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

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Abstract
This article assessed the Influence of financial literacy on growth in wealth of investment groups in Kenya. In research methodology, the study adopted cross sectional survey design. The design also adopted a descriptive and correlational approach that aided on drawing conclusions on the research objectives. The population of interest was composed of investment groups registered by KAIG as availed by the KAIG directory. The population comprised of the 4020 groups registered by the Association as at December 2015. The sample size of this study was calculated using the formula for finite population. Since the population is not homogenous. Stratified random sampling was then be used in allocation of samples proportionate to size of the strata that were divided into small, medium and large investment groups. The research instrument was a questionnaire. Analysis of the data was done using (SPSS). Regression and correlation analysis was done to test the relationship between the study variables. The study findings indicated that there was a positive and significant relationship between financial literacy and growth in wealth of investment groups. The study concluded that financial literacy is key to growth in wealth of investment groups. The study therefore recommends that investment groups need to train in financial literacy to create investment groups wealth.
Keywords: financial literacy, growth in wealth, investment groups in Kenya.

1. Introduction

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 Africa 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" (Chama handbook 2012). The more widely used word for Investment Group or Club in Kenya is "Chama" (Kiswahili for group).

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).

1.1 Statement of the Problem

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 is to 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% (Malkamaki 2008). 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 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 proper guidance in investing, the lack of investing knowledge, differences over investment strategy and risk appetite.

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, 1999). 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. 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 which do not use the same model as 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 by specifically focusing on financial literacy. It is against this background that this study assessed the influence of financial literacy on growth in wealth of investment groups. If Investment groups build wealth this will have far reaching effects on economic growth of the country 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.

In view of the above review the following study was investigated:

1.1.1 Research Objective

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

1.1.2 Hypothesis

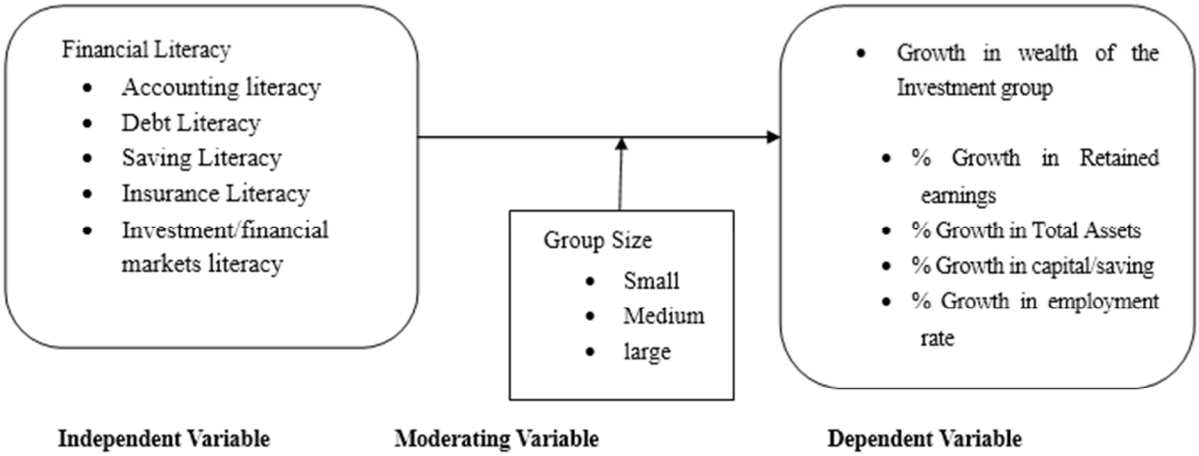
H01: Financial literacy has no significant influence on growth in wealth of investment groups in Kenya.

2.1 Theoretical Framework

This study was guided by the financial literacy theory. This theory is emerging and draws theoretical perspectives from other theories including economics, psychology, sociology and management to explain the financial behavior of individuals. A study by the OECD (2005) reviewed financial literacy in 12 countries including the USA, the UK, European countries, Australia, and Japan. The study found that all of the surveys conducted in those countries concluded that financial literacy is very low for most respondents. 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 Financial Practices Index scores thus confirming that financial knowledge is related to financial practices. 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. study, financial literacy theory was used to examine the effect of financial literacy on the growth in wealth of investment groups.

2.2 Conceptual Framework



2.3 Review of literature on Variable

2.3.1 Financial Literacy

Financial literacy has been 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 Lusardi, Michaud, and Mitchell (2013). 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 (Lusardi, Michaud, and Mitchell 2013). people will rationally select to invest in financial knowledge so as to gain access to higher return assets and the financial knowledge helps them identify better performing assets and hire financial advisers who can reduce investment expenses Lusadi (2013). A financially literate person knows the most suitable financing and financial management options for his business at the various growth stages of his 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, adoption 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. A study on SMME owners' financial literacy and business growth was unable to demonstrate that a statistically significant relationship existed between owners' financial literacy and the broad construct of business growth (Eresia and Raath 2013). The term financial refers to the information dimension while the term literacy refers to the mental processes of individuals when using this information Gouws and Shuttleworth (2009). 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.

A financially literate person will understand 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). 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 influence on the investment choice decisions.

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) 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 to determine the effect of financial literacy on management of personal finances of employees of commercial banks in Kenya used: money basics, budgeting, saving and planning, borrowing, debt literacy, financial products, recourse and self-help. 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.

2.3.2 Group Size

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.

2.3.3 Growth in wealth

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). 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. 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, 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 Wickham (2006). 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, that is Changes in number of employees, Changes in the size and location of business premises as proposed by Wickham (2006). 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.

3.1 Research Methodology

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). This study employed a mixed research design. A cross-sectional survey research design 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 and 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 and Thornhil, 2007). 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.

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 and 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.

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:

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

Where: N=Number of investment groups (population)

N1 Nn = proportionate population in each strata

Pn= proportion of sample to be selected in each strata

Table 1.0 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**

The research instrument was a questionnaire. Analysis of the data was done using descriptive statistics

and inferential statistics using Statistical Package for Social Scientists (SPSS) and a regression models was fitted and hypothesis testing carried using ordinary least squares regression analysis in the inferential analysis.

Table 1.1 Operationalization of Study Variable

Variable	Indicators	Operationalization	Measurement scale	Hypothesis
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 Growth in wealth of the 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 • Knowledge of investment risks and returns	5 point Likert type scale	
	Insurance literacy	• Attitude towards insurance • Knowledge of insurance concepts • Type of insurance taken	5 point Likert type scale	

4.1 Results and Discussion

4.2 Results of Reliability Tests

Reliability is a measure of the degree to which a research instrument yields consistent result or data after repeated trials (Mugenda and Mugenda, 2003). Reliability in research is influenced by random error. Reliability was tested using Cronbach's coefficient Alpha. Cronbach's Alpha measures how well a set of items or variables, measure a single uni-dimensional latent construct that is a coefficient of reliability or consistency. Reliability is expressed as a coefficient between 0 and 1.00. The higher the coefficient, the more reliable is the test. A threshold of a Cronbach Alpha of 0.7 and above is acceptable (Cronbach, 1951). Cronbach Alpha was used to test the reliability of the proposed constructs. The findings indicated that, operational excellence had a coefficient of 0.754 for financial literacy and 0.758 for growth in wealth as shown in the table 1.2 below.

Table 1.2 Cronbach's Alpha

Variable	Number of Items	Cronbach's Alpha	Comment
Financial Literacy	10	0.754	Accepted
Growth in Wealth	5	0.758	Accepted

4.3 Sampling Adequacy

To examine whether the data collected was adequate and appropriate for inferential statistical tests such as the factor analysis, regression analysis and other statistical tests, two main tests were performed namely; Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity. 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). Findings in Table 1:0 showed that the KMO statistic was 0.898 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett's Test of Sphericity was also highly significant (Chi-square = 1203.4327with 210 degrees of freedom, at $p < 0.05$). The results of the KMO and Bartlett's Test are summarized in Table 1.3 below. These results provided an excellent justification for further statistical analysis to be conducted.

Table 1.3 KMO and Bartlett's Test

Test	Value	
Kaiser-Meyer-Olkin measure of sampling adequacy.		0.898
Bartlett's test of sphericity	Approx. Chi-square	1203.432
	Df	210
	sig.	0.000

4.4 Financial literacy and growth in wealth

4.4.1 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 table 1.4. 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.

Table 1.4 Factor loadings matrix

Element	Component 1	Component 2	Status
Am sufficient competent in book keeping	0.832		Retained
Our group has received adequate training on bookkeeping	0.692		Retained
The group always prepares budgets yearly	0.691		Retained
The group members can interpret the contents of the Financial statements	0.800		Retained
Books of accounts for our group are always prepared by professionals	0.757		Retained
Our group experiences irregular savings by some group members	-0.348		Expunged
Our group has an effective savings plan	0.361		Expunged
Our group members interrogate the Bank statements frequently	0.511		Retained
Borrowing is considered risky by the members in our group	0.378		Expunged
Insurance is too costly and our group cannot afford it	-0.515		Retained
Our group has annual saving target that is adequate	0.127		Expunged
I know the types of securities traded in the Nairobi Securities Exchange	0.565		Retained
I follow the trends in securities traded in the security exchange	0.589		Retained
I update myself with current information on business news	0.468		Retained
Growth in Profit after tax		0.498	Retained
Growth in total Assets		0.550	Retained
Growth in Number of employees		0.784	Retained
Growth in retained profits		0.561	Retained
Growth in capital		0.488	Retained
Growth in loans borrowed		0.369	Expunged

4.4.2 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 1.5. 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 1.5 Elements of 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 1.6. 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 1.6 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 Descriptive Analysis for Financial literacy

The study sought to establish the financial literacy of the respondents in the investment groups. The researcher asked the respondents suppose they had Kshs. 100, 000 in a savings account with an interest rate of 20% per year and no withdraw of money or interest payments. The respondents were asked on how much in total they would have after one year. The findings shown in figure 4.1 below indicate that the majority said they would have exactly Kshs. 120,000 forming 75% (n=237) of the responses followed by those who said they would have more than Kshs. 120,000 at 24% (n=75) while those who said they would have less than Kshs. 120,000 formed 1% (n=2) of the responses as shown below.

have less than Kshs. 120,000 formed 1% (n=2) of the responses as shown below.

Figure 4. 1Total amount in account having Ksh 100,000 with interest of 20% after a year

The study also sought to test the respondents' knowledge of assets, capital and liability. The results obtained, shown in table 1.7 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.

Table 1.7 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.

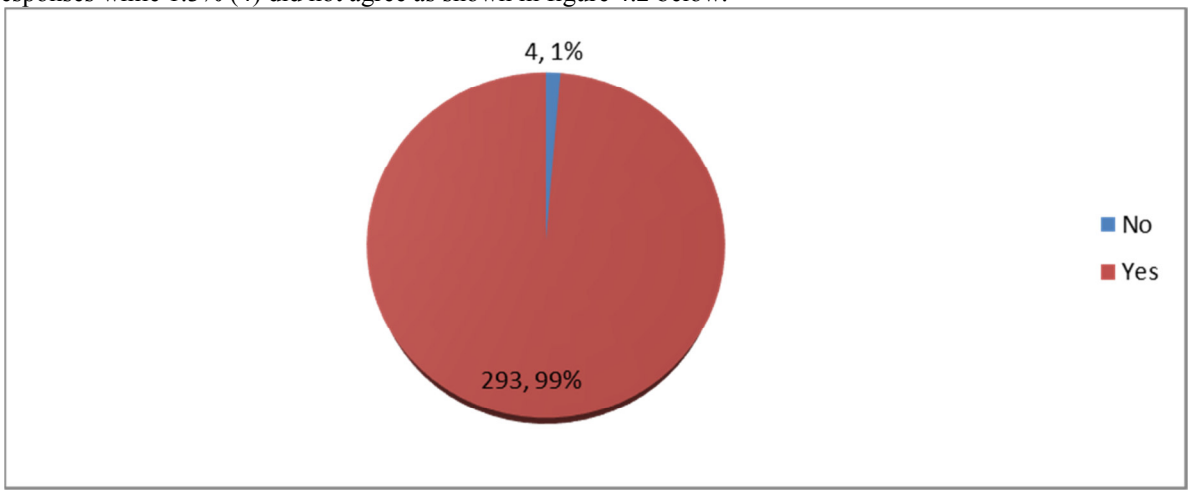


Figure 4. 2 Compound interest is interest calculated on the initial principal

The respondents were asked to give their level of agreement on the given statements on financial

literacy. The results shown in table 1.8 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. 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 and 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,1983; Fatoki,2014) and a basis for setting performance targets(Siekei et al.,2012) which ultimately results to increased sales ,business profitability and growth. 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. 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. 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 1.8 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 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. 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 1.9 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, M. T. 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 1.9 Correlation Test Results

		Growth in wealth	Financial Literacy
Growth in wealth	Pearson's ρ	1	0.608**
	Sig		0.000
	N	308	308
Financial Literacy	Pearson's ρ	0.608**	1
	Sig	0.000	
	N	308	308

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

4.6 Influence of Financial Literacy on Growth in wealth

Table 1.10, presents a summary of regression model results. The value of r and r2 are .608 and .37 respectively. This shows that there is a positive linear relationship between financial literacy and growth in wealth. The r2 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 $y = \beta 0 + \beta 1x1$. 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.

Table 1.10 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 1.11 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.

Table1.11 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 1.12 shows the results of coefficient of financial literacy as 0.604 which helps to generate the model y=0.000+0.604x1 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**.**

Table 1.12 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

4.7 Test for Normality

The regression model is fit based on the assumptions that the residuals follow a normal distribution. The figure 4.5 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.

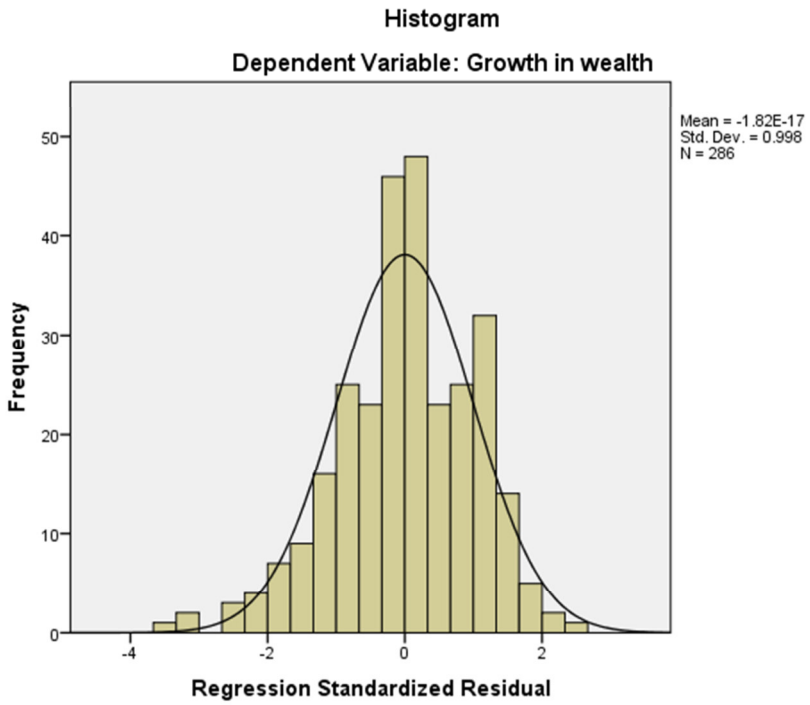


Figure 4. 5: Normality Histogram

For further normality histogram, table 1.13 represents key statistics for this test. The Kolmogorov-Smirnov normality test for the standardized residuals is significant with a significance of 0.126 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 1.13 Normality Test

	Kolmogorov-Smirnov	Df	Sig.
Standardized Residual	0.045	308	.126*

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

4.8 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 1.847, the upper limit for 2 including excluding the intercept and 310 sample size at 0.05 level of significance is 1.82019and the lower limit is 1.80725. 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 I). The calculated Durbin Watson value 1.847 is higher than the upper limit so we conclude that the residuals are not auto correlated. The Darbin Watson results are shown in table 1.14 below.

Table 1.14 Autocorrelation

Durbin-Watson statistic	Tabulated lower limit	Tabulated Upper limit
1.847	1.80725	1.82019

4.9 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 ad 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.

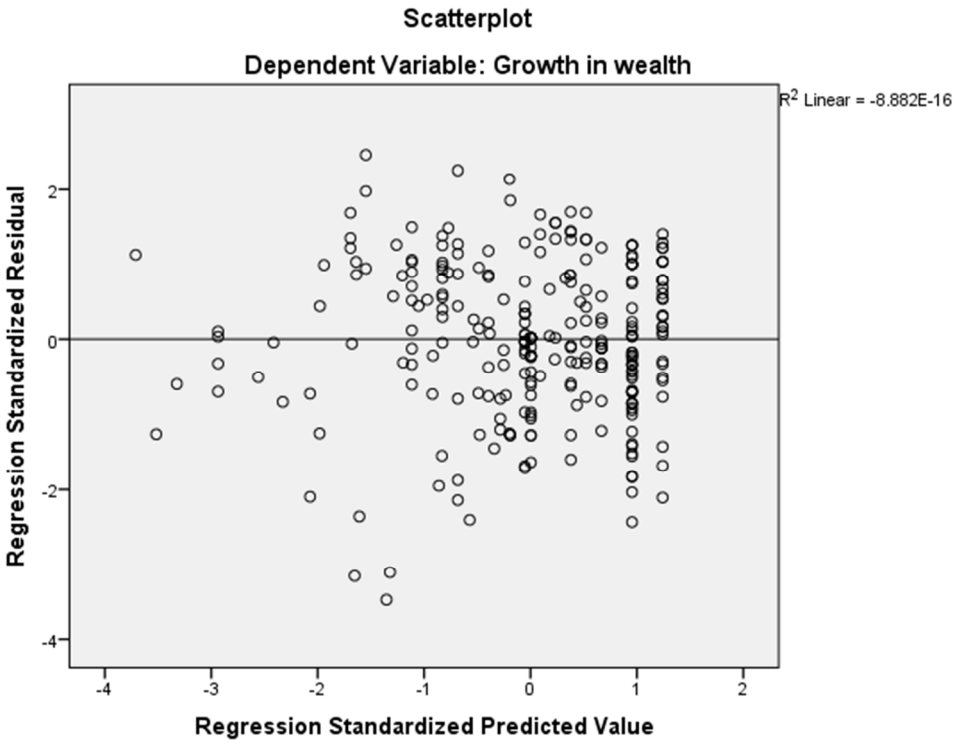


Figure 4. 6: Standardized residual scatter plot

4.10 Hypothesis Testing

The results from the regression analysis were used to test the null hypothesis of the study and conclusions drawn for the objective. 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.

H01: Financial literacy has no significant influence on growth in wealth of investment groups in Kenya.

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.

Table 1.16 Hypothesis test summary table

Hypothesis	Estimate	P-value	Conclusion
H_{01}: Financial literacy has no significant influence on growth in wealth of investment groups in Kenya.	$\beta_1 = 0.604$	0.000	Reject H_{01}

Considering the moderation effect of groups size on the relationship between Financial Literacy and performance

The study also analyzed the moderating influence of group size on the relationship between performance and portfolio diversification. This model involved generating a transformation variable as an interaction variable between group size and Financial Literacy and performing a 3 stage stepwise regression analysis.

Table 4.7 shows the summary of the Moderated multiple regressions to not the moderating effect group size on the relationship between Financial Literacy and performance. Model 1 results produced an R-square of 0.311 implying that the variation in the independent variable in the model explains 31.1% of the variation in wealth growth in investment firms. The second model was found to have an R-square of 0.317. This shows that the variance of growth explained in the 2nd model is 31.7%, 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 0.138 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 variable of the moderator and other portfolio diversification. The third step of the MMR modeling had an R-square of 0.375 implying that the variation in wealth growth explained in the 3rd model is 37.5%. 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.

Table 4.7 The summary of the Moderated multiple regressions

Model	R	R Square	Adjusted R Square	Std. Error	R Square Change	F Change	df1	df2	Sig. F Change
1	.614a	.378	.375	.784	.378	154.052	1	254	.000
2	.634b	.402	.398	.770	.025	10.568	1	253	.001
3	.649c	.421	.414	.759	.019	8.201	1	252	.005

Table 4.8 shows the coefficient estimates of the three step MMR regression. From the table, model two shows that group size has insignificant direct influence on performance with a p-value of 0.138 which is greater than 0.05. Model three however shows that there is a positive influence of group size on performance with a p-value of 0.03 which is less than 0.05. The coefficient estimate of the interaction variable in model three also has a p-value which is less than 0.05 that confirms the moderating effect of group size.

Table 4.8 The coefficient estimates of the three step MMR regression

Model	Variable	Unstandardized β	Std. Error	Standardized β	T	Sig.
1	(Constant)	-.033	.049		-.670	.504
	Financial Literacy	.595	.048	.614	12.412	.000
2	(Constant)	.009	.050		.187	.852
	Financial Literacy	.607	.047	.626	12.853	.000
	Size	.017	.005	.158	3.251	.001
3	(Constant)	-.021	.050		-.420	.675
	Financial Literacy	.541	.052	.559	10.445	.000
	Size	.017	.005	.154	3.262	.001
	Financial Literacy intersection Group size	-.015	.005	-.207	-2.864	.005

The conclusion from the fitted model also 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. A graphical presentation from the model is shown in figure 4.7. 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.

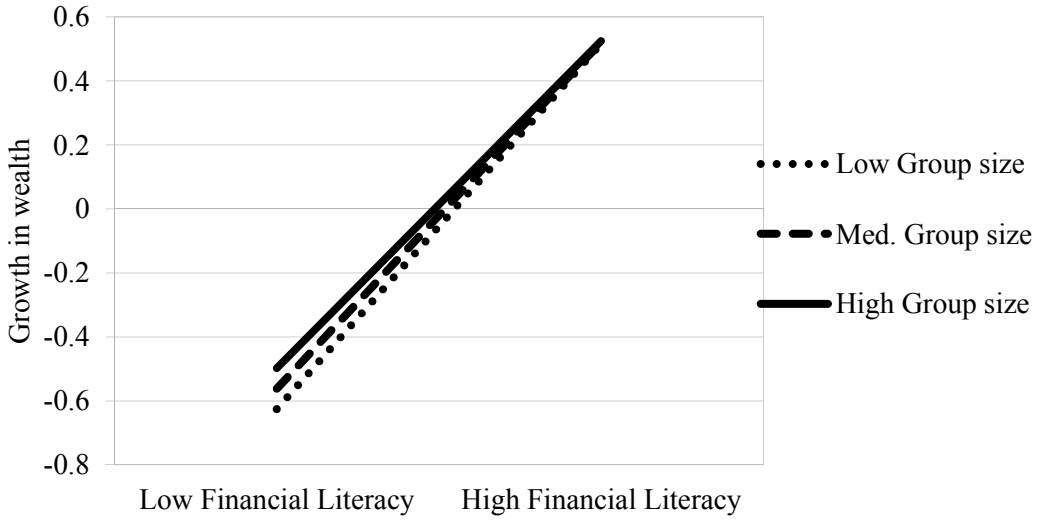


Figure 4. 7: Moderating influence of size on financial literacy and growth

5.1 Summary, Conclusions and Recommendations

5.1.1 Introduction

This is the final chapter for the research thesis. The researcher has already done data interpretation and established the findings as per the research objectives. This chapter contains the recommendations of the study and areas of further researcher. The researcher has arranged the findings as per research objectives and concluded as per research objectives. The study sought to establish the influence of financial literacy, portfolio

diversification, capital structure and group governance on growth in wealth of investment groups in Kenya and the moderating influence of group size on the relationship between financial practices and growth in wealth.

5.1.2 Influence of Financial Literacy on growth in wealth of investment groups

The first research objective was to find the influence of financial literacy on growth in wealth of investment groups in Kenya. 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. Findings indicated that financial literacy has high effect on growth in wealth of investment groups in Kenya. A high majority of the respondents confirmed that the growth in their groups was attributable to financial literacy. This observation was arrived since data showed that most of the groups members were literate. The correlation between financial literacy and growth in wealth is positive and significant. The correlation coefficient for financial literacy to growth in wealth is 0.608 with a p-value of 0.000 which is less than 0.05 implying significance at the 5% level of significance. The regression analysis results also affirm the results obtained in the correlation analysis. From the regression model results, financial literacy had a coefficient (B1 = 0.604, t = 12.915, p= 0.000) showing a significant influence on growth in wealth. The study had a hypothesis that financial literacy influences growth in wealth of investment groups in Kenya. The results revealed that financial literacy was statistically significant in explaining growth in wealth of investment groups in Kenya. This implied that the null hypothesis that financial literacy 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 Conclusion

The preceding empirical analysis shed light on the influence of financial literacy on growth in wealth of investment groups in Kenya. The study found that financial literacy influence growth in wealth of investment groups. If the investment groups are equipped with financial literacy they would grow their wealth and thrive. Groups that had members that were financially literate grew more wealth. If these investment groups are equipped to be able to understand and apply the concept of financial practices 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 Recommendations

The recommendations were made regarding the influence of financial literacy on growth in wealth of investment groups in Kenya. Based on the findings of the study, Conclusions were arrived at the influence financial literacy. With respect to the study findings presented in the above section, the study recommends as follows; 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. 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. According to a report by FSD Kenya in 2012, it was indicated that Investment groups make up a significant portion of the backbone of the economy and play a vital role in the development of the capital markets and property development amongst other things (FSD Kenya, 2012). This study affirms these findings. As the government issues capital to investment groups through the Uwezo Fund, WEF, YEF and others, they should also ensure capacity building for the groups by building on their financial literacy so that they grow their wealth. Group governance and portfolio diversification are also crucial for growth in wealth of the investment groups. 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. The study recommends that the groups be given more training on bookkeeping and preparation of budgets. The training should also include educating members on the interpretation of the contents of the financial statements and books of accounts. Since the groups experienced irregular savings by some group members, there should be effective savings plans in the investment groups.

The study recommends that that the members of the group to be made aware on how to share all the profits made every year. Since the groups relied mainly on the members' savings to invest, they could be given more light on the importance of borrowing and how to translate it into success. 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.

5.4 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. In addition, the moderating effect of other variables such as size and group structure could be considered. Lastly, to measure the influence of determinants of growth and growth in wealth, times series data could be considered and utilized in a future study. A research can also be carried out using panel data to determine changes in asset value over time across the investment groups.

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Appendix 1 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