	0.000	0.137		0.294	0.793
	N	308	308	308	308	308
Capital Structure	Pearson's ρ	0.389**	0.024	0.06	1	-0.004
	Sig	0.000	0.675	0.294		0.944
	N	308	308	308	308	308
Group	Pearson's	0.308**	0.019	0.015	-0.004	1

Governance	ρ					
	Sig	0.000	0.740	0.793	0.944	
	N	308	308	308	308	308

**. Correlation is significant at the 0.01 level (2-tailed).

4.6.2 Influence of Financial Literacy on Growth in Wealth

Table 4.28, presents a summary of regression model results. The value of r and r^2 are .608 and .37 respectively. This shows that there is a positive linear relationship between financial literacy and growth in wealth. The r^2 is the coefficient of determination which indicates that explanatory power of the independent variables is 0.37. This means that 37% of the variation in the variable growth in wealth is explained by the variation of the variable financial literacy in the model $y = \beta_0 + \beta_1 x_1$. The remaining 63% of the variation in the dependent variable unexplained by this one predictor model but by other factors. This indicates that a financially literate group will grow more wealth for the group than a group with illiterate group members. These findings are in line with the findings of Kotze and Smit (2008) who argued that, individuals with a knowledge of financial management can reduce the effects and consequences of the mismanagement of finances and hence grow the wealth in their business. Wise (2013) finds that increase in financial literacy leads to more frequent production of financial statements and such an entrepreneur who produces financial statements more frequently has a higher probability of growing his business and a lower probability to close business.

Table 4.28: Model summary table for growth and financial literacy

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.608a	0.37	0.368	0.790

a. Predictors: (Constant), Financial Literacy

Table 4.29 shows the results of the Analysis of Variance ANOVA on the variables financial literacy and growth in wealth. The test reveals that financial literacy has significant effect on the growth in wealth. The P value is actually 0.000 which is less than 5% level of significance implying that the coefficient of financial literacy is at least not equal to zero.

Table 4.29: ANOVA table growth and financial literacy

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	113.960	1	113.960	180.301	0.000b
	Residual	194.040	307	0.632		
	Total	308	308			

a. Dependent Variable: Growth
b. Predictors: (Constant), Financial Literacy

The study further determined the beta coefficients of financial literacy. Table 4.30 shows the results of coefficient of financial literacy as 0.604 which helps to generate the model $y=0.000+0.604x_1$ for growth in wealth versus financial literacy this model implies that every unit increase in the measure of financial literacy leads to a 0.604 increase in the level of the growth in wealth. Since the p value of the t statistic of financial literacy is equal to zero which is less than 0.05, it implies that the coefficient of financial literacy is statistically significant. This supports the findings by Lusardi and Mitchell (2013),

Turyahebwa *et al*. (2013) and FSD (2009) that a strong association exists between financial literacy, ability to make good financial decisions and business growth.

Table 4. 30: Coefficients table for growth and financial literacy

Model		Unstandardized β	Std. Error	Standardized β	t	Sig.
1	**(Constant)**	0.008	0.047		0.174	0.862
	Financial Literacy	0.604	0.047	0.608	12.915	0.000

a. Dependent Variable: Growth

4.6.3 Influence of Portfolio Diversification on Growth in Wealth

Table 4.31, present a summary of regression model results. The value of r and r^2 are .543 and .295 respectively. This shows that there is a positive linear relationship between portfolio diversification and growth in wealth. The r^2 is the coefficient of determination which indicates that explanatory power of the independent variables is 0.295. This means that 29.5% of the variation in the variable growth in wealth is explained by the variation of the variable portfolio diversification in the model $y = \beta_0 + \beta_1 x_1$. The remaining 70.5% of the variation in the dependent variable unexplained by this one predictor model but by other factors.

Table 4. 31: Model summary table for growth and portfolio diversification

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.543[a]	0.295	0.293	0.837

a. Predictors: (Constant), portfolio diversification

Table 4.32 shows the results of the Analysis of Variance ANOVA on the variables portfolio diversification and growth in wealth. The test reveals that portfolio diversification has significant effect on the growth in wealth. The P value is actually 0.000 which is less than 5% level of significance implying that the coefficient of portfolio diversification is at least not equal to zero.

Table 4. 32: ANOVA Table Growth and Portfolio Diversification

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	**Regression**	90.880	1	90.880	128.501	0.000b
	Residual	217.120	307	0.707		
	Total	308	308			

a. Dependent Variable: Growth
b. Predictors: (Constant), portfolio diversification

The study further determined the beta coefficients of portfolio diversification. Table 4.33 shows the results of coefficient of portfolio diversification as 0.539 which helps to generate the model $y=0.000+0.539X_1$ for growth in wealth versus portfolio diversification this model implies that every unit increase in the measure of portfolio diversification leads to a 0.539 increase in the level of the growth in wealth. Since the p value of the t statistic of portfolio diversification is equal to zero which is less than 0.05, it implies that the coefficient of portfolio diversification is statistically significant.

Table 4. 10: Coefficients Table for Growth and Portfolio Diversification

Model		Unstandardized β	Std. Error	Standardized β	T	Sig.
1	(Constant)	-0.047	0.050		-0.932	0.352
	Portfolio diversification	0.539	0.050	0.543	10.787	0.000

a. Dependent Variable: Growth

4.6.4 Influence of Capital Structure on Growth in Wealth

Table 4.34, present a summary of regression model results. The value of r and r^2 are .389 and .151 respectively. This shows that there is a positive linear relationship between capital structure and growth in wealth. The r^2 is the coefficient of determination which indicates that explanatory power of the independent variables is 0.151. This means that 15.1% of the variation in the variable growth in wealth is explained by the variation of the variable capital structure in the model $y = \beta_0 + \beta_1 x_1$. The remaining 84.9% of the variation in the dependent variable unexplained by this one predictor model but by other factors.

Table 4. 34: Model summary table for growth in wealth and capital structure

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.389[a]	0.151	0.148	0.930

a. Predictors: (Constant), capital structure

Table 4.35 shows the results of the Analysis of Variance ANOVA on the variables capital structure and growth in wealth. The test reveals that capital structure has significant effect on the growth in wealth. The P value is actually 0.000 which is less than 5% level of significance implying that the coefficient of capital structure is at least not equal to zero.

Table 4. 35: ANOVA table growth and capital structure

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	**Regression**	46.637	1	46.637	54.780	0.000b
	Residual	261.363	307	0.851		
	Total	308	308			

a. Dependent Variable: Growth
b. Predictors: (Constant), capital structure

The study further determined the beta coefficients of capital structure. Table 4.36 shows the results of coefficient of capital structure as 0.389 which helps to generate the model $y=0.000+0.389X_1$ for growth in wealth versus capital structure this model implies that every unit increase in the measure of capital structure leads to a 0.389 increase in the level of the growth in wealth. Since the p value of the t statistic of capital structure is equal to zero which is less than 0.05, it implies that the coefficient of capital structure is statistically significant.

Table 4. 36: coefficients table for growth and capital structure

Model		Unstandardized β	Std. Error	Standardized β	t	Sig.
1	**(Constant)**	-0.002	0.055		-0.032	0.975
	Capital			0.389		
	structure	0.389	0.054		7.181	0.000

a. Dependent Variable: Growth

4.6.5 Influence of Group Governance on Growth in Wealth

Table 4.37, present a summary of regression model results. The value of r and r^2 are .308 and .095 respectively. This shows that there is a positive linear relationship between group governance and growth in wealth. The r^2 is the coefficient of determination which indicates that explanatory power of the independent variables is 0.095. This means that 9.5% of the variation in the variable growth in wealth is explained by the variation of the variable group governance in the model $y = \beta_0 + \beta_1 x_1$. The remaining 90.5% of the variation in the dependent variable unexplained by this one predictor model but by other factors. These results are in line with (Klapper & Love, 2004) who correlated corporate governance with better firm performance.

Table 4.11: Model summary table for growth and group governance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.308[a]	0.095	0.091	0.878

a. Predictors: (Constant), group governance

Table 4.38 shows the results of the Analysis of Variance ANOVA on the variables group governance and growth in wealth. The test reveals that group governance has significant effect on the growth in wealth. The P value is actually 0.000 which is less than 5% level of significance implying that the coefficient of group governance is at least not equal to zero.

Table 4. 12: ANOVA table growth and group governance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	**Regression**	29.163	1	29.163	32.109	0.000b
	Residual	278.837	307	0.908		
	Total	308	308			

a. Dependent Variable: Growth
b. Predictors: (Constant), group governance

The study further determined the beta coefficients of group governance. Table 4.39 shows the results of coefficient of group governance as 0.280 which helps to generate the model $y=0.000+0.280X_1$ for growth in wealth versus group governance this model implies that every unit increase in the measure of group governance leads to a 0.280 increase in the level of the growth in wealth. Since the p value of the t statistic of group governance is equal to zero which is less than 0.05, it implies that the coefficient of group governance is statistically significant.

Table 4. 13: coefficients table for growth and group governance

Model		Unstandardized β	Std. Error	Standardized β	t	Sig.
1	**(Constant)**	0.065	0.052		1.247	0.213
	Group governance	0.280	0.052	0.308	5.402	0.000

a. Dependent Variable: Growth

4.6.6 Multiple regression Analysis

A multiple regression model was fitted to determine whether independent variables; X_1= financial literacy, X_2= portfolio diversification, X_3= capital structure, X_4= group governance simultaneously affected the dependent variable Y= growth in wealth. As a result, this subsection examines whether the multiple regression equation can be used to explain the nature of the relationship that exists between the independent variables and the dependent variable.

Findings under this section present the results on the combined influence of the independent variables on the dependent variable. A multivariate OLS model was used to show the combined effect of the determinants of growth in wealth and growth of wealth of investment groups in Kenya. Table 4.40, present a summary of regression model results. The value of r and r^2 are .661 and .437 respectively. This shows that there is a positive linear relationship between determinants of growth and growth in wealth. The r^2 is the coefficient of determination which indicates that explanatory power of the independent variables is 0.437. The R-square results under the multiple regression analysis show the extent of variability of growth due to the influence of the predictor variables (Financial Literacy, Portfolio Diversification, Capital Structure and Group Governance) as given by the coefficient of determination. The results show that 43.7% of the variation in the variable growth in wealth is explained by the variation of the

predictors in the model. The remaining 56.3% of the variation in the dependent variable unexplained by this one predictor model but by other factors.

Table 4. 40: Model summary table for the multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.661[a]	0.437	0.427	0.698

a. Predictors: (Constant), Group Governance, Capital Structure, Financial Literacy, Portfolio diversification

The Analysis of Variance ANOVA on the multiple regression is shown in table 4.41. The general significance of the regression model was tested at the 5% level of significance b the F –statistic which shows the model is generally significant and thus the determinants of growth tested jointly influence growth in wealth. The P value of the F-statistic is actually 0.000 which is less than 5% level of significance implying that at least one of the determinants has significant effect on the growth in wealth.

Table 4.41: ANOVA table for the multiple regression

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	134.644	4	33.661	59.029	0.000b
	Residual	173.356	304	0.570		
	Total	308	308			

a Dependent Variable: Growth
b Predictors: (Constant), Group Governance, Capital Structure, Financial Literacy, Portfolio diversification

The study further determined the beta coefficients of the independent variables. Table 4.42 shows the results of Coefficients that generates the model $Y = 0.376X_1 + 0.217X_2 + 0.117X_3 + 0.174X_4$. This model implies that every unit increase in the measure of the independent variables leads to an increase in the growth of a firm. The coefficients of X_1 (0.376), X_2 (0.217), X_3 (0.117) and X_4 (0.174) are all significant according to the

analysis. The results show that all these determinants of growth had a significant influence on growth in wealth. The coefficients also showed a positive relationship between all the variables and growth in wealth. This is according to the significance values and the coefficients obtained against each variable. The coefficients show a positive effect of the moderating variable to the effect of the determinants of growth. From the table 4.42, financial literacy had a coefficient ($B_1 = 0.376$, $t = 6.754$, $p > 0.000$). Portfolio diversification also showed a significant influence on growth in wealth with the coefficient ($B_2 = 0.217$, $t = 3.43$, $p > 0.001$) indicating a positive effect on growth in wealth. Capital structure has a coefficient of ($B_3 = 0.117$, $t = 2.055$, $p > 0.041$) showing a positive and significant relationship which was also the case with group governance which showed a coefficient of ($B_4 = 0.174$, $t = 3.8$, $p > 0.000$). The results show that the constant is insignificant. The T statistic for the constant term has a p-value of 0.978 which implies that the model passes through the origin.

Table 4.42: multiple regression coefficients table

Model		Unstandardized β	Std. Error	Standardized β	t	Sig.
1	(Constant)	0.001	0.046		0.028	0.978
	Financial Literacy	0.376	0.056	0.378	6.754	0.000
	Portfolio diversification	0.217	0.063	0.234	3.43	0.001
	Capital Structure	0.117	0.057	0.129	2.055	0.041
	Group Governance	0.174	0.046	0.193	3.8	0.000

a Dependent Variable: Growth

4.6.7 Hypothesis Testing

Hypothesis testing is a process by which the researcher infers the result of sample data on the larger population based on a presupposition made prior to commencement of research (Gujarati, 2003). The study performed hypothesis testing by determining statistical significance of the coefficients of explanatory variables. Test-of-significance method is meant to verify the truth or falsity of a null hypothesis by using sample

results, showing that the means of two normally distributed populations are equal. The results from the multiple regression analysis were used to test the null hypotheses of the study and conclusions drawn for the objectives. The hypotheses were tested at 5% level of significance basis to either accepted or reject them. If the calculated t-value was greater than the critical value, then the alternative hypothesis was accepted.

$H_{01:}$ Financial literacy has no significant influence on growth in wealth of investment groups in Kenya.

The t-statistic for the coefficient estimate for this variable was found to be 6.754. The statistic 6.754 is greater than 1.968 which is the critical t statistic from the students t-distribution at 0.05 level of significance and 304 degrees of freedom. This is an implication that the coefficient is significant at 5% level of significance. The p-value of the t-statistic for this variable was found to be 0.000. Since the p-value 0.000 is below 0.05, the null hypothesis is rejected and the alternative hypothesis was accepted thus concluding that financial literacy significantly influence growth in wealth of investment groups in Kenya. These findings obtained in this study agree with those arrived by Jessen (2012). Van Rooij *et al*. (2011) in line with the findings of this study observed that financial knowledge impacts on performance. Financially literate individuals oversee assets more carefully; utilize financial data more insightfully in this way enhancing the benefit of their enterprises. In line with these findings, Berman *et al.* (2008) observed that financial literacy impacts the general access and usage of an financial services; similar to the findings of Nunoo *et al.* (2010) as well.

The findings are also in line with those of Ichari (2012) who concluded that the investment groups need to select management teams that are competent in employing creative thinking and logical analysis in combination in order to create the future of the investment groups. The findings also agree with those of Fatoki (2014) who concluded that financial literacy impacts positively on the ability to make good financial decisions and business survival. This implies that financial literacy skills of the group owners has the potential to bring about growth in investment group consistent with the assertion by

Turyahebwa *et al*. (2013) that sound financial management is critical for business survival and growth. These findings relate with that of Gikomo (2013) and Sagana (2014) who also established that financial literacy and efficient financial management influenced greatly how the firms performed. Financial literacy enables entrepreneurs to interpret financial information in order to make effective financial decisions that contribute to the financial goals of the firms (Dolezalek, 2006).Financial literacy results in financial efficiency which allows entrepreneurs to access and utilize of financial products without waste and unnecessary cost as well as promoting financial practices that enhance enterprise growth (Capuano et al, 2011). Njoroge (2013) studied the relationship between financial literacy and entrepreneur success among SMEs in Nairobi City County, Kenya and established that entrepreneurs in the county had some level of financial literacy and that in some cases those in formal SMEs were highly financially literate.

These findings are in line with those of Siekei et al (2013) who studied the effect of financial literacy education on performance of small firms in Njoro, Kenya and established that training in financial analysis, budgeting and credit management improved the performance of microenterprises. The study is also consistent with a study by Zindiye (2008) which established that financial skills, particularly book keeping skills, financial statements preparation, debit and credit control, budgeting skills and tax calculation influenced the performance of the enterprises. The study further confirmed the findings by Siekei et al (2013) which showed that training in financial analysis, budgeting and credit management improved the performance of microenterprises.

However, the finding contradicted the findings of a study on the impact of financial training on financial outcomes in India by Carpena et al (2011) which established that financial literacy did not immediately enable individuals to discern costs and rewards that require high numeracy skills, but it significantly improved basic awareness of financial choices and attitudes toward financial decisions. The study is also not consistent with findings by Eresia-Eke et al (2013) who studied the relationship between the financial literacy of entrepreneurs and business growth in South Africa and

established that there was no correlation between financial literacy and the growth of Small, Micro and Medium Enterprises (SMMEs).

$H_{02:}$ Portfolio diversification has no significant influence of on growth in wealth of investment groups in Kenya.

The coefficient estimate for this variable had t-statistic of 3.43 which is greater than 1.968. This shows that the calculated t-statistic is greater than the critical t statistic from the students t-distribution at 0.05 level of significance and 304 degrees of freedom. This is an implication that the coefficient is significant at 5% level of significance. This is also implied by the p-value of the t-statistic which was found to be 0.001 which is less than 0.05. The null hypothesis was rejected and the alternative hypothesis was accepted thus concluding that Portfolio diversification has a significant influence of on growth in wealth of investment groups in Kenya. These findings are in line with those of Njiru (2006) who observed that through proper portfolio management an investor is able to maximise his returns.

$H_{03:}$ Capital structure has no significant influence of on growth in wealth of investment groups in Kenya.

The analysis estimated the coefficient of capital structure on performance with a t-statistic of 2.055. The statistic is greater than 1.968 which is the critical t statistic from the students t-distribution at 0.05 level of significance and 304 degrees of freedom. This is an implication that the coefficient is significant at 5% level of significance. The p-value of the t-statistic for capital structure was found to be 0.041. This p-value is less than 0.05 therefore the null hypothesis was rejected and the alternative accepted thus drawing a conclusion that capital structure has a significant influence of on growth in wealth of investment groups in Kenya. These findings are in line with a study conducted by Vincent (2013) on the effect of capital structure and the value of companies listed at the NSE which showed that value of firms and capital structure have a positive relationship. These results are also agree with modigliani and miller theorem that

suggest that 'capital structure is relevant in determining the value of the firm'. This however differs with Maina and Kondongo (2013) who investigated the effect of capital structure on performance of firms listed at the NSE and found that it was negative.

$H_{04:}$ Group governance has no significant influence of on growth in wealth of investment groups in Kenya.

The coefficient for this variable was estimated and found to have a t-statistic of 3.43 which is greater than the critical t statistic from the students t-distribution at 0.05 level of significance and 304 degrees of freedom. This shows that the calculated t-statistic is greater than This is an implication that the coefficient is significant at 5% level of significance. This is also implied by the p-value of the t-statistic which was found to be 0.000 which is less than 0.05 resulting into the rejection of the null hypothesis and acceptance of the alternative hypothesis thus concluding that group governance significantly influence growth in wealth of investment groups in Kenya. These findings, agree with those arrived by Icharia 2012 who studied the factors influencing wealth creation in investment groups working with micro finances.

This finding is in line with Grove et al (2011) who asserts that in agency theory separating the roles of CEO and chairman of the board can mitigate agency costs. As a leader of the board, the chairman of the board is responsible for monitoring the CEO's decision making and overseeing the process of CEO hiring, firing, evaluation and compensation (Grove et al., 2011). Therefore, agency theory predicts that CEO-duality weaken the financial performance of the firm (Donaldson & Davis, 1991).This study findings are also in line with Vo & Phan (2013) who carried out an empirical study on the relationship between corporate governance and the performance of firms in Vietnam and found that good corporate governance influences performance. The finding are also in line with Ahmad (2010) who explored the factors that influence the relation between corporate governance and performance of banks operating in Palestine relying on financial ratios, namely return on asset. The researcher reported that corporate governance has statistical significance on the performance of the sampled banks. The

study finding also agree with Al-Shammari and Al-Sultan(2009) who investigated the relationship between corporate governance mechanisms and firm performance for non-financial companies on the KSE from 2004 to 2007 and found a positive relationship between corporate governance and firm performance measures.

4.6.8 Moderating Effect of Group Size

To draw conclusions on the objective regarding the moderating effect of group size on the relationship between the determinants of growth and growth in wealth of investing companies in Kenya. Other studies measures firm size by sales or market capitalization (Baptista, 2010) and the number of employees (Richarda et al., 2009). The moderated multiple regression model was adopted. This model involved generating a transformation variable as an interaction variable between group size and the determinants of growth. The interaction variables were generated as intersections between the independent variables and groups size. The interaction variables were then used in the hierarchical moderated multiple regressions.

Table 4.43 presents the summary of the analysis of the moderating effect from the moderated multiple regression analysis of determinants of growth and growth in wealth. Hierarchical regression was used as a stepwise regression analysis that produced and tested three models. Model one only constituted of the determinants of growth without considering the moderating variable. Model two was fitted including the moderating variable group size and model 3 included the interaction variables between the determinants of growth and the moderator group size. The fitness of all the three models were tested using, R^2 and ANOVA (F) and the coefficients of the models tested using T statistics. Model 1 results produced an R-square of 0.437 implying that the variation in the independent variable in the model explains 43.7% of the variation in wealth growth in investment firms. The second model was found to have an R-square of 0.450. This shows that the variance of growth explained in the 2^{nd} model is 45.0%, with an R-square change of 0.013. The R-square change in the second step is however insignificant as shown by the change in F that has a p-value of 0.072 which is greater than 0.05. the P-

value of the change in F being greater than 0.05 implies that the direct inclusion of the moderating variable group size has no significant change in the R-square and no significant improvement on the model from model one to model 2. The third model was fitted adding the interaction variables of the moderator and other independent variables. The third step of the MMR modelling had an R-square of 0.503 implying that the variation in wealth growth explained in the 3rd model is 50.3%. Model three is an improvement of the first two model with a significant positive change in the R-square. The change in R-square for model three is 0.053 which is significant as shown by the P-value of the F-change which was found to be less than 0.05. The p-value of the F-change is 0.000. The results agree with the findings of Kuria (2013) who found that firm size was significant.

Table 4.43: Moderated multiple regression Models Summary

Model	R	R Square	Adjusted R Square	Std. Error	R Square Change	F Change	df 1	df2	Sig. F Change
1	.661[a]	0.437	0.427	0.698	0.437	45.048	4	232	0.000
2	.671[b]	0.450	0.439	0.691	0.013	5.578	1	231	0.019
3	.709[c]	0.503	0.484	0.663	0.053	6.043	4	227	0.000

a. Predictors: (Constant), Group Governance, Capital Structure, Financial Literacy, Portfolio diversification

b. Predictors: (Constant), Group Governance, Capital Structure, Financial Literacy, Portfolio diversification, Size

c. Predictors: (Constant), Group Governance, Capital Structure, Financial Literacy, Portfolio diversification, Size, Group Governance, Portfolio diversification intersection Group size, Financial Literacy intersection Group size, Capital Structure intersection Group size

The coefficients of the three models are presented in table 4.44. Model one results show that all the determinants of growth had a significant influence on growth in wealth. The coefficients also showed a positive relationship between all the variables and growth in wealth. This is according to the significance values and the coefficients obtained against each variable. The result of the model generates an equation given as:

$$Y = 0.376X_1 + 0.217X_2 + 0.117X_3 + 0.174X_4$$

Model two results show that addition of the moderating variable to the initial model doesn't improve the model. It however found that in the joint model with the determinants of growth, the moderating variable group size also had significant influence on growth in wealth. The p-value of the t-statistic for the variable group size was found to be 0.019 which is less than 0.05. The result of the 2nd model generates an equation given as:

$$Y = 0.384X_1 + 0.214X_2 + 0.098X_3 + 0.183X_4 + 0.012Z$$

The results for the third model show that addition of the interaction variables significantly improves the model on the influence of the determinants on growth of wealth. The change statistics show a p-value of 0.000 which is less than 0.05. The individual interaction variables were also found to all have significant influence on wealth growth. The interaction variables between each independent variable and group size were all found to be have p-values less than 0.05 implying significance at 0.05 level of significance. The final model generated an equation given by;

$$Y = 0.088X_1 + 0.169X_2 + 0.115X_3 + 0.195X_4 + 0.013Z * X_1 - 0.014Z * X_2 - 0.031Z * X_3 + 0.009Z * X_4$$

Table 4.44: Moderated multiple regression coefficients

Model	Variable	Unstandardized β	Std. Error	Standardized β	T	Sig.
1	(Constant)	0.001	0.046		0.028	0.977
	Financial Literacy	0.376	0.056	0.378	6.754	0.000
	Portfolio diversification	0.217	0.063	0.234	3.430	0.001
	Capital Structure	0.117	0.057	0.129	2.055	0.041
	Group Governance	0.174	0.046	0.193	3.800	0.000
2	(Constant)	0.030	0.047		0.651	0.516
	Financial Literacy	0.384	0.055	0.386	6.958	0.000
	Portfolio diversification	0.214	0.063	0.231	3.414	0.001
	Capital Structure	0.098	0.049	0.108	2.013	0.045
	Group Governance	0.183	0.045	0.203	4.036	0.000
	Size	0.012	0.005	0.118	2.362	0.019
3	(Constant)	0.053	0.050		1.066	0.287
	Financial Literacy	0.088	0.035	0.089	2.498	0.013
	Portfolio diversification	0.169	0.064	0.182	2.653	0.009
	Capital Structure	0.115	0.053	0.127	2.154	0.032
	Group Governance	0.195	0.046	0.216	4.270	0.000
	Size	-0.015	0.010	-0.149	-1.551	0.122
	Financial Literacy intersection Group size	0.013	0.006	0.311	2.431	0.016
	Portfolio diversification intersection Group size	-0.014	0.007	-0.204	-2.032	0.043
	Capital Structure intersection Group size	-0.031	0.010	-0.515	-3.128	0.002
	Group Governance	0.009	0.004	0.108	1.985	0.048

a. Dependent Variable: Growth in wealth

The conclusion from the fitted model shows that the moderating variable group size has a positive moderating effect on the relationship between financial literacy and growth in wealth. Increasing the group size would increase the rate of influence that financial literacy has on wealth growth. The above findings are in line with those of Uhomoibhi (2008), Dietrich and Wanzenried (2011) that size is positively associated with performance given that banks with a larger size are able to diversify and move away from the traditional deposit-taking and lending business to cost-effective but riskier

wholesale funding and market based activities. These findings are also in line with those of (Pasiouras & Kosmidou, 2007) that large banks have a wide range of products and loans diversification and are able to diversify their lending and deposit portfolios by moving away from traditional deposit-taking and lending practices to more cost effective but riskier wholesale funding and market-based activities that lead to improved levels of performance. A graphical presentation from the model is shown in figure 4.8. It shows that with high group size, increases in financial literacy results into higher and faster influence to increase growth in wealth than in cases of low group size.

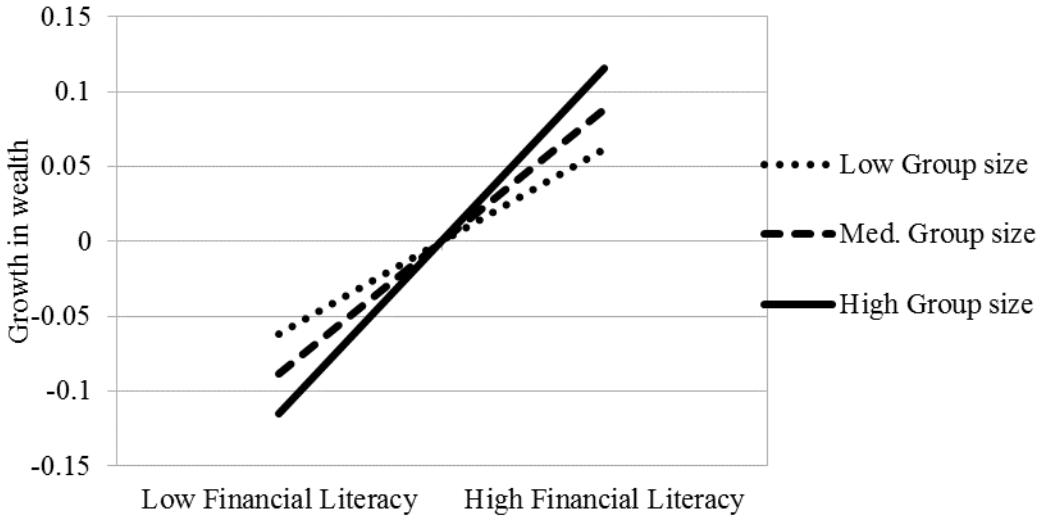

Figure 4. 6: Moderating influence of size on financial literacy and growth

The conclusion from the fitted model also shows that the moderating variable group size has a positive moderating effect on the relationship between portfolio diversification and growth in wealth. Increasing the group size would increase the rate of influence that portfolio diversification has on wealth growth. A graphical presentation from the model is shown in figure 4.9. It shows that with high group size, increases in portfolio diversification results into higher and faster influence to increase growth in wealth than in cases of low group size.

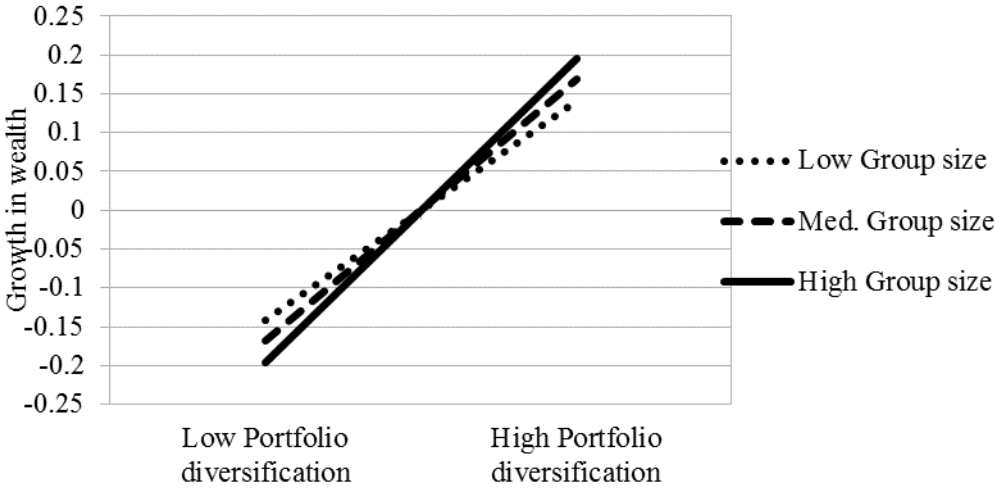

Figure 4. 7: Moderating influence of size on portfolio diversification and growth

The fitted MMR model also shows that the relationship between capital structure and growth in wealth is influenced by the moderating variable group size. Increasing the group size would increase the rate of influence that capital structure has on wealth growth. A graphical presentation from the model is shown in figure 4.10. It shows that with high group size, increases in capital structure results into higher and faster influence to increase growth in wealth than in cases of low group size.

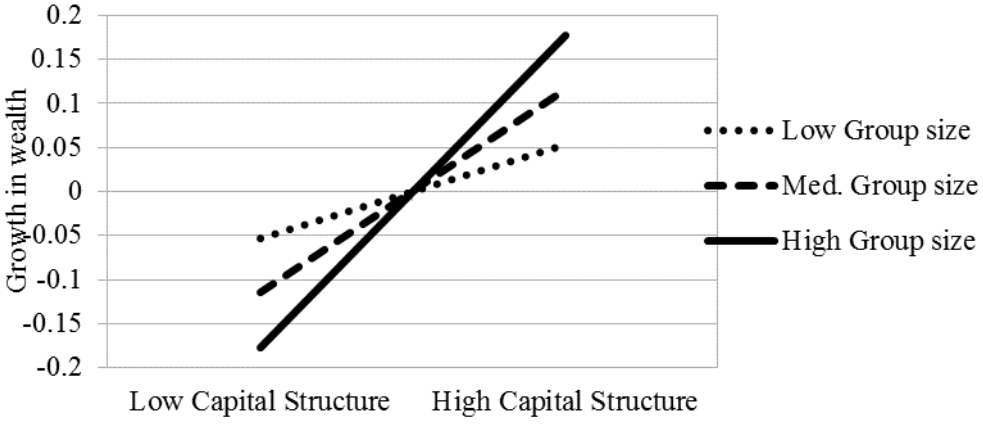

Figure 4. 8: Moderating influence of size on capital structure and growth

The moderating variable group size also has a positive moderating effect on the relationship between group governance and growth in wealth. Increasing the levels of group size would increase the rate of influence that group governance has on wealth growth. The results agree with the findings of Kuria (2013) who found that firm size was significant. A graphical presentation from the model is shown in figure 4.11 It shows that with high group size, increases in levels of group governance results into higher and faster influence to increase growth in wealth than in cases of low group size.

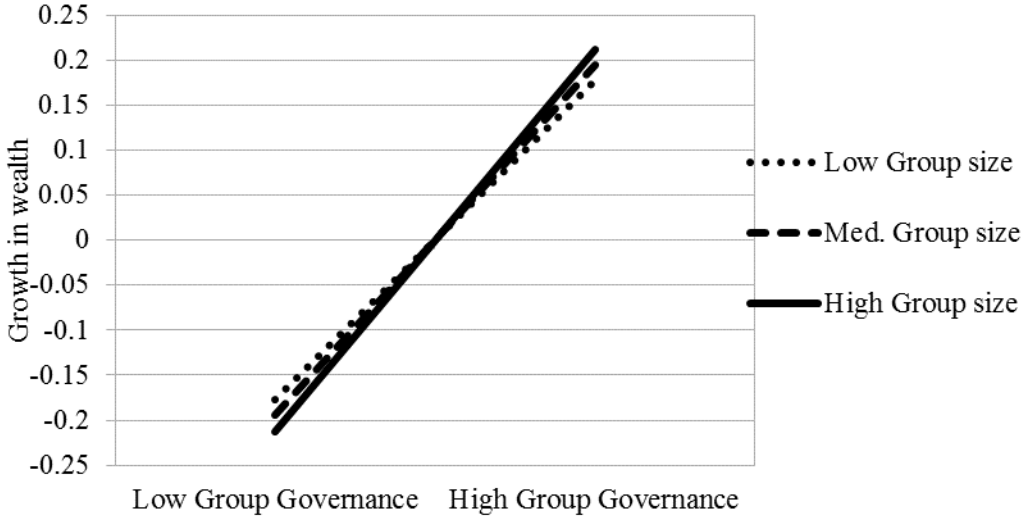

Figure 4. 9: Moderating influence of size on group governance and growth

The conclusion of the 5th objective was made based on the moderated regression model. The fifth hypothesis was also tested and concluded on based on the same model.

H_{05}: Group size has no significant moderating effect on the determinants of growth in wealth of investment groups in Kenya.

The P-value of the F-change statistic of the 3rd model was 0.000 which is less than 0.05. This means that the positive change in R-square due to inclusion of the interaction variables of group size and determinants of growth is significant implying that the model is significantly improved by the addition. The null hypothesis was thus rejected and the

alternative taken to conclude that group size significantly influences the relationship between determinants of growth and growth in wealth of investment groups in Kenya. The findings are in line with those of (Wepukhulu 2016) where he rejected the null hypothesis that size does not influence the relationship between corporate governance and performance of commercial banks in Kenya where he used size as a control variable. The results agree with the findings of Kuria (2013) who found that firm size was significant.

Table 4.45 presents the results of hypotheses where the study made the following conclusions: On hypothesis number one: there is no dependence between financial literacy and growth in wealth of investment groups in Kenya. The study accepted the alternative hypothesis and concluded that financial literacy is an important determinant of Growth of investment groups' wealth. These findings relate with those of Mwambia (2014) who established that financial literacy influenced miraa farmers' returns in Meru County. These findings relate with that of Gikomo (2013) and Sagana (2014) who also established that financial literacy and efficient financial management influenced greatly how the firms performed. These findings are in line with those of Siekei et al (2013) who studied the effect of financial literacy education on performance of small firms in Njoro, Kenya and established that training in financial analysis, budgeting and credit management improved the performance of microenterprises.

The study is also consistent with a study by Zindiye (2008) which established that financial skills, particularly book keeping skills, financial statements preparation, debit and credit control, budgeting skills and tax calculation influenced the performance of the enterprises. The study further confirmed the findings by Siekei et al (2013) which showed that training in financial analysis, budgeting and credit management improved the performance of microenterprises. However, the finding contradicted the findings of a study on the impact of financial training on financial outcomes in India by Carpena et al (2011) which established that financial literacy did not immediately enable individuals to discern costs and rewards that require high numeracy skills, but it significantly improved basic awareness of financial choices and attitudes toward financial decisions.

The study is also not consistent with findings by Eresia-Eke et al. (2013) who studied the relationship between the financial literacy of entrepreneurs and business growth in South Africa and established that there was no correlation between financial literacy and the growth of Small, Micro and Medium Enterprises (SMMEs).Hypothesis number two: there is no dependence between portfolio diversification and growth in wealth of investment groups in Kenya is rejected. The study accepted the alternative hypothesis and concluded that portfolio diversification is an important determinant of growth in wealth of investment groups' in Kenya. These findings are in line with those of Njiru (2006) who observed that through proper portfolio management an investor is able to maximise his returns. Hypothesis number three: there is no dependence between capital structure and growth in wealth of investment groups in Kenya, the study accepted the alternative hypothesis and concluded that capital structure is an important determinant of growth in wealth of investment groups in Kenya.

WOCCU (2007) concluded that organisations should be funded by pre-determined financing mix. This mode of financing would discourage flexibility in the choice of financing options. This study emphasizes on the accumulation of internal financing for long-term sustainability. Fiorillo (2006) found that external funds did not help a weak organisation become strong. It was recommended that external funding should be discouraged and instead encourage and promote a strong saving culture. Agrawal *et al.* (2002) found out that, members' funds had a central role in performance. These findings are in line with a study conducted by Vincent (2013) on the effect of capital structure and the value of companies listed at the NSE which showed that value of firms and capital structure have a positive relationship.

These results are also agree with modigliani and miller theorem that suggest that 'capital structure is relevant in determining the value of the firm'. This however differs with Maina and Kondongo (2013) who investigated the effect of capital structure on performance of firms listed at the NSE and found that it was negative. Hypothesis number four: there is no dependence between group governance and growth in wealth of investment groups in Kenya, the study accepted the alternative hypothesis and

concluded that group governance is an important determinant of growth in wealth of investment groups in Kenya. Brown (2004) found that better governed firms were relatively more profitable, more valuable, and paid out more dividends to their shareholders. This is in agreement with this study in that the staff making financial decision need to have requisite skills and uphold professionalism among other competencies to arrive at a sound working investment solution. However, he laid more emphasis on the value of governance to the shareholders while this study lays more emphasis on the value to the investment group.

These findings, agree with those arrived by Icharia 2012 who studied the factors influencing wealth creation in investment groups working with micro finances. This finding is in line with Grove et al (2011) who asserts that in agency theory separating the roles of CEO and chairman of the board can mitigate agency costs. As a leader of the board, the chairman of the board is responsible for monitoring the CEO's decision making and overseeing the process of CEO hiring, firing, evaluation and compensation (Grove et al., 2011). Therefore, agency theory predicts that CEO-duality weaken the financial performance of the firm (Donaldson & Davis, 1991).

This study is also in line with Vo & Phan (2013) who carried out an empirical study on the relationship between corporate governance and the performance of firms in Vietnam and found that good corporate governance influences performance. The finding are also in line with Ahmad (2010) who explored the factors that influence the relation between corporate governance and performance of banks operating in Palestine relying on financial ratios, namely return on asset. The researcher reported that corporate governance has statistical significance on the performance of the sampled banks. The study finding also agree with Al-Shammari and Al-Sultan(2009) who investigated the relationship between corporate governance mechanisms and firm performance for non-financial companies on the KSE from 2004 to 2007 and found a positive relationship between corporate governance and firm performance measures. Hypothesis number five: Group size has no significant moderating effect on the determinants of growth in wealth of investment groups in Kenya. The null hypothesis was thus rejected and the alternative

taken to conclude that group size significantly influences the relationship between determinants of growth and growth in wealth of investment groups in Kenya. This is also supported by Jonsson (2007) who maintains that large banks are profitable as compared to smaller banks. They have a large portfolio of customers that attracts more customers while retaining present customers. Such banks possess a huge turnover of customers and a huge assest base and can easily access credit because of its credibility from stakeholders and financial stability (Williamson, 2001). The findings agree with the findings of Kuria (2013) who found that firm size was significant.

Table 4. 45: Hypothesis Test Summary Table

Objective	Hypothesis	Estimate	P-value	Conclusion
Objective 1 To establish the influence of Financial Literacy on growth in wealth of investment groups in Kenya	H_{01}: Financial literacy has no significant influence on growth in wealth of investment groups in Kenya.	$\beta_1 =$ 0.376	0.000	Reject H_{01}
Objective 2 To determine the influence of Portfolio diversification on growth in wealth of investment groups in Kenya	H_{02}: Portfolio diversification has no significant influence of on growth in wealth of investment groups in Kenya.	$\beta_2 =$ 0.217	0.001	Reject H_{02}
Objective 3 To establish the influence of Capital Structure on growth in wealth of investment groups in Kenya	H_{03}: Capital structure has no significant influence of on growth in wealth of investment groups in Kenya.	$\beta_3 =$ 0.117	0.041	Reject H_{03}
Objective 4 To examine the influence of Group governance on growth in	H_{04}: Group governance has no significant influence of on growth	$\beta_4 =$	0.000	Reject H_{04}

wealth of investment groups in Kenya	in wealth of investment groups in Kenya.	0.174		
Objective 5 To determine the moderating effect of group size on the determinants of growth in wealth of investment groups in Kenya	H_{05}: Group size has no significant moderating effect on the determinants of growth in wealth of investment groups in Kenya.	R^2 Change = 0.053	0.000	Reject H_{05}

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the summary of the major findings and gives the conclusions and recommendations of the study. The chapter is organized as follows. It starts with the summary of the major findings, conclusions, recommendations and eventually areas for further research. The general objective of the study was to assess the determinants of growth in wealth of investment groups in Kenya. The study was guided by the following specific objectives; To establish the influence of financial literacy on growth in wealth of investment groups in Kenya, To determine the influence of portfolio diversification on growth in wealth of investment groups in Kenya, To establish the influence of capital structure on growth in wealth of investment groups in Kenya, To examine the influence of group governance on growth in wealth of investment groups in Kenya and to determine the moderating effect of group size on the determinants of growth in wealth of investment groups in Kenya.

5.2 Summary of the Major Findings

The summary is done in line with the objectives of the study based on the output of the descriptive and inferential statistical analyses guided to test the research hypothesis of the study.

5.2.1 Influence of Financial Literacy on Growth in Wealth of Investment Groups in Kenya

The first objective of the study was to find out the influence of financial literacy on growth in wealth of investment groups in Kenya. Financial literacy comprised of five dimensions namely accounting literacy, savings literacy, debt literacy, investment

literacy and insurance literacy. This study clearly confirmed the role played by financial literacy on growth in wealth of investment groups. Various analytical methods were used to arrive at the findings. These methods included descriptive statistics, correlation analysis and regression analysis. The overall model revealed a statistically significant relationship between financial literacy and growth in wealth of the investment groups in Kenya. Findings indicated that financial literacy has a significant high influence on growth in wealth of investment groups in Kenya. A high majority of the respondents confirmed that the growth in their groups wealth was attributable to financial literacy. This observation was arrived since data showed that most of the groups members were literate. The study had hypothesised that financial literacy influences growth in wealth of investment groups in Kenya. The results reveal that financial literacy is statistically significant in explaining growth in wealth of investment groups in Kenya. This implied that the null hypothesis, financial literacy does not influence the growth in wealth of investment groups in Kenya, failed to be accepted and the alternative hypothesis failed to be rejected. The results are consistent with extant literature and previous studies that suggested that financial literacy leads to superior enterprise performance and growth in wealth.

5.2.2 Influence of Portfolio Diversification on Growth in Wealth of Investment Groups in Kenya

The second research objective was to determine the influence of portfolio diversification on growth in wealth of investment groups in Kenya. Portfolio diversification had two dimensions namely investment policy and range of investments. The importance of portfolio diversification in growth in wealth was evident from the findings. For groups which had diversified, their growth was remarkably high. Various analytical methods were used to arrive at the findings. These methods included descriptive statistics, correlation analysis and regression analysis. The overall model revealed a statistically significant relationship between portfolio diversification and growth in wealth of the investment groups in Kenya. The findings indicated that portfolio diversification contributed to growth in wealth of investment groups in Kenya. This observation was

arrived since data showed that most of the groups invested in risk investments, most groups had an investment policy, most groups preferred long-term investments, investment appraisal was done, groups also set funds aside to take advantage of investment opportunities. The study had a hypothesis that portfolio diversification influences growth in wealth of investment groups in Kenya. The results revealed that portfolio diversification was statistically significant in explaining growth in wealth of investment groups in Kenya. This implied that the null hypothesis that portfolio diversification does not influence growth in wealth of investment groups in Kenya failed to be accepted and the alternative hypothesis failed to be rejected.

5.2.3 Influence of Capital Structure on Growth in Wealth of Investment Groups in Kenya

The third research objective was to examine the influence of capital structure on growth in wealth of investment groups in Kenya. Capital structure had three dimensions retained earnings, savings and deposits and debt capital in the capital structure. Various methods analytical methods were used to arrive at the findings. These methods included descriptive statistics, correlation analysis and regression analysis. The overall model revealed a statistically significant relationship between capital structure and growth in wealth of the investment groups in Kenya. The findings indicated that capital structure contributed to growth in wealth of investment groups in Kenya. This observation was arrived since data showed that groups obtained their capital from members own contribution, borrowed loans and had a mixture of sources of their funds

The study had a hypothesis that capital structure influences growth in wealth of investment groups in Kenya. The results revealed that capital structure was statistically significant in explaining growth in wealth of investment groups in Kenya. This implied that the null hypothesis that capital structure does not influence growth in wealth of investment groups in Kenya failed to be accepted and the alternative hypothesis failed to be rejected. This agrees with this study to some extent as it also emphasizes on the use of group members contributions and accumulation of share capital. This study does

not embrace the use of members' savings in financing in view of the fact that these are withdrawable on demand and carry fixed charges.

5.2.4 Influence of Group Governance on Growth in Wealth of Investment Groups in Kenya

The fourth research objective was to examine the influence of group governance on growth in wealth of investment groups in Kenya. Group governance had five dimensions professionalism, group structure, conduct of meetings, decision making and due diligence. Various methods analytical methods were used to arrive at the findings. These methods included descriptive statistics, correlation analysis and regression analysis. The overall model revealed a statistically significant relationship between group governance and growth in wealth of the investment groups in Kenya. Group governance as confirmed in the study, is critical in determining whether a group will grow its wealth. The correlation coefficient for the association between group governance and growth in wealth indicated a significant relationship between group governance and growth in wealth. The study had a hypothesis that group governance influences growth in wealth of investment groups in Kenya. The results revealed that group governance was statistically significant in explaining growth in wealth of investment groups in Kenya. This implied that the null hypothesis that group governance does not influence growth in wealth of investment groups in Kenya failed to be accepted and the alternative hypothesis failed to be rejected

5.2.5 Moderating Effect of Group Size

Testing the influence of size of group as well showed a significant influence to the relationship between determinants of growth and growth in wealth as indicated by the coefficients. Adding the interaction variables between group size and the determinants of growth resulted into a significant improvement of the model The change statistics results on the model including the interaction terms we found to be significant.

5.3 Conclusion

The conclusions were arrived at on the influence of the independent variables (financial literacy, portfolio diversification, capital structure and group governance) on the growth in wealth of investment groups in Kenya. Groups that have good group governance grew more wealth for the group. If these investment groups are equipped to be able to understand and apply the concept of determinants of growth in the running of their affairs, then they would be better placed to achieve their goals with the main goal being creation of wealth.

5.3.1 Financial Literacy and Growth in Wealth

If the investment groups are equipped with financial literacy they would grow their wealth and thrive. Based on the inferential analysis, the study concluded that financial literacy significantly influences the growth of wealth in investment groups in Kenya positively. The groups averagely have high financial literacy that in turn reflects positively on the growth of wealth in the groups. The groups had received adequate training on bookkeeping and that the groups always prepared budgets every year. The group members could interpret the contents of the financial statements and books of accounts for the groups were always prepared by professionals. The study further concluded that the groups experienced irregular savings by some group members and had effective savings plans. In addition, the study concluded that the group members interrogated the bank statements frequently. The study however determined that insurance is not considered too costly and group can afford it.

5.3.2 Portfolio Diversification and Growth in Wealth

Having a diversified portfolio grows wealth to the investment groups. Groups that had diversified their investments grew more wealth. The study determined that the groups had annual saving target that was adequate; knew the types of securities traded in the Nairobi Securities Exchange; followed the trends in securities traded in the securities exchange and updated themselves with current information on business news. The study

also concluded that portfolio diversification significantly influences the growth in wealth of investment groups in Kenya. The conclusion was based on the inferential analysis results of the study for the objective that found portfolio diversification to have a significant positive influence on the growth in wealth of investment groups in Kenya. The study concluded that the groups carried out an appraisal of value addition to the portfolio before investment decision is made. The groups had substantial investments in the financial markets and long term investments were more preferred by the group members in the groups. However, investment in government securities was not highly preferred by their groups and the groups often set aside funds to take advantage of unexpected investment opportunities. The study concluded that the groups did not regularly invest in mutual funds and short term investments were not preferred by the groups

5.3.3 Capital Structure and Growth in Wealth

Having a mix of sources of capital for investment was also found to grow more wealth for the group. For the objective to determine the influence that capital structure has on growth in wealth of investment groups in Kenya, the study concluded that capital structure positively influences the growth in wealth of investment groups in Kenya. The study found that the members of the group share all the profits made every year and the groups reinvested a portion of the profits made. The study also concluded that that the groups relied mainly on the members' savings to invest and they had borrowed a loan for investment purposes. The study further concluded that the decision to borrow a loan for financing an investment is based on the expected return on investment and that the groups had documented policy on debt finance.

5.3.4 Group Governance and Growth in Wealth

For the fourth objective of the study, it was concluded that the group's governance significantly influence on growth in wealth of investment groups in Kenya. The analysis revealed that the manner of group governance have significant positive influences on

growth in wealth of investment groups in Kenya. The groups met regularly as per the schedule of meeting and that they had a clear organizational structure. However, the group members did not only meet when there was need. There was transparency in decision making; group decisions were arrived at democratically; groups were run and managed by adequately trained professionals; groups had clear communication channels and the groups had a well laid schedule of meeting. In addition, group members attended more than 80% of the meetings in a year; before purchase of property due diligence was always carried out; voting of office bearers was always done democratically and that disposal or sale of assets was done in a transparent and well laid out procedure.

5.3.5 Moderating Influence of Group Size and Growth in Wealth

The fifth objective of the study was to determine if the size of the group has a moderating influence on the relationship between determinants of growth by the group and growth in wealth of investment groups in Kenya. From the results of the study, it was concluded that group size moderates the relationship between determinants of growth and the growth in wealth of investment groups in Kenya. From the study all the determinants of growth have positive influence on the growth in wealth of investment groups in Kenya. Increasing the size of the group in terms of the number of members, the asset base and the number of employees in the group would positively moderate and increase the strength of relationship between the determinants and growth. A larger group would experience faster growth from increases in the levels of determinants of growth.

5.4 Recommendations

The recommendations were made regarding the influence of the independent variables; financial literacy, portfolio diversification, capital structure, group governance and moderating influence of size on the relationship between the predator variables and growth in wealth of the investment groups in Kenya based on the findings of the study.

5.4.1 Financial Literacy and Growth in Wealth

The study sought to establish the influence of financial literacy on growth in wealth of investment groups in Kenya. The study recommends that investment groups should enhance financial literacy in their groups. With respect to the study findings presented in the above section, the study recommends as follows; Micro Finance Institutions and government agencies including WEF, YEF and Uwezo should organize financial education capacity building programs and financial awareness campaigns on accounting, debt management, savings, insurance and investments literacy for investment groups under their jurisdiction. Such trainings should be separated from financing since mixing training and financing has been reported to be in effective as the groups participants are only interested in the loan with little commitment to learning. The training should also include educating members on the interpretation of the contents of the financial statements and books of accounts.

5.4.2 Portfolio Diversification and Growth in Wealth

The study also recommends that investment groups should diversify their portfolio to get high growth and also increase the asset base. Portfolio diversification was found to be a determinant of growth in wealth of the investment groups in Kenya. The study recommends that groups should determine an asset allocation that best conforms to groups' investment goals and strategies. The members of the group should be aware on how to invest optimally. The study recommends that the groups to carry out appraisals of value addition to the portfolio before investment decisions are made. The groups had substantial investments in the financial markets and long term investments were more preferred by the group members in the groups. However, investment in government securities was not highly preferred by their groups. The study therefore recommends that the groups be made aware on the importance of investing in securities, and how they can use it to expand their wealth. it is vital for investment companies to diversify their portfolio by investing across markets, sectors or geographical regions to grow their wealth.

5.4.3 Capital Structure and Growth in Wealth

Since the groups experienced irregular savings by some group members, there should be effective savings plans in the investment groups. The investment groups should apply proper financing mix in their capital structure. This is due to the fact that capital structure showed a strong insignificant relationship with Growth in wealth. There should therefore, be optimum mix between share capital, institutional capital, savings and debt capital since any improper mix does not contribute significantly to the Growth in wealth of investment groups. Since the groups relied mainly on the members' savings to invest, they should be given more light on the importance of borrowing and how to translate it into success

5.4.4 Group Governance and Growth in Wealth

The study sought to establish the influence of group governance on growth in wealth of investment groups in Kenya. Group governance was found to be a determinant of growth in wealth of investment groups in Kenya. The study recommends that the groups to continue meeting regularly as per the schedule of meeting and that they should have a clear organizational structure. Since group members attended more than 80% of the meetings in a year, these meetings should be made more beneficial and ensure they focus on matters of growth. The study determined that profits had been growing steadily since the groups began and that total assets had also been growing steadily since the groups began. Retained profits had grown steadily since the groups began and the number employees had also increased. Therefore, it is essential that the leaders of the investment groups maintain good governance in order to keep their profits on the rise. There is need for the investment groups to have solid group structure which will influence their growth in wealth. Good organization structure will allow for better decision making in the groups and thus increasing the growth in wealth of the investment groups.

5.5 Areas of Further Research

Despite following an exhaustive research method and carrying out rigorous data analysis, however, the study experienced limitations which serve as suggestions for future research as follows: From a methodological point of view, the sample and context is considered a limitation. This study was limited to the assessment of the determinants of growth in growth in wealth in the investment groups in Kenya. The investment groups studied only included those investment groups registered by KAIG. Thus, there is need for more studies to be conducted on determinants of growth and growth in wealth using for instance the views of the employees to assess the relationship that exists. Further research could be conducted in other investment groups apart from those listed by KAIG. The factors used to measure the study variables, namely; financial literacy, portfolio diversification, capital structure and group governance are not exhaustive. A further review would identify additional dimensions, moderating variables and even intervening variables which would broaden the range of variables that influence growth in wealth

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APPENDICES

Appendix I: Letter of Introduction

Date……
Chairman,
…….Group
P O BOX …….. Kenya

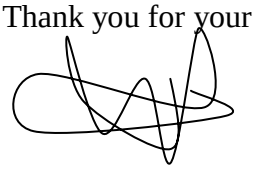
Dear Sir/Madam,

Re: COLLECTION OF THE RESEARCH DATA

I am a postgraduate student of the Jomo Kenyatta University of Agriculture and Technology pursuing a PhD in Business Administration. I wish to conduct a study entitled "Determinants of growth in wealth of investment groups in Kenya". Your investment group has been identified as one of the registered group by KAIG and hence the decision to have your participation in this important study.

I kindly request you to spare a few minutes of your time to respond to the questionnaire. Responses provided will be handled with utmost confidentiality and ethically and the findings of this study will be used exclusively for academic purposes.

Thank you for your cooperation.

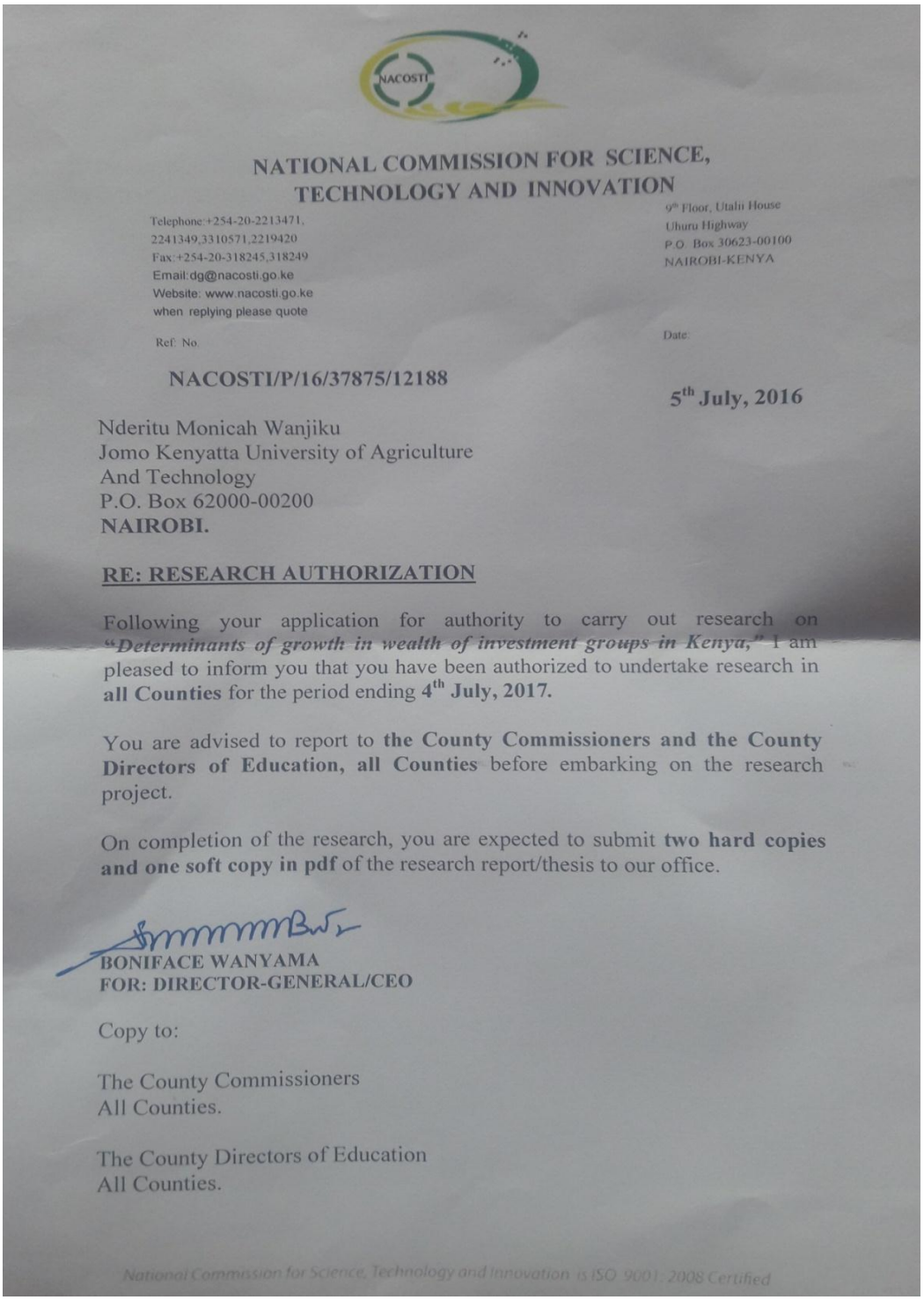


Monicah Wanjiku Nderitu

HD433-C002-0708/2012 Mobile Contact 0722 451454

Principal Researcher

Appendix II: NACOSTI Research Permit



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

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Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No.

NACOSTI/P/16/37875/12188

Date:

5th July, 2016

Nderitu Monicah Wanjiku
Jomo Kenyatta University of Agriculture
And Technology
P.O. Box 62000-00200
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Determinants of growth in wealth of investment groups in Kenya,"*** I am pleased to inform you that you have been authorized to undertake research in **all Counties** for the period ending **4th July, 2017.**

You are advised to report to **the County Commissioners and the County Directors of Education, all Counties** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioners
All Counties.

The County Directors of Education
All Counties.

National Commission for Science, Technology and Innovation is ISO 9001: 2008 Certified

Appendix III: Questionnaire

This questionnaire is to collect data for purely academic purposes. All the information will be treated as confidential. **(Group Name Is Optional).** The questionnaire is meant to find out the determinants of growth in wealth of investment groups registered by KAIG in Kenya

i. Group Name _____

ii. In which year was the group started _____

SECTION A: GROUP SIZE

(Please tick the appropriate box below)

iii. What is the size of the group in terms of the Total Assets Base?

- ☐ Below 1 million
- ☐ 1 million and below Ksh 20 Million
- ☐ Ksh 20 Million and above

iv. How many group members do you have in the group? _____

v. How many members are involved in key investment decision making for the group?

(Please tick the appropriate box below)

- ☐ All the group members are involved
- ☐ The office elected by members does it on behalf of the members

vi. How many permanent employees does your group have?

□ None □1-10 □11-20 □>20

SECTION B: FINANCIAL LITERACY

i. Are you aware of any training organisations that can train your group on financial literacy?

(Tick in the appropriate box)

□ KAIG

□ Uwezo Fund

□Youth Enterprise Development Fund

□ Women enterprise development Fund

□ Banks

□ Micro finance institutions

□ Others Specify……

5. Excellent knowledge and skills. 4. Good knowledge and skills 3.Satisfactory knowledge and skills 2. Unsatisfactory knowledge and skills 1. No knowledge and skills (tick only one)

S/N	Financial Literacy	5	4	3	2	1
	Ability to compute compound interest on invested funds					
	Ability to identify the assets in your group					
	Ability to compute capital invested by your group					
	Ability to identify liabilities in your group					
	Adequate knowledge on insurance premium					
1.	Ability to prepare financial statements for Your group. (income statement and balance sheet)					
2.	Ability to perform financial analysis on your business financial statements(e.g calculate gross profit margin, current ratio, debt ratios etc)					
3.	Adequate knowledge on maintenance of a Cashbook.					
4.	Filling tax return.					
5.	Ability to do bank reconciliations for your group?					
6.	Adequate knowledge on financial markets					
7.	Ability to prepare cashflow projections					

Rate the following statements by ticking appropriately using a Likert scale as follows:

SD = Strongly Disagree, D = Disagree, N= Neutral, A = Agree, SA = Strongly Agree.

Financial Literacy	**SD**	**D**	**N**	**A**	**SA**
1. Am sufficiently competent in book keeping	□	□	□	□	□
2. Group has received adequate training on bookkeeping	□	□	□	□	□
3. The group always prepares cash flow projections yearly	□	□	□	□	□
4. The group members can interpret the contents of the Financial statements	□	□	□	□	□
5. The accounting System that is used in accounting is adequate	□	□	□	□	□
6. Books of accounts are always prepared by professionals	□	□	□	□	□
7. Our group experiences irregular savings by some group members	□	□	□	□	□
8. The group has an effective savings plan	□	□	□	□	□
9. Group members interrogate the Bank statements frequently	□	□	□	□	□
10. Saving and investing as a group increases return on investments	□	□	□	□	□
11. Debt is inevitable in investments	□	□	□	□	□
12. Borrowing is considered risky by the group members	□	□	□	□	□
13. Insurance is too costly and the group cannot afford it	□	□	□	□	□
14. Our group has annual saving target that is adequate	□	□	□	□	□
15. I know the types of securities traded in the Nairobi Securities Exchange	□	□	□	□	□
16. I follow the trends in securities traded in the securities exchange	□	□	□	□	□
17. I update myself with current information on business news	□	□	□	□	□

SECTION C: CAPITAL STRUCTURE

Please answer the following questions by answering either Yes or No

1. The Group members contribute a fixed amount at set intervals — Yes □ No □
2. Our group has received money from Uwezo fund — Yes □ No □
3. Our group has received money from women Enterprise fund — Yes □ No □
4. Our group has received money from Youth Enterprise fund — Yes □ No □
5. In the last one year the Chama has borrowed a loan — Yes □ No □

Rate the following statements by ticking appropriately using a Likert scale as follows:

SD = Strongly Disagree, D = Disagree, N= Neutral, A = Agree, SA = Strongly Agree.

	SD	D	N	A	SA
6. The group distributes all the profits made every year	□	□	□	□	□
7. The group uses their savings only to invest	□	□	□	□	□
8. The funds contributed by the group members is adequate for investments	□	□	□	□	□
9. In the last one year the Chama has borrowed a loan for operational expenses	□	□	□	□	□
10. In the last one year our group has borrowed a loan for investment purposes	□	□	□	□	□
11. The choice of equity or debt in financing an investment is based on the expected return on investment	□	□	□	□	□

12. The group has a documented policy on debt finance □ □ □ □ □

SECTION D: PORTFOLIO DIVERSIFICATION

1. **Please tick the range of portfolio of Investments your group has invested on.**

☐	Real Estate	☐	Commercial Paper
☐	Retail Business	☐	Venture Capital
☐	Equity Shares	☐	Treasury Bonds
☐	Preference Shares	☐	Treasury Bills
☐	Corporate Bonds	☐	Farming as a business
☐	Fixed Deposit	☐	Other

Rate the following statements by ticking appropriately using a Likert scale as follows:

SD = Strongly Disagree, D = Disagree, N= Neutral, A = Agree, SA = Strongly Agree.

Portfolio Diversification	**SD**	**D**	**N**	**A**	**SA**
2. An appraisal of value to the portfolio is often done before an investment decision is made	□	□	□	□	□
3. Our group often makes some substantial investments in the financial markets	□	□	□	□	□
4. Long term investments are more preferred by our group members	□	□	□	□	□
5. Short term investments are more preferred by our	□				□

group					
6. Investment in Government securities highly preferred by the group					
7. Our group sometimes invests in fixed deposits					
8. The group often sets aside funds to take advantage of unexpected investment opportunities					
9. Investment in corporate bonds is highly preferred by the group					
10. Investment in shares is preferred					
11. Our group has some investments in commercial papers					
12. It is possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares					

SECTION E: GROUP GOVERNANCE

Please answer the following questions by answering either Yes or No

1. The group has a schedule for meetings Yes □ No □
2. Our group has a formal structure Yes □ No □
3. Our group is being run by professionals Yes □ No □
4. Our group holds an annual general meeting (AGM) yearly Yes □ No □
5. Our group has a constitution Yes □ No □

Rate the following statements by ticking appropriately using a Likert scale as follows:

SD = Strongly Disagree, D = Disagree, N= Neutral, A = Agree, SA = Strongly Agree.

6. The group members only meet when there is need	□	□	□	□	□
7. In our group there is transparency in decision making	□	□	□	□	□
8. In our group decisions are arrived at democratically	□	□	□	□	□
9. The group is run and managed by adequately trained professionals	□	□	□	□	□
10. The group does due diligence before selling or buying assets	□	□	□	□	□
11. The group has a well laid out schedule of meetings	□	□	□	□	□
12. Group members attend more than 80% of the meetings in a year	□	□	□	□	□
13. Before purchase of property a search is always carried out by a committee appointed by the group	□	□	□	□	□
14. Voting of office bearers is always done democratically	□	□	□	□	□
15. Disposal or sale of assets is done in a transparent and well laid out procedure	□	□	□	□	□

SECTION F: GROWTH IN WEALTH

a. **Kindly fill the table below from the information in the financial statements of your group:**

Indicator	**Year the group started**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Profit after Tax							
Distributed Profits							

Retained Profits							
Total Assets							
Savings by Members							
Capital							
Short term debt							
Long-term debt							
Number of employees							

b. Rate the following statements by ticking appropriately using a Likert scale as follows:

SD = Strongly Disagree, D = Disagree, N= Neutral, A = Agree, SA = Strongly Agree.

	SD	D	N	A	SA
1. Financially literacy leads to growth in wealth of investment groups	□	□	□	□	□
2. Use of debt and capital in the capital structure leads to growth in wealth of investment groups	□	□	□	□	□
3. If group members doubled their wealth there would be growth in wealth	□	□	□	□	□
4. Having several investments leads to growth in wealth of investment groups	□	□	□	□	□
5. Good governance leads to growth in wealth of investment groups	□	□	□	□	□
6. Financially literacy leads to growth in wealth of investment groups	□	□	□	□	□

7. Having more people in decision making position leads to better investment opportunities	□	□	□	□	□
8. Larger groups grow their wealth more than small firms	□	□	□	□	□
9. Group size affects growth in wealth of the investment group					
10. Larger groups have more resources to help them grow than small firms	□	□	□	□	□
11. Large firms do not mind doing risky investments because the gains of doing this exceed the costs of investing	□	□	□	□	□
12. The management of large and medium sized groups have greater commitment and invests more resources to grow the groups wealth	□	□	□	□	□
13. Small groups usually have little if any access to financial markets	□	□	□	□	□
14. Do you think skills and education level of group leaders influences Growth in wealth of the group	□	□	□	□	□
15. Larger groups can afford to engage professionals in the business as compared to small groups	□	□	□	□	□

THANK YOU FOR YOUR COOPERATION

Appendix IV: Factor loadings Matrix

	Component 1	Component 2	Component 3	Component 4	Component 5	Component 6
Am sufficient competent in book keeping	0.832					
Our group has received adequate training on bookkeeping	0.692					
The group always prepares budgets yearly	0.691					
The group members can interpret the contents of the Financial statements	0.800					
Books of accounts for our group are always prepared by professionals	0.757					
Our group experiences irregular savings by some group members	-0.348					
Our group has an effective savings plan	0.361					
Our group members interrogate the Bank statements frequently	0.511					
Borrowing is considered risky by the members in our group	0.378					
Insurance is too costly and our group cannot afford it	-0.515					
Our group has annual saving target that is adequate	0.127					
I know the types of securities traded in the Nairobi Securities Exchange	0.565					
I follow the trends in securities traded in the security exchange	0.589					
I update myself with current information on business news	0.468					
Our group carries out an appraisal of value addition to the portfolio before investment decision is made		0.597				
Our group has a substantial investments in the financial markets		0.655				
Long term investments are more preferred by our		0.635				

group members			
Investment in Government securities highly preferred by our group	-0.201		
The group often sets aside funds to take advantage of unexpected investment opportunities	0.631		
It is possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares	0.674		
Our group regularly invests in mutual funds	-0.525		
Short term investments are more preferred by our group	-0.530		
The group meets regularly as per the schedule of meeting		0.791	
Our group has a clear organizational structure		0.769	
The group members only meet when there is need		-0.606	
In our group there is transparency in decision making		0.539	
In our group decisions are arrived at democratically		0.814	
Our group is run and managed by adequately trained professionals		0.672	
Our group has a clear communication channels		0.870	
The group has a well laid schedule of meetings		0.891	
Group members attend more than 80% of the meetings in a year		0.679	
Before purchase of property due diligence is always carried out		0.843	
Voting of office bearers is always done democratically		0.829	
Disposal or sale of assets is done in a transparent and well laid out procedure		0.845	
The group meets regularly as per the schedule of meeting			0.791
Our group has a clear organizational structure			0.769
The group members only meet when there is need			-0.606
In our group there is transparency in decision making			0.539
In our group decisions are arrived at democratically			0.814
Our group is run and managed by adequately trained professionals			0.672
Our group has a clear communication channels			0.870
The group has a well laid schedule of meetings			0.891
Group members attend more than 80% of the meetings in a year			0.679
Before purchase of property due diligence is always carried out			0.843
Voting of office bearers is always done democratically			0.829
Disposal or sale of assets is done in a transparent and well laid out			0.845

procedure		
Mean growth in Profit after tax	0.498	
Mean growth in total Assets	0.550	
Mean growth in Number of employees	0.784	
Mean growth in retained profits	0.561	
Mean growth in capital	0.488	
Mean growth in loans borrowed	0.369	
Size of the group in terms of Total Assets		0.641
Number of group member's in the group		0.845
Number of members in your group		0.833

Appendix V: Factor scores Matrix

	Component 1	Component 2	Component 3	Component 4	Component 5	Component 6
Am sufficient competent in book keeping	0.178					
Our group has received adequate training on bookkeeping	0.148					
The group always prepares budgets yearly	0.147					
The group members can interpret the contents of the Financial statements	0.171					
Books of accounts for our group are always prepared by professionals	0.162					
Our group experiences irregular savings by some group members	-0.074					
Our group has an effective savings plan	0.077					
Our group members interrogate the Bank statements frequently	0.109					
Borrowing is considered risky by the members in our group	0.081					
Insurance is too costly and our group cannot afford it	-0.110					
Our group has annual saving target that is adequate	0.027					
I know the types of securities traded in the Nairobi	0.121					

Securities Exchange				
I follow the trends in securities traded in the security exchange	0.126			
I update myself with current information on business news	0.100			
Our group carries out an appraisal of value addition to the portfolio before investment decision is made		0.226		
Our group has a substantial investments in the financial markets		0.248		
Long term investments are more preferred by our group members		0.241		
Investment in Government securities highly preferred by our group		-0.076		
The group often sets aside funds to take advantage of unexpected investment opportunities		0.239		
It is possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares		0.256		
Our group regularly invests in mutual funds		-0.199		
Short term investments are more preferred by our group		-0.201		
The members of the group share all the profits made every year			0.318	
The group relies only on members savings to invest			0.306	
The decision to borrow a loan for financing an investment is based on the expected return on investment			0.401	
Our group has a documented policy on debt finance			0.386	
The group meets regularly as per the schedule of meeting				0.111
Our group has a clear organizational structure				0.108
The group members only meet when there is need				-0.085
In our group there is transparency in decision making				0.076

In our group decisions are arrived at democratically	0.114		
Our group is run and managed by adequately trained professionals	0.095		
Our group has a clear communication channels	0.122		
The group has a well laid schedule of meetings	0.125		
Group members attend more than 80% of the meetings in a year	0.095		
Before purchase of property due diligence is always carried out	0.119		
Voting of office bearers is always done democratically	0.117		
Disposal or sale of assets is done in a transparent and well laid out procedure	0.119		
Mean growth in Profit after tax		0.298	
Mean growth in total Assets		0.550	
Mean growth in Number of employees		0.784	
Mean growth in retained profits		0.036	
Mean growth in capital		-0.249	
Mean growth in loans borrowed		0.169	
Size of the group in terms of Total Assets			0.353
Number of group members in the group			0.465
Number of members in your group			0.458

Appendix VI: Durbin Watson Tables

Critical Values for the Durbin-Watson Test: 5% Significance Level
T=200,210,220,...,500, K=2 to 21
K includes intercept

T	K	dL	dU	T	K	dL	dU	T	K	dL	dU
290	7	1.76539	1.8498	300	15	1.71385	1.90885	320	3	1.80408	1.82922
290	8	1.75825	1.85704	300	16	1.70667	1.91623	320	4	1.79775	1.83559
290	9	1.75106	1.86434	300	17	1.69946	1.92365	320	5	1.79139	1.84199
290	10	1.74384	1.87169	300	18	1.69221	1.93111	320	6	1.785	1.84844
290	11	1.73659	1.87909	300	19	1.68494	1.93863	320	7	1.77857	1.85494
290	12	1.72929	1.88655	300	20	1.67764	1.94619	320	8	1.77211	1.86147
290	13	1.72196	1.89405	300	21	1.6703	1.95379	320	9	1.76563	1.86804
290	14	1.71459	1.90161	310	2	1.80725	1.82019	320	10	1.75911	1.87466
290	15	1.70718	1.90921	310	3	1.80076	1.82672	320	11	1.75256	1.88133
290	16	1.69975	1.91686	310	4	1.79422	1.83329	320	12	1.74598	1.88804
290	17	1.69227	1.92456	310	5	1.78766	1.83991	320	13	1.73937	1.89478
290	18	1.68477	1.93232	310	6	1.78105	1.84657	320	14	1.73272	1.90156
290	19	1.67722	1.94012	310	7	1.77441	1.85328	320	15	1.72605	1.9084
290	20	1.66964	1.94798	310	8	1.76774	1.86003	320	16	1.71935	1.91527
290	21	1.66204	1.95587	310	9	1.76104	1.86683	320	17	1.71262	1.92218
300	2	1.80398	1.81735	310	10	1.7543	1.87368	320	18	1.70585	1.92913
300	3	1.79726	1.8241	310	11	1.74753	1.88058	320	19	1.69906	1.93613
300	4	1.79051	1.83088	310	12	1.74072	1.88751	320	20	1.69225	1.94316
300	5	1.78371	1.83773	310	13	1.73389	1.89449	320	21	1.6854	1.95024
300	6	1.77689	1.84463	310	14	1.72703	1.90152	330	2	1.81335	1.8255
300	7	1.77003	1.85157	310	15	1.72012	1.90859	330	3	1.80724	1.83162
300	8	1.76313	1.85856	310	16	1.71319	1.91571	330	4	1.80111	1.83779
300	9	1.75619	1.8656	310	17	1.70622	1.92286	330	5	1.79495	1.844
300	10	1.74921	1.87269	310	18	1.69923	1.93006	330	6	1.78876	1.85024
300	11	1.74222	1.87983	310	19	1.69221	1.93731	330	7	1.78252	1.85653
300	12	1.73518	1.88702	310	20	1.68516	1.94459	330	8	1.77627	1.86286
300	13	1.7281	1.89425	310	21	1.67807	1.95192	330	9	1.76999	1.86923
300	14	1.72099	1.90152	320	2	1.81037	1.82291	330	10	1.76367	1.87563

Appendix VII: List of Investment Groups

FECHIM INVESTMENTS LIMITED	AFRICA ADVANCE INVESTMENT LIMITED	CAPITAL WIDE INVESTMENTS LTD
TANG KENDI WOMEN GROUP	HOME AFRICA LIMITED	RIWA WOMEN GROUP
FUTURES INVESTMENTS LTD	ARK FAMILIES INVESTMENT GROUP	VIPEPEO INVESTMENTS LIMITED
AMALGAMATED CHAMA LIMITED	UMOJA ROTA YOUTH GROUP	KAYABA UNITY FOR DEVELOPMENT CBO
LELA FRIENDS WOMEN GROUP	KAGUTU A VILLAGE YOUTH GROUP	MEDRUOK PARO WELFARE/KAYABA
JIRANI WELFARE SELF HELP GROUP/KAYABA	SWEAT FOR SUCCESS YOUTH GROUP	BISMILLAHI WOMEN GROUP HAZINA
MAPATO INVESTMENT LTD	KACHAMA DEVELOPMENT YOUTH GROUP	CRITICAL MASS GROWTH LTD(CMG)
MAKE A BETTER WORLD (KENYA)	NYIKAWINO WOMEN GROUP	KANGO ST LAZARO YOUTH GROUP
EXEMPLAR LIMITED	HOLO JUCTION MOTOCYCLE	KALOLENI CAR WASH SELF HELP GROUP
KANGO NYATINI WOMEN GROUP	IMPALA CHAMA LIMITED	NYAMBURU WELFARE SELF HELP GROUP
MAASAI YOUTH GROUP	BIDII WOMEN GROUP	MILLINUM MAENDELEO GIKOMBA
MBASNI SELF HELP GROUP	KAZANJO YOUTH GROUP	SYKLIGHT WOMEN GROUP
JAMALA WELFARE INVESTMENT GROUP	KAYABA RIVERSIDE WOMEN GROUP	KANGO NYI KISUMU WOMEN GROUP
HAZINA HUSTLERS SELF HELP GROUP	KENYA YOUTH SPORTS FAN ORGANISATION	NYAMARERE WOMEN GROUP
RAM LINKS LIMITED	KAMUOK SELF HELP GROUP	AMAZING YOUTH GROUP
KAMODI MIXED SEED OF HOPE PROJECT	OLARE JAKOLOGI DEVELOPMENT GROUP	PETKEN LIMITED
TRANS MILLENIUM INVESTMENT GROUP	ANGOGO WINDOWS SUPPORT GROUP	ST CONSILATER NGERE B WIDOWS GROUP

LTD		
FUTURES INVESTMENTS LTD	OSIEPE YOUTH GROUP	NGULA WIDOWS SUPPORT
CHIEKO YOUTH GROUP	MAPATO GROUP	MILELE ALLIANCE LTD
NYANGERE WINDOWS WOMEN GROUP	CONFER LIMITED	KAYABA CLUSTER A SELF HELP GROUP
BAHATI UNITY SELF HELP GROUP	NYANGOMA UPENDO SELF HELP GROUP	MILENYE CARE GIVES SUPPORT GROUP
WASIKIA SUPPORT GROUP	KINDA WOMEN GROUP	IBSE MUSLIM YOUTH GROUP
OPAR KOLEWO WOMEN GROUP	WAGOK JOKAMBAI DEVELOPMENT INITIATIVE GROUP	KENYA ASSOCIATION FOR MATERNAL AND NEONATAL HEALTH
CARLING ENTERPRISES	JACHIWO SELF HELP GROUP	KWEOYA INVESTMENTS LTD
CHAMA COMMUNITY WATER PROJECT	STEP UP AND SHINE HELP GROUP	UMOJA WOMEN GROUP
NYARENDA WIDOWS SUPPORT GROUP	FOCUSED BIDII DEVELOPMENT YOUTH GROUP	LUNGA LUNGA URAFIKI WOMMEN SELF HELP GROUP
THURBIE A YOUTH GROUP	LAIBON NINETY THREE LIMITED	VIPEPEO INVESTMENTS LIMITED
SKIRT SUIT INCOME GENERATING GROUP	MHASIBU INVESTMENT COMPANY LTD	WEALTH CREATORS(2010) KENYA
KILITY COMMUNITY WATER PROJECT	ST LUSIA WOMEN GROUP	KAMARAWA VILLAGE YOUTH GROUP
LADS INVESTMENT LTD	KACHA SELF HELP GROUP	ANNAN WOMEN GROUP
TRANSMILLENIA INVESTMENTS LTD	KAYABA WINAM INVESTERS SELF HELP GROUP	KAYABA NGITHERI ROAD SELF HELP GROUP
BIBLE REVELATION SELF HELP GROUP	TAMU SUPPORT WOMEN GROUP	TAMU WORKERS YOUTH GROUP
KONUNDU COSAVE GROUP	TRANSFROMERS GROUP	PINY PEK YOUTH GROUP
KAMACHAGA WOMEN GROUP	ORIGINS INVESTMENT GROUP	CLAYCITY YOUTH GROUP INITIAIVE
A P E X YOUTH GROUP	RAM LINKS LIMITED	TASO WOMEN GROUP
KABANSORA SELF HELP GROUP	NYOKECH SELF HELP GROUP	TEKEEDO YOUTH SELF HELP GROUP
MAJI MAZURI SELF HELP GROUP	ROYSAMBU BUILDERS SELF HELP	VIJANA MASHINANI YOUTH GROUP

	GROUP	
HOPE BODA BODA COMPLANCE SELF HELP GROUP	KALOLENI ECONOMIC EMPOWERMENT YOUTH GROUP	SIMUKHA YOUTH SUPPORT GROUP
SHARKS INVESTMENTS LTD	SINDIKIZA WOMEN GROUP	CARLING ENTERPRISES
EIGHT STEPS INVEST. LTD	MBOTELA YOUTH GROUP	EXEC INVESTMENT GROUP LTD
CAPITAL WIDE INVESTMENTS LTD	UPRISING WOMEN GROUP	GUFI COMPANY
KAMSWA NORTH COMMUNITY SUPPORT GROUP	VILLAGE HEADS DEVELOPMENT GROUP	CINEMA YOUNG INVESTORS
KWEOYA INVESTMENTS LTD		
MUTHUURI AND CO. INVESTMENT LTD	OLIVE CAPITAL HOLDINGS LIMITED	KENYA WOMEN INVESTMENT COMPANY LTD
SENATE YOUTH GROUP	PSOK HOLDINGS LIMITED	LAS VEGAS WOMEN GROUP
PROSPEROUS VENTURES LIMITED	MACHAMBI YOUTH GROUP	SHABAHA SORORITY LIMITED
SIAM INVESTMENT LTD	SWAN SECURITIES LTD	FLAMINGO YOUTH GROUP
TRANS MILLENIUM INVESTMENT GROUP LTD	KEUMBU VOICE SOCIETY YOUTH GROUP	UWEZEKANO WOMEN GROUP
TRANSMILLENIA INVESTMENTS LTD	NYAMWARE TUJIPANGE YOUTH GROUP	BETTER YOUTH TAKING A STAND
SHANGWE INVESTMENTS LTD	TEMATEMA	SMALL EDEN YOUTH GROUP
UPL LTD	TYCHE LTD	BLAIR YOUTH GROUP
WEALTH CREATORS(2010) KENYA	WAZALENDO YOUTH GROUP	WENZO LIMITED
WIDOWS OWN GROUP	CHREBEVER YOUTH GROUP	MIGINGO WOMEN GROUP
DOLPHIN VENTURES 2006 LTD	NYAGISAI POULTRY KEEPING WOMEN GROUP	WANGU WOMEN GROUP
AVEC INVESTMENT	MINTO	WAZALENDO NI SISI

LTD	DEVELOPMENT	
BRIDGE INVESTMENT GROUP LTD	THIRD ALTERNATIVE INVESTMENT LTD	DANDORA CINEMA NI SISI
CAYENNE LIMITED	MBARETS INVESTMENTS	MALI RASILI LTD
CONSOLIDATED SECURITIES LTD	YOUTH ENTERPRISES MPANGO ASSOCIATION	CINEMA YA CHINI YOUTH GROUP
SUPATRIC YOUTH GROUP	MATHARE FOUNDATION	MABOIZ ASSOCIATION
WOSIA VENTURES LIMITED	THIBIZ PARTNERSHIP	THE INVESTOR NETWORK
OUTERING YOUTH GROUP	TWAWEZA WOMEN GROUP	KANARO YOUTH FOR CHANGE
VISIONARY INVESTMENTS LTD	WAMWARES YOUNG MOTHERS	TUSHIKAMANE VILLAGE YOUTH GROUP
WALLACE FIVE LIMITED	RUBIE FORTIS	GLOBAL VISION YOUTHS
WELEVEN WOMEN GROUP	MASELINA YOUTHS	ATHI BOYS
SYNERGIA INVESTMENTS	MAKUTI WOMEN GROUP	GHETTO HEROES NI SISI YOUTH CHAPTER
CHANGE MAKERS NI SISI YOUTH GROUP	FLYING EAGLES YOUTH GROUP	POWER LINE UNDUGU YOUTH GROUP (PLUG)
COTA YOUTH BUNGE	AMANI YOUTH GROUP	PATANA YOUTH GROUP
INSIGHT INVESTMENTS LIMITED	VIPEPEO INVESTMENTS LIMITED	KINGSTONE WOMEN GROUP
VIJANA WA MKONO YOUTH GROUP	USHIRIKA WOMEN GROUP	SENOIRS YOUTH BUNGE
IMPERIAL QUEST	BOBOLEA YOUTH GROUP	SHABAI YOUTH GROUP
MAWE TATU SALAAMS SUPPORT YOUTH GROUP	DARFUR YOUTH GROUP	AMBITIOUS NI SISI YOUTH CHAPTER
LUANDA A YOUTH BUNGE	BLUE INN YOUTH GROUP	HOUSING DEVELOPMENT DEPORTMENT YOUTH BUNGE
MAJENGO YOUTH GROUP	EAST EDEN YOUTHS	POWERING UNDUGU NI SISI CHAPTER
MATENDO WOMEN GROUP	SUMMER YOUTH GROUP	EX MUOROTO TROOPS YOUTH BUNGE
JOB BRIDGE YOUTH	KOMBONI YOUTH	GITARI MARIGO 3C

BUNGE	GROUP	DANDORA PHASE IV
BONDENI YOUTH BUNGE		UNITED FOR CHANGE NI SISI CHAPTER
NETWORK FORUM	UWEZEKANO YOUNG MOTHERS	D PACE NI SISI CHAPTER
LENGO SAFI	AUTOMOTIVE YOUTH GROUP	UPRISING NI SISI YOUTH GROUP
SIMUKHA YOUTH SUPPORT GROUP	LIGHT INDUSTRY YOUTHS	PROSPERITY YOUTH BUNGE
MITOTO YOUTH BUNGE	SUMMIT YOUTH GROUP	SOUTH B ACTIVE WOMEN
NABIKODO VILLAGE YOUTH GROUP BUNGE	KARIOBANGI SPORTIFF YOUTH	MUUANGANO GROUP
GIGS AFRICA LIMITED	BARAKA MOWLEM YOUTH GROUP	DEAC PICCARS INVESTEMENTS
BANDANI OVERCOMERS PIKI PIKI YOUNG GROUP	SAFARI NJEMA GROUP	DEAC PICCARS INVESTEMENTS
GUIDLINE WOMEN GROUP	CAXTON YOUTH GROUP	LIVEWELL CARE SOLUTION CENTRE
WAKILISHA SELF HELP GROUP	CHAS INVESTMENTS	MOMBASA COUNTY YOUTH INITIATIVE
KAHONGO FARMERS GROUP	INTELLIVEST INVESTMENT GROUP	EMPRESARIOS INVESTMENT LIMITED
NEW MORNING INVESTMENT GROUP	VICINITY INVESTMENT GROUP	KAMUOMO DEVELOPMENT GROUP
BEHA INVESTMENT GROUP	PROINVEST	IBUKA INVESTMENT GROUP
DYNAMO INVESTMENT GROUP	MUKINYE GRIDROCKED LIMITED	FLY-HIGH INVESTMENT GROUP
BOARDROOM INVESTMENTS GROUP	SIRI DEVELOPMENT GROUP	BARATON PACKAGING INVESTMENT
KIREMBE KAJUL CBO AND COMPANY	KUNE ENTERPRISE	ROSINANTA COMMUNITY DEVELOPMENT GROUP
IMARIKA TRADING AND INVESTMENT COMPANY LIMITED	CONTINENTAL CAPITAL INVESTMENT GROUP	MARENA INVESTMENTS
KAGONYA VEGETABLE VALUE CHAIN DEV.GROUP	NEW MARIGUINI DEVELOPMENT	GOLDEN REALTORS LTD
MARENA INVESTMENTS	SHARKS INVESTMENTS LTD	PESMOTRACH ENTERPRISES LIMITED

JUBIZA INVESTMENTS LIMITED	BALMASI VENTURES LTD	JUBIZA INVESTMENTS LIMITED
LOCAL INITIATIVE DIRUBI DEVELOPMENT	YOUNG INVESTORS GROUP	PROGRESSIVE DISASTER RESPONSE ORGANISATIONS
MAYCO INVESTMENT LTD	MUKIBA INVESTMENT GROUP	MUKIBA INVESTMENT GROUP
REAL HOMES INVESTMENT	MUKIBA INVESTMENT GROUP	INK YOUNG INVESTMENT GROUP

Source: KAIG 2015