

# FINANCIAL FACTORS THAT INFLUENCE THE PERFORMANCE OF COOPERATIVE SOCIETIES IN JUJA SUB COUNTY IN KIAMBU, KENYA

<sup>1\*</sup> **Joyce Wacheke Gacheru** gacherujoyce2014@gmail.com <sup>2\*\*</sup> **Prof. Willy Muturi** *wmuturi@jkuat.ac.ke* 

<sup>1, 2</sup> Jomo Kenyatta University Of Agriculture And Technology, P.O Box 62000-00200 Nairobi, Kenya

# ABSTRACT

Cooperative societies have been present in Kenya for decades but this sector has not been able to impact positively on the lives of people. Access to finance has been cited as one of the factors hampering economic growth and poverty alleviations. Cooperative societies have lagged behind other financial institutions by performing below the members' expectations therefore causing dissatisfaction among the members. The study sought to find out the effect of financial factors on performance of cooperative societies. The objectives that guided the study were credit policy, investment policy and dividend policy. The population of interest was drawn from the cooperative societies registered with the ministry of cooperatives in Juja Sub -county, Kiambu. They were all thirty by number where a sample size of 14 cooperatives was selected. The study employed the descriptive research design. Secondary data was obtained from the ministry of cooperatives Juja sub-county. Data was analyzed using a regression model with the aid of SPSS and presented on tables and figures .The dividend policy was found to have a positive influence on Return on Asset and Return On Equity. Investment decision also had a positive influence on ROA and ROE. Loan policy measured by the non-performing loans had a negative influence on both Return on Asset and Return On Equity. The study concludes that since all the variables were loaded into one factor for each of the variables, this was a good indication that the constructs used in the measurement of all the variables were adequate and they measured the financial performance . The study recommends that managers should be keen on their dividend policy in their firms. The management should also consider diversifying their investment portifolios so as to earn more income. Managers to strictly follow loan policy to make follow up on defaulted loans so as to improve on performance. The study suggests further studies on effect of internal political influence on performance of cooperatives societies and the effect of non financial factor on performance of cooperatives societies.

Keywords: Credit policy, Investment policy, Dividend policy and Performance

# **1.1 Introduction**

Cooperative sector has been recognized worldwide as important avenues of economic growth. Close to a billion people are associated with Cooperatives. Many countries that have achieved economic development have a vibrant and dynamic cooperative sector. Kenya has the most vibrant and dynamic cooperative sector in Africa. They range from agriculture, livestock to SACCOS in urban areas (International Cooperative Alliance (ICA), 2006).

Cooperatives perform active financial intermediation function mediating from urban to semi urban to rural areas. They play the same role as commercial banks. Commercial banks have continued to grow day by day for example Equity bank was formed in 1984 as a simple Building society. It later transformed into a powerful micro finance and now a commercial bank that have even crossed border to offer services to neighboring countries,(Equity ,2016).On the other hand the cooperative sector despite being there for long their performance cannot be compared with that of commercial banks (Miriti, 2014).

The impact of cooperative in the world economy is both extensive and impressive. It is estimated that there are over 800 million people globally who are members of cooperatives and 100 million people are employed by cooperatives. In nearly all developing countries they are the main contributors of economic growth. Europe has 58000 cooperatives with membership of 13.8 million. In the US there are 72,000 cooperative societies with over 140 million members. Mwangi & Wambua (2016). In Brazil there are more than 6,800 cooperatives distributed over13 business segments. The cooperatives are faced with competition from other sectors. However they seek to exercise their role of development and still offer their members condition to grow, International Summit of Cooperatives report (2016). In Nigeria the number of registered cooperative societies has grown from 108 from 1967 to 15000 in 2016. This is according to midyear report of the Cooperative Department for year 2016. However though a lot of people have heard about the Cooperatives it is just a few that are exploring the enormous opportunities they present. When wholly utilized cooperatives can boost job creation as well as national productivity, (A.Lolande, 2016).

There are over 9000 cooperative societies in Canada which are widely supported by 83% of Canadians. They have 18 million members and they employ more than 150,000 people and are the major players in many sectors, Ministry of Cooperatives report (2016).

In Tanzania, Cooperatives draw membership from the local community or a similar employer (Klinkhamer 2009). Their members share a geographical area, a community, an employer or other affiliations (CGAP, 2005). The members are the sole beneficiaries, sole savers and sole decision-makers (Mwakajumilo 2011). The Cooperatives funds emanate from members` saving deposits (Shrestha 2009). Cooperatives members registered high increases of incomes, assets, food consumption, education expenditure, improved housing and decline of health expenditures compared to non-members (Sharma et al 2005). However, many co-operatives and SACCOs in Tanzania face problems of poor management, embezzlement, lack of working capital, poor business practice and high loan delinquency rates (Maghimbi 2010; Mwakajumulo 2011).

In Kenya the first cooperative society was Lumbwa Cooperative Society formed in 1908 by European farmers with the main objective of supporting agricultural activities and products to take advantage of economies of scale (KUSCCO, 2006).

The Co-operative movement in Kenya is an important player in the social economic development of this country. Cooperatives cut across all sectors of the economy and provide an important framework for mobilization of both human and capital resources (Ministry of Co-operative Development and Marketing, 2008). Cooperative societies in Kenya are divided into two. Saving and credit cooperatives (SACCOs) and several types based on objective and purpose eg. transport, investment, Housing, etc. Presently the cooperative sector in Kenya boasts of over 20,000 registered cooperatives with membership of over 12 million people (Ernst and Young Global Company limited report, 2017).

The cooperatives have employed over 300,000 people besides providing opportunities for self-employment. Indeed, a significant number of Kenyans, approximately 63% draw their livelihood either directly or indirectly

from cooperative-based enterprises (Republic of Kenya 2007; International Monetary Fund 2007; The Kenya High Commission in the United Kingdom 2007). There are 256 Cooperative Societies that are registered with Ministry of Cooperative in Kiambu County. Out of this 30 Cooperatives are registered under Juja Sub County. (Ministry of Cooperatives Kiambu County, 2015).

# 1.2 Statement of the problem.

Although Cooperatives Societies have been present in Kenya for the last 109 years they have not been able to perform well as compared to the other mainstream financial institutions like commercial banks (Miriti ,2014). In order to make them perform well it is crucial to understand the determinants of the financial performance thus ensure sustainability of the Co-operative movement in Kenya (Mundia,2016). Mwangi and Wambua, (2016), established the following factors that influence the performance of Saccos:- poor governance, delayed loan processing, Some pay little or no dividends on shares and as compared to other financial institutions members queue for long to receive FOSA services. Their study concluded that organization subculture and the organization structure has a significant effect on financial performance of saccos. Mvula (2013) presented a report on common issues affecting performance of SACCOs in Malawi concluded that the issues affecting performance of SACCOs are inadequate capital, poor asset quality, poor governance, poor profitability, poor liquidity and noncompliance.

On the other hand Mudibo, (2005) identified some of the factors affecting performance of SACCOs as weak regulation, limited product and services, low marketing and poor image.

Makori,J., Munene,C. and Muturi W. 2013,did a study on challenges facing deposit taking saccos in Kenya and concluded that many SACCOSs has challenges in regulatory compliance, credit management, liquidity, ICT, Governance and investment policy.

Miriti (2014), identified only credit policy as the main factor that influence financial performance of cooperatives. Black and Schore, 2000 on their study on effect of dividend policy on stock prices concluded that we cannot tell the effect a change in dividend policy will have on stock prices.

Few studies exist on financial factors that affect performance of cooperatives hence this study seek to establish financial factors that affect performance of cooperative Societies.

# 1.3 Research objective.

The general objective of the study will be to establish the financial factors that influence the performance of cooperative Societies in Juja Sub County in Kiambu Kenya.

# 1.3.1 Specific objective.

- 1. To determine whether credit policy has an effect on financial performance of the cooperative societies in Juja Sub county Kiambu.
- 2. To determine whether Dividend policy affect financial performance of the cooperative societies in Juja Sub county Kiambu.
- 3. To assess the influence of investment policy on financial performance of the cooperative societies in Juja Sub county Kiambu.

# **1.4 Research questions.**

- 1. What is the influence of credit policy on financial performance of cooperative societies in Juja Sub county Kiambu?
- 2. What is the influence of dividend policy on financial performance of cooperative societies in Juja Sub county Kiambu?
- 3. What is the influence of investment policy adopted by various Cooperative Societies Juja Sub County in Kiambu on their financial performance?.

# 2.0 LITERATURE REVIEW

# 2.1 Theoretical framework

# 2.1.1 Dividend Irrelevance Theory

Much like their work on the capital-structure irrelevance proposition, Modigliani and Miller also theorized that, with no taxes or bankruptcy costs, dividend policy is also irrelevant. This is known as the "dividend-irrelevance theory", indicating that there is no effect from dividends on a company's capital structure or stock price. MM's dividend-irrelevance theory says that investors can affect their return on a stock regardless of the stock's dividend. For example, suppose, from an investor's perspective, that a company's dividend is too big. That investor could then buy more stock with the dividend that is over the investor's expectations. Likewise, if, from an investor's perspective, a company's dividend is too small, an investor could sell some of the company's stock to replicate the cash flow he or she expected. As such, the dividend is irrelevant to investors, meaning investors care little about a company's dividend policy.

# 2.1. 2 The bird-in-the-hand theory

The bird-in-the-hand theory, however, states that dividends are relevant and that total return (k) is equal to dividend yield plus capital gains. Myron Gordon and John Lintner (Gordon/Litner) took this equation and assumed that k would decrease as a company's payout increased. As such, as a company increases its payout ratio, investors become concerned that the company's future capital gains will dissipate since the retained earnings that the company reinvests into the business will be less. M.Gordon and J. Lintner argued that investors value dividends more than capital gains when making decisions related to stocks. The bird-in-the-hand may sound familiar as it is taken from an old saying: "a bird in the hand is worth two in the bush." In this theory "the bird in the hand' is referring to dividends and "the bush" is referring to capital gains.

# 2.1.3 Modern Portfolio Theory

This theory was developed by Markowitz (1952). In investment; modern portfolio theory management is a critical theory. It tries to look for the most efficient combinations of assets to maximize portfolio expected returns for given level of risk. Alternatively, minimize risk for a given level of expected return. Portfolio theory is presented in a mathematical formulation and clearly gives the idea of diversifying the assets investment combination with a purpose of selecting those assets that will collectively lower the risk than any single asset. In the theory, it clearly identifies this combination is made possible when the individual assets return and movement is opposite direction. An investor therefore needs to study the value movement of the intended asset investment and find out which assets have an opposite movement. However, risk diversification lowers the level of risk even if the assets' returns are not negatively or positively correlated (Omisore et al., 2012).

The major assumptions in portfolio theory in managing risk are that the investors are rational and the market is efficient and perfect (Chijoriga, 2007). This theory addresses the investments policies 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 SACCOs to deploy prudent financial management practices in order to instill control within the various portfolios with a target of maximizing returns on each portfolio.

# 2.2 Conceptual framework



# Figure 2.1: Conceptual Framework

# 2.3 Empirical review

# 2.3.1 Performance of Cooperatives.

A quantitative measure of an entity's performance not expressed in monetary units is referred to as a nonfinancial performance. Some of these may include; number of new products, customer satisfaction, and quality in service, loan disbursements, growth, continuity, stability of the firm among many others. Financial measures show the impact of the firm's policies and procedures on the firm's current financial position and its current return on shareholders' whereas non-financial factors show the firms current and potential competitive position. By supplementing accounting measures with non-financial data about strategic performance and implementation of strategic plans, companies can communicate objectives and provide incentives for managers to address long-term strategy. Non-financial performance has to be measured alongside other performance indicators and clearly stated in financial statements (Friends consult Ltd).

The payment of dividends by firms has different impact according to the various performance indicators. The use and usefulness of non-performance measures to determine the extent to which firms combine financial, nonfinancial and subjective performance measures and that every kind of measure affects a firms operations differently (Chow & Stede, 2006). Non-financial measures have the advantages over measurement systems based on financial data. It gives a link to long-term organizational strategies. Financial evaluation systems

generally focus on annual or short-term performance against accounting yardsticks. They do not deal with progress relative to customer requirements or competitors, or other non-financial objectives that may be important in achieving profitability, competitive strength and longer-term strategic goals. Also, non-financial data can provide indirect, quantitative indicators of a firm's intangible asset. Some of the performance determinants are, Asset growth rates ratio, Liquidity ratio, Return on assets, Return on equity (Molla 2015).

# 2.3.3 Dividend policy

Uwuigbe and Ajayi (2012) conducted a study on dividend policy and firms performance a study of listed firms in Nigeria .They used regression analysis method for analyzing data and which was from the annual report of the companies they found out that there is a significant positive association between the performance of the firms and dividend payout.

Priya and Mohnasundari (2016), on their study on dividends policy and its impact on firms value found out that the research can be categorized into two different schools of thought. The first is that dividend policy of a firm has an impact on the firm's value and the other one is that dividend policy has no impact on the value of the firm.

Miller & Modigliani (1961) argued that under certain simplifying assumptions, the dividend decision does not affect the value of a firm and is, hence, unimportant. Yet, traditional wisdom with changed postulations advocates that a properly managed dividend policy is vital to shareholders because it can affect share prices and shareholder's wealth.

According to Kapoor (2009), Stakeholders know with certainty that firms which pay dividends have a higher firm value as opposed to the ones that do not pay dividends. Dividend payout depends on the dividend policies embraced by different firms.

Dividend policy is also likely to be influenced by the performance of Cooperatives. This is a very important factor in measuring the cooperatives performance. The behavior of dividend policy is one most debatable issue in the corporate finance literature and still keeps its prominent place both in developed and emerging markets (Hafeez & Attiya, 2009).

Dividend policy has been analyzed for many decades, but no universally accepted explanation for companies' observed dividend behavior has been established. It has long been a puzzle in corporate finance. (Samuel & Edward, 2011)

Dividend policy enables firms to know how much to be distributed to the stakeholders or retained by the firm for other investment purposes of the firm (Mundia,2016).

# 2.3.3 Credit policy

Miriti ,2014 on his study on factors influencing financial performance of cooperative societies revealed that defaulting on loan payment is a serious offence and should be avoided at all cost. Most of the time defaulting on payments is temporary in nature caused by clients loss of jobs, a temporary extra expenditure that left no money to make the pay or prolonged illness which may cause the client financial distress or keep him in hospital for few months.

Yashwant (2014) was particularly concerned about the mounting non-performing assets in the corporate lending segment as compared to other sectors. He noted that a number of finance institutions have been

attributed to have managerial failures because of their inability to arrest the rising non-performing assets. The study concluded that solution to this can be restructuring, where the terms of the loan are eased up and borrowers get more time to get his house in order.

A research by Linda Gatakaa (2014) on relationship between loan policy and financial performance of commercial banks in Kenya found out that the provision for bad and doubtful debts was positively related to the financial performance of the Kenyan commercial banks. Declining loan default rate significantly enhanced the financial performance of the Kenyan commercial banks. Collateral significantly enhanced the financial performance of the Kenyan commercial banks. There is a positive relationship between loan policy and financial performance of the Kenyan commercial banks.

Another related study was done by Otieno M. (2012), on effect of lending policies on levels of non performing loans of commercial banks in Kenya. He gathered only primary data using questionnaires. The study found that lending policies and non-performing loans are indeed related. Lending policies helps the banks lend prudently and lowers the risk level to the banks, and strict adherence to lending policies therefore has led to reduced non-performing loans.

# 2.3.4 Investment policy

A study by Makori, Munene and Muturi (2013), on the challenges facing SACCOs in Gusii region in Kenya revealed that the high investment in none, earning investments and inadequate managerial competence contributed to the failure of SACCOs in Kenya. The study had used structured questionnaires, interview and focused discussion with selected persons to collect data. In another study by Olando, Jagongo and Mbewa (2013) on the contribution of financial stewardship to the growth of SACCOs in Kenya indicated that SACCOs did not adequately cover their costs on investments undertaken.

Muchemi (2005), noted that non profitable investments should be discouraged because, despite the enormous amount of resources input in such projects, returns are almost nil, hence reducing the capital base where interest is drawn from.

Hesse & Cihak (2007), found that co-operative financial institutions tend to be more stable in times of crisis, as their investment patterns use the capital of members in ways that best serve their long term needs and interests. They have a lesser tendency to invest in high risk financial markets when compared to other forms of commercial banks. It is therefore thought that their comparative stability, under both average and extraordinary conditions, can help to mitigate crisis impact for members and clientele, especially in the short-term.

Machuki (2011) did a study on the Effect of Investment Decision on the performance of firms listed in the Nairobi Securities Exchange. The target population of the study as at 31st December 2013 was all the 61companies listed at the Nairobi Securities Exchange, under the main segment. The study adopted a census approach because of the small number of non-financial companies in the NSE. Both descriptive and inferential statistics were used in data analysis. The study utilized panel data which consisted of time series and cross-sections. Results revealed good, significant and positive correlations between ROA and all the predictor variables, that is., Investment Decision, Financial Leverage and Liquidity.

# 3.0 RESEARCH METHODOLOGY

Descriptive research design was used in this study this is because according to Mugenda and Mugenda,2003, it gives information as it is in the field. It tries to answer the questions like why, when, who and where. Another reason why the design was used is that the researcher is able to acquire factual, accurate and systematic data that can be used in averages, frequencies and similar statistical calculations. The target population was drawn from the Cooperative societies that are registered with the ministry of cooperatives Juja Sub County. There are 30 cooperative societies which are registered with the Ministry of Cooperative Juja Sub County. Simple random sampling was used where a sample size of 14 cooperatives within Juja Sub County was selected. A list of all cooperatives within Juja Sub County is attached.

The secondary data collected involved the previous works from related articles including published Financial Reports from the Cooperatives and data related to those Cooperatives available with the Ministry of Cooperatives Juja Sub County annual reports on their performance. This was the most viable sources available and only secondary sources such as those mentioned above could suffice for the analysis by virtue of the nature of the variables. The data was further collected and organized using a data collection schedule.

This research applied the content validity test method. Cooper and Schindler (2008), noted that content validity of a measuring instrument is the extent to which it provides adequate coverage of the investigative questions guiding the study. They asserted further that if the instrument contains a representative sample of the universe of subject matter, the content validity is good. They concluded that determination of content validity involves judgment which may involve a panel of persons who then judge how well the instrument meets the standards.

Data collected was analyzed and presented by use of tables and the use of summarized percentages and proportions. Data was first subjected to a sequence of operations which includes editing, coding, classification and analysis using statistical package for social science(SPSS). Analysis was done through descriptive statistics such as percentages, averages and inferential statistics.

Other inferential statistics such as, Analysis of Variance, correlation analysis and multiple regression were used to elaborate the study further. The following regression model was estimated.

The Multiple Regression Model below was used to analyze the data

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

Where:

Y = SACCOs performance

 $\beta_0$  = Intercept term,  $\beta_i$  = Are the various coefficients of the Independent Variables

 $X_1$  = Divided policy

 $X_2$  = Credit policy

 $X_3$  = Investment policy;  $\varepsilon$  = error term

#### 4.0 RESULTS AND DISCUSSION

#### 4.1 Descriptive statistics

Data used for this study was secondary data derived from Ministry of cooperatives offices the data provided 100%

#### 4.1.1 Investment policy

The study sought to establish the distribution of funds invested in securities. The variable was measured by amount invested in securities.

year	Mean(millions Ksh)	Std.deviation	Skewness
2015	15.357	0.250	0.1478
2014	11.317	0.280	0.1946
2013	13.152	0.136	0.1695
2012	15.145	0.217	0.1367
2011	15.164	0.167	0.2354

#### Table 4.1 Investment in securities.

Investment in securities was highest in 2015 with a mean of 15.357 and declined in 2014 where the mean was 11.317. Table 4.1 indicates that there has been an upward trend in investment in securities from 2014 with a mean of 11.317 to 2015 with a mean of 15.357.

# 4.1.2 Credit policy

The study sought to establish the distribution loan policy. The variable was measured by non-performing loans against the loans advanced.

year	Mean	Std.deviation	Skewness
2015	0.534	0.0452	0.0349
2014	0.476	0.0357	0.0391
2013	0.546	0.0246	0.0452
2012	0.456	0.05345	0.0673
2011	0.435	0.03245	0.0454

# Table 4.2 Credit policy (non-performing loans)

The level of non-performing loans was highest in 2013 with a mean of 0.546. And lowest in 2011 with a mean of 0.435. There is an indication from the analysis that non-performing loans have been rising from 2013 to 2015 with a mean of 0.534.

# 4.1.3 Dividend Policy

The study sought to establish the distribution of dividend policy. The variable was measured by amount in Kenya shillings paid out per every share held by the members from 2011-2015.

year	Mean	Std.deviation	Skewness
2015	0.2800	0.3324	0.02
2014	0.2534	0.3894	0.04
2013	0.2345	0.2856	0.05
2012	0.1712	0.3067	0.05
2011	0.2814	0.2487	0.05

# Table 4.3 Dividend policy (dividends paid out)

The amount paid out per share on average was highest in 2011 with a mean of 0.2814and the lowest was in 2012 where the mean was 0.1712.

# 4.1.4 Return on Assets (ROA)

The study sought to establish the distribution of return on assets. The variable was measured by by the ratio of net income over total assets converted into percentage.

year	Mean(%)	Std.deviation	Skewness
2015	2.7	0.0234	0.123
2014	2.4	0.0214	0.169
2013	2.5	0.0123	0.115
2012	2.6	0.0342	0.141
2011	2.1	0.0123	0.172

#### **Table 4.4 Return on Assets**

The mean value of return on assets was highest in 2015 with a mean of 2.7%. and lowest in 2011 with a mean value of 2.1%.

# 4.1.5 Return on Equity (ROE)

The study sought to establish the distribution of return on equity. The variable was measured by net income per shareholder's fund.

# Table 4.5 Return on Equity

Year	Mean (%)	Std.deviation	Skewness
2015	11.12	0.0451	0.054
2014	12.14	0.0436	0.045
2013	13.51	0.0546	0.012
2012	12.23	0.0234	0.035
2011	13.72	0.0342	0.023

The amount of return on equity was highest in 2011 with a mean of 13.72 and lowest amount was in 2015 where the mean was 11.12. ROE had higher percentage values than ROA on all the years under study.

#### 4.2 Correlation Matrix

#### **Table 4.6 Correlation matrix**

		Performance	Divided	Credit policy	Investment
			policy		policy
Performance	Pearson	1	0.707**	$0.774^{**}$	$0.745^{**}$
	Correlation				
	Sig. (2-tailed)		0.000	0.000	0.000
	Ν	74	74	74	74
Divided policy	Pearson	$0.707^{**}$	1	$0.569^{**}$	$0.539^{**}$
	Correlation				
	Sig. (2-tailed)	0.000		0.000	0.000
	N	74	74	74	74
Credit policy	Pearson	$0.774^{**}$	$0.569^{**}$	1	$0.504^{**}$
	Correlation				
	Sig. (2-tailed)	0.000	0.000		0.000
	N	74	74	74	74
Investment	Pearson	$0.745^{**}$	$0.539^{**}$	0	1
policy	Correlation			$.504^{**}$	
-	Sig. (2-tailed)	0.000	0.000	0.000	
	N	74	74	74	74
**. Correlation	is significant at th	ne 0.01 level (2-	-tailed).		

From table 4.6 it can be observed that the correlation between the independent variables and the dependent variable was high and positive at 0.707, 0.774 and 0.745 for divided policy, credit policy and investment policy respectively. The interpretation was that the level of multicollinearity between the independent variable was not very high which meant that the influence of each variable in the regression model could be isolated individually. Burns and Burns (2008), assert that muticollinearity is the presence of very high correlations between the independent variables and should be avoided.

#### 4.3 Regression Model 1 fit

Table 4.7 Regression Result with ROA as dependent variable

variable	coefficient	std. error	t-statistic	prob.
Dividend policy	0.4728	0.0811	5.9100	0.0020
Dividend policy Loans policy	-0.1612	0.0811	-4.0322	0.0020
Investment decision	0.1745	0.0535	3.2617	0.0001
constant	3.4679	0.5957	5.8216	0.0000
F-statistic	120.57	Adjusted I	R-squared	0.083
prob(f-statistic)	0.000			

The regression model is as follows:

$ROA = 3.479 + 0.4728_{dividend} - 0.1612_{loan policy} + 0.1745_{investment} + \epsilon$						
Standard Erro	or 0.5957	0.0811	0.0400	0.0535		
t-Statistics	5.816	5.9100	-4.0322	3.2617		
p-value	0.000	0.0020	0.0001	0.0041		
F-statistic = 120.57						
Prob>F = 0.0000 Adjusted R-squared=0.8						

The coefficient of determination (R square) of 0.083 indicates that 83% of the corresponding change ROA can be explained by dividend policy loan policy and investment decision. The remainder of 17% is explained by other factors and variables.

# 4.3.1 Dividend policy

From the regression model above the coefficient of dividend policy was found to be 0.728, p=0.002 which is less than 0.05. This value shows that holding other variables in the model constant, an increase in dividend policy by one unit causes the financial performance to increase by 0.4728 units. i. e. 1% increase in dividend policy results to an increase in ROA by 47.28%. The value of the coefficient is also positive. The positive effect shows that there is a positive relationship between the dividend policy in the Cooperatives and their performance.

The coefficient is not just positive but also statistically significant with a t-statistic value of 5.9100. In statistics, a t-statistic of 2 and above is normally accepted to be significant in statistical inference. The standard error was found 0.0811 and the p-value was found to be 0.0020. The variable was also found to be the most influential variable on ROA.

# 4.3.2 Investment decision

The coefficient of investment policy was found to be 0.1745 with a p=0.0041 which is less than 0.05. This value shows that holding other variables in the model constant, an increase in investment decision by one unit causes the financial performance to increase by 0.1745 units.i.e. 1% increase in investment decision results in 17.45% in ROA. The value of the coefficient is also positive. The positive effect shows that there is a positive relationship between the investment policy in the SACCOs and their performance.

The coefficient is not just positive but also statistically significant with a t-statistic value of 3.2617 and a standard error of 0.0535. The variable was also found to be the second most influential variable on ROA.

# 4.3.3 Loan Policy (Non-performing loans)

The coefficient of loan policy was found to be -0.1612, p=0.001 which is less than 0.05. This means an increase in Non-performing loans by one unit causes the ROA to decrease by -0.1612 units.i.e. 1% increase in loan policy results in a 16.12% decrease in ROA. The value of the coefficient is negative. The negative effect shows that there is a negative relationship between the loan policy (non-performing loans) and ROA. The variable was also found to be the least influential variable on the performance of SACCOs in Juja Sub-County.

#### 4.4 Regression Model 2 fit

Variable	Coefficient	Std. Error	t-Statistic	Prob.
<b>Dividend Policy</b>	0.4072	0.1242	3.2786	0.0006
Loans policy	-0.1467	0.0314	-4.6720	0.0003
<b>Investment decision</b>	0.2122	0.0761	2.7884	0.0298
Constant	1.0856	0.7654	6.9367	0.0000
F-statistic	134.333			
<b>Prob(F-statistic)</b>	0.0000			
Adjusted R-squared	0.075			
The regression model is as	s follows:			
$ROE = 1.0856 + 0.4072_{divi}$	dend - 0.1467 <sub>loan po</sub>	$licy + 0.2122_{investm}$	$ent + \varepsilon$	
Standard Error 0.7654	0.1242 0.03	0.0761		
t-Statistics 6.9367	3.2786 -4.6	2.7884		
	0.0007 0.0	0.02 0.0200		

#### Table 4.8 Regression Result table ROE as dependent variable

Standard Err	or 0.7654	0.1242	0.0314	0.0761
t-Statistics	6.9367	3.2786	-4.6720	2.7884
p-value	0.0000	0.0006	0.0003	0.0298
F-statistic = 134	4.333			
Prob>F = 0.0	0000			Adjusted R-squared=0.75

Where: Y = Financial performance,  $\beta_0$  = Constant Term,  $\beta_1$  = Beta coefficients, X1 = dividend policy, X2 = loan policy, X3 = investment decision

 $\epsilon = Error Term$ 

The coefficient of determination (R square) of 0. 75 indicates that ROE on its own in the model explains 75% of the variation or change in the dependent variable (ROE) which can be explained by dividend policy, loan policy (non performing loans) and investment decision.

# 4.4.1 Dividend policy

The regression model result represented above for the financial factors with ROE as a measure of performance. From the regression model, the coefficient of dividend policy was found to be 0.4072, p=0.0006 which is less than 0.05. This value shows an increase in dividend policy by one unit causes ROE to increase by 0.4072 units.i.e. 1% increase in dividend policy results in an increase if 40.72% in ROE. The value of the coefficient is also positive. The positive effect shows that there is a positive and significant relationship between the dividend policy and ROE

The standard error was found 0.1242 and the p-value was found to be 0.0006. The variable was also found to be the most influential variable on ROE.

#### 4.4.2 Investment decision

From the regression model and results, the coefficient of investment decision was found to be 0.2122, p=0.2122 which is less than 0.05. This value shows that an increase in investment policy by one unit causes the financial performance (ROE) to increase by 0.2122 units.i.e. 1% increase in investment decision results in 21.22% increament in ROE. The value of the coefficient is also positive. The positive effect shows that there is a positive and significant relationship between the investment policy in the SACCOs and performance.(ROE). The variable was found to be the second most influential variable on the performance of SACCOs in Kiambu County.

# 4.4.3 Loan policy

The coefficient of loan policy measured by the non-performing loans was found to be -0.146, p = 0.003 which is less than 0.05 This means that an increase in non-performing loans by one unit causes the ROE to decrease by -0.146 units.i.e 1% increase in non-performing loans results in a decrease in ROE. The value of the coefficient is negative meaning there is a negative relationship between the non-performing loans and ROE.

# 4.4.4 Good-of- fit Statistics

From the analysis above the value of F-statistic is 134.33 with a p value = 0.000 which is less than 0.05 means that the model was a good fit and it is also statistically significant. The value of adjusted R-squared was found to be 0.75. This implied that the estimated model explains approximately 75 % of the variation in Cooperatives performance and that the remaining 25% is accounted for by other factors that were not included in the model. The future researchers are therefore urged to try and improve the model by including other variables in the model.

# 5.0 SUMMARY, CONCLUSION AND RECOMMENDATION

# **5.1 Summary of findings**

The purpose of this study was to assess the financial factors influencing performance of co-operative societies in Juja sub-county in Kiambu Kenya. The study was guided by four research objectives. The first research objective was to determine whether loan policy has an effect on financial performance of cooperative societies in Juja Sub county Kiambu. The second objective sought to determine whether Dividend policy affect financial performance of cooperative societies in Juja Sub county Kiambu. The last objective was to assess the influence of investment policy on financial performance of cooperative societies in Juja Sub county Kiambu.

The regression result found out that when ROA is the depedent variable, the coefficient of determination (R square) is 0.83 which means that the variables, 83% of the corresponding change ROA can be explained by dividend policy, loan policy and investment decision. The remainder of 17% is explained by other factors and variables. Also when ROE is the depedent variable, the coefficient of determination (R square) is 0.75 indicates that ROE on its own in the model explains 75% of the variation or change in the dependent variable (ROE) which can be explained by dividend policy, loan policy (non performing loans) and investment decision and the remaining 25% can be explained by other factors.

From the data, test for multicollinearity there exist a positive correlation between dividend policy, investment policy and return on Equity and Return on Assets.

The dividend policy was found to have a positive influence on Return on Asset and Retrun On Equity whereby 1% increament in dividend policy resulted in an increament of 40.72% in ROA and an increase in 47.28% in ROE. Investment decision also had a positive influence on ROA and ROE where 1% increase in investment decision resulted in 17.45% increase in Return on Assets and 21.22% increase in return on Equity. Loan policy measured by the non performing loans had a negative influence on both Return on Asset and Retrun On Equity with 1% increment resulting in a reduction of ROA by 16.12% and ROE by 14.6%.

# 5.2 Conclusion

The results from the regression model revealed that the factor's that influenced Cooperative Societies performance were statistically significant with the linear regression analysis showing there was a relationship between the independent and dependend variables with an adjusted R of 0.75 meaning that 75% of the changes in Return on Asset and Return on Equity can be explained by dividend policy, loan policy and investment decision. Dividend policy was found to be the most influential, investment decision was found to be the second most influential variable, and finally loan policy was the least influential variable on financial performance of Cooperative Societies in Juja Kiambu county.

The study concludes that since all the variables were loaded into one factor for each of the variables, this was a good indication that the constructs used in the measurement of all the variables were adequate and they measured the financial performance.

# 5.3 Recommendation

# 5.3.1 Dividend policy

This variable was found to be statistically significant and therefore it is recommended that managers should be keen on the dividend policy in their cooperative societies. The importance of Dividend policy in any firm cannot be underscored especially by the managers. The management has to decide whether to pay dividend or not depending on the performance of the sacco in a given year.

Saccos should consider all petinent issues before issuing dividends since members always expect return on investment of their deposits in form of dividend at the end of the financial year. Therefore there is need for saccos to open up more channels for funding its activities for example regular dividend policy can be maintained by saccos with long standing and stable earnings while a residual dividend policy can be used by saccos who finance upcoming projects using internally generated funds. However the payment of dividend should not undermine a firms investment policy

# 5.3.2 Investment decision

The investment decision was found to be statistically significant and therefore it is recommended that managers should be keen on the investment decision in their SACCOs. The management of these organizations should focus on diversifying their investment portifolios aimed at generating more income to the saccos. The dividend policy should not be the sole focus of the management and funds should be directed towards other income generating activities. Members should be involved during the AGMs so that they can also bring in new ideas on the investments portifolios with high returns in consultation with the experts in field.

# 5.3.3 Credit Policy

Loan policy focused on the non-performing loans. The management should take the initiative of educating their members on the prudent way of investing the loans advanced so that they can be able to repay the loans as scheduled. Though there were saccos that had partnered with Credit Reference Bureau(CRB) majority of them had not. The saccos are argued to join so that they can advance loans to those members who are creditworthy.

Saccos should also attach guarantors of members whose loans have fallen due after the first three months to avoid them being default loans and due diligence should be adhered to when evaluating members for eligibility of loans.

# 5.4 suggestions for further Research

This study focused on three financial variables. Further studies should be done on other variables such as the effect of competition from commercial banks, internal political influence, operations cost, inflation rates, exchange rates and saving culture. The effect of non-financial factor on performance should also be done to ascertain whether they affect performance of cooperative societies.

#### REFERENCES

- Almazari A. (2011). Financial Performance Evaluation of Jordanian Commercial Banks. International Research Journal of Finance and Economics(68)1450-288768 retrieved from:http://www.eurojournals.com/finance.htm
- Aura, D. and Mwangi J. (2013). Factors influencing SACCO members to seek services of other financial service providers in Kenya. Retrieved.
- Bagachwa, D. (1997). Financial integration and development in Sub-Saharan Africa. Study of informal finance in Tanzania 1st edition.
- Bhattacherjee, A. (2012). Social science research: principles, Methods, and practices. Textbooks collections. Books 3.
- Birchall, J. (2005). Co-operative principles ten years on. International Cooperative Alliance, Issue 2, 98(2):45-63. http://www.ica.coop/(accessed on 1July, 2012)
- Brooks, C. (2002). Introductory Econometrics for Finance: Cambridge University Press.

Bryman, A. and Cramer D. 2012). Quantitative Data Analysis with SPSS for Windows. Routledge, London.

- Black, F. and Scholes, M. The effect of dividend yield and dividend policy on common stock prices and return. Journal of financial economics vol 1, issue 1, May 2000, pages 1-22.
- Cooper, R. and Schindler, P. (2008). Business Research Methods 10<sup>th</sup> edition. McGraw-Hill Publications. New York, United States.
- Gatakaa l. (2014), Relationship between loan policy and performance of commercial banks in Kenya. A proceeding of University of Nairobi.
- Hansen, B. (2014). Econometrics. University of Wisconsin, Department of economics
- Kilonzo, J. (2010). Impact of SASRA regulation on the financial performance of SACCOs in Kenya.
- Gordon, M.J. 1963, "Optimal investment and financing policy", Journal of Finance, Vol. 18 No. 2, 264-72.
- Kenya National Federation of Cooperatives. Website, The National Apex of Cooperatives in Kenya.
- Kothari C. R. (2004), Research Methodology: Methods and Techniques, Second Revised Edition. New Age International (p) limited, Publishers. Mumbai, India.

- Machuki C.(2011) The effect of Investment Decision on the performance of firms listed in the Nairobi Securities Exchange.A proceeding of Nairobi University.
- Mudibo K. (2005). The savings mobilized by SACCOs in Kenya and the cases of fraud and corruption including Cooperative Societies –Governance issues 9th November, 2005.
- Mvula, R. (2013). Common issues affecting performance of SACCO in Malawi, 8thAugust, 2013.
- Mugenda and Mugenda (2003). Research methods. Laba Graphics services Nairobi

Musyoka C. (2015). The effect of dividend policy on the financial performance of firms listed at the NSE.

- Mundia, M. (2016). Financial factors that affect performance of saving and credit cooperative societies: A survey of deposit taking saccos in Kiambu County. Proceedings of Jomo Kenyatta University of Agriculture and Technology.
- Miriti, J. (2014). Factors influencing financial performance of savings and credit cooperative societies: A case of Capital SACCO, Meru County, Unpublished MSc Project, Nairobi: University of Nairobi.
- Makori, J., Munene, C. & Muturi, W. (2013). The challenges facing deposit taking Savings and
- Mukalo J.(2015).Influence of regulatory system on implementation of strategic plans of deposit taking Saving and credit Cooperatives in Nairobi County: A survey of Saccos in Nairobi County. Proceedings of Jommo Kenyatta University of Agriculture and Technology
- Otieno M.(2012). The effect of the lending policies on levels of nonperforming loans of Commercial Banks in Kenya. A proceeding of Nairobi University.
- Priya & Mohnasundari, Apeejay- Journal of Management Sciences and Technology, 3 (3), June 2016 ISSN -2347-5005
- SASRA (2013). SACCO annual supervision report, 2010. Available fromwww.sasra.go.ke accessed on 4th July 2015.
- Uwuigbe U.& Anjayi A(2012).Dividends policy and firm performance. study of listed firms in Nigeria. Journal of accounting and management information system :Vol1 442-454
- Wanyama, F. (2008). The qualitative and quantitative growth of the cooperative movement in Kenya, cooperative out of poverty