



INFLUENCE OF LOAN PORTFOLIO, CORE CAPITAL AND DIVIDEND POLICY ON FINANCIAL PERFORMANCE OF SAVINGS AND CREDIT CO-OPERATIVE SOCIETIES IN VIHIGA COUNTY, KENYA

Anaya, H. K., & Otinga, H. N.

INFLUENCE OF LOAN PORTFOLIO, CORE CAPITAL AND DIVIDEND POLICY ON FINANCIAL PERFORMANCE OF SAVINGS AND CREDIT CO-OPERATIVE SOCIETIES IN VIHIGA COUNTY, KENYA

Anaya, H. K.,^{1*} & Otinga, H. N.²

^{1*}MBA (Finance) Scholar, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kakamega, Kenya

²Ph.D, Lecturer, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kakamega, Kenya

Accepted: February 18, 2019

ABSTRACT

This study sought to examine the effect of loan portfolio, core capital and dividend policy on financial performance of SACCOs in Vihiga County, Kenya. The study adopted explanatory design and targeted 132 senior management staff of registered SACCOs located in Vihiga County. Both descriptive and inferential statistics were computed by Statistical Package of Social Scientists (SPSS) version 24. From the values of unstandardized regression coefficients with standard errors in parenthesis, all the independent variables (loan portfolio; $\beta = 0.314 (0.065)$ at $p < 0.01$; dividend policy; $\beta = 0.269 (0.065)$ at $p < 0.01$; and core capital; $\beta = 0.325 (0.063)$ at $p < 0.01$ were significant predictors of SACCO performance (dependent variable). Secondary data from selected SACCOs also confirmed that effective financial management practices led to growth in assets base, profits and membership base. The study concluded that there is a positive and significant effect of loan portfolio on financial performance of SACCOs in Vihiga County, Kenya; implying that SACCOs that adopt effective loan portfolio management practices can really have a positive impact on their financial performance;. Secondly, effective formulation and application of dividend policies in SACCOs can lead to improvement in financial performance of SACCOs in Vihiga County SACCOs' and; core capital yields a positive increase in financial performance of SACCOs. The study recommended that; one; SACCOs should craft and implement effective loan portfolio management practices so as to boost their financial performance; and engage in effective formulation; secondly, application of dividend policies so as to realize positive improvements in SACCO's overall performance and finally SACCOs should adhere to core capital requirement and craft capital mobilization strategies which can fund SACCO's core activities that can have a significant bearing on SACCO's overall performance.

Key Words: Loan Portfolio, Dividend Policy, Core Capital, SACCO Performance

CITATION: Anaya, H. K., & Otinga, H. N. (2019). Influence of loan portfolio, core capital and dividend policy on financial performance of savings and credit co-operative societies in Vihiga County, Kenya. *The Strategic Journal of Business & Change Management*, 6 (1), 347 – 366.

INTRODUCTION

Financial sector comprised players from banking industry, micro finance institutions, capital markets, insurance companies, mutual funds and development finance institutions (CBK, 2007). In Kenya, SACCOs remained the most important players in provision of financial services and have deeper and extensive outreach than any other type of financial institute (ICA, 2002). They provided savings, credit and insurance services to a large portion of the population. Financial sector reforms were adopted in 1989 through the Structural adjustment programs supported by World Bank credit, which will include liberalization of interest rate- attained in July 1991, and exchange rate-attained in October 1993. From the year 2010 new developments and intense competition in lending industry in Kenya's economy was witnessed since the introduction of the economic liberalization will pose serious challenges to the Sacco's. The emergence of formal and informal segments in the financial sector fragmentation implies that different segments approached problems such as high transactions costs, risk management, mobilization of funds, grants and capitalization (Steel, 1998).

More so, SACCOs are in the business of safeguarding money and other valuables for their Members besides providing loans and offering investment financial services. Credit creation is the main income generating activity for the SACCOs. But this activity involves huge risks to both the lender and the borrower. The risk of a member not fulfilling his or her obligation as per the contract on due date or anytime thereafter can greatly jeopardize the smooth functioning of a SACCO's business. On the other hand, a SACCO with high credit risk has high bankruptcy risk that puts the members' funds in jeopardy. Among the risk that face SACCO's, credit risk is one of great concern to most SACCO authorities and government regulators. This is because credit risk is that risk that can easily and will most likely prompt SACCO failure (Boateng, 2008)

The diversification of financial products and services by the SACCOs has to be consumed with some

caution and prudence as this involves a great deal of risk. The very nature of the SACCO business is so sensitive because more than 85% of their liability is shares from Members SACCO use these deposits to generate credit for their borrowers, which in fact is a revenue generating activity for most SACCOs. This credit creation process exposes the SACCO's to high default risk which might lead to financial distress including bankruptcy (Saunders & Cornett, 2007). Despite the development and use of highly sophisticated tools and models to measure the exposure of Financial Institutions to Credit Risk, the default rate in the SACCOs in Kenya remain relatively high. For example the Amount of defaulted loans for Kenyan SACCOs rose from Ksh. 5 Billion in the year 2007 to over with Ksh 10 Billion in 2012 (MOCD&M, 2013).

Further, Saunders and Cornet (2007) assert that most regulators acknowledge the owners contributions (core capital) as important component of SACCOs primarily because it is the amounts available to stakeholders in the event of insolvency and liquidation. The financial institutions particularly fix high capital ratios in order to cushion depositors against any probable loss and the undesirable banking impact of panic funds withdrawal which may create destructive panic runs on other solvent but illiquid banks or SACCOs (Saunders and Cornet, 2007).

SACCOs are exposed to many financial risks including but not limited to credit, systemic and liquidity risks. In credit risk, the lender is uncertain if the loan provided will be repaid as per the contractual documents. It includes the default risk which states that the lender is unlikely to recover both the principal and the interest rate payable by the client. For the protection of deposits the regulator must be assured that the organization can at least be able to pay a proportion of shareholders' funds in the event of insolvency and liquidation (Mishkin & Eakins, 2011).

In Kenya, the first Co-operative Society was Lumbwa Co-operative Society formed in 1908 by the European Farmers with the main objective of

supporting agricultural activities and products to take advantage of economies of scale (Kenya Union of Saving and Credit Co-operatives [KUSCCO], 2006). Notably, after independence, the Government of Kenya recognized co-operatives as suitable vehicles with appropriate framework to achieve their aspirations and participate in the economic development of the nation. Accordingly, steps were taken by the Government which saw the rapid growth and expansion of the SACCO Society movement in the country (Gardeklint, 2009). In fact, the SACCO movement is considered by the government as one of the economic pillars of the nation and by the year 2010, Kenya had over 5,000 registered SACCOs with a membership of about 7 million (Ndung'u, 2010).

Further, SACCOs in Kenya operate under Co-operative societies Act of 2008; SACCOs that operate front office services are licensed, supervised and regulated by SASRA while SACCOs not operating front office services are supervised and regulated by the Ministry of Industrialization. Most SACCOs in urban areas are formed by salary and wage earners who have common bond, and whose employers are ready to effect check-off system from members' monthly contributions and loan repayments. On the other hand, most of SACCOs found in rural areas are community-based with also branches of the national based SACCOs (Mumanyi, 2014).

Vihiga County is one of the 47 counties created under the constitution of Kenya (2010) with economic aspects that favors various business environment, its powers are provided in article 191 and 192 and fourth schedule of the constitution of Kenya and county government Act of 2012, found in the western region of Kenya (constitution of Kenya, 2010). There are a number of community based registered SACCOs and nationally based SACCOs having branches in the County. Therefore this study will investigate whether loan portfolio, dividend policy and core capital have significant influence on financial performance of SACCOs in the Vihiga County.

Statement of the Problem

SACCOs in many developing countries has been known to boost economic status of both rural and urban dwellers. However, the financial performance of many SACCOs especially based in Kenya's rural settings has been dwindling in the recent years. Few researches have been done to address factors that could be contributing to the dismal performance of SACCOs but the research findings are either inconsistent or elicit inconclusive empirically based outcomes (Rubinstein, 2006).

From literature review, few researchers (Bhana, 1991), Gongera et al. (2013), Lagat et al.(2013) studied on the influence of loan portfolio on profitability of financial lending institutions like SACCOs with inconclusive results; while Ross (1977), Petit (1977), Karanja (1987), Iminza (1997) and Kioko (2006) studied on the effect of dividend policies on financial performance of financial lending institutions and found both significant and insignificant results thus recommending further research on the dividend policies.

Further, according to the Sacco Society Regulations, 2010, establishing a core capital for deposit taking Sacco's will improve the efficiency and effectiveness of how SACCOs conduct their deposit taking business. But researches by Mbogo (2010); Murungi (2014); Kahuthu, Muturi and Kiweu (2015); Kioko (2016) found inconsistent results on the influence of cost of operations and core capital on financial performance of SACCOs in Kenya, and therefore recommended further researches on what really determines financial performance of SACCOs especially based in rural Kenya.

Further, most of the studies on what determines financial performance of SACCOs had been studied in foreign countries (Saunders and Cornet, 2007) or in SACCOs based in urban setting in Kenya (Kahuthu, Muturi & Kiweu, 2015); with inconsistent empirical results. This study thus sought to fill this gap by examining the effect of loan portfolio, core capital and dividend on financial performance of SACCOs in Vihiga County, Kenya.

Objectives of the Study

The general objective of the study was to investigate the determinants of financial performance of SACCOs in Vihiga County, Kenya. The specific objectives were:-

- To examine the influence of loan portfolio on financial performance of SACCOs in Vihiga County, Kenya.
- To assess the influence of dividend policy on financial performance of SACCOs in Vihiga County, Kenya.
- To examine the influence of core capital on financial performance of SACCOs in Vihiga County, Kenya.

Research Hypotheses

H₀₁: There is no significant relationship between loan portfolio and financial performance of SACCOs in Vihiga County, Kenya.

H₀₂: There is no significant relationship between dividend policy and financial performance of SACCOs in Vihiga County, Kenya.

H₀₃: There is no significant relationship between core capital and financial performance of SACCOs in Vihiga County, Kenya.

LITERATURE REVIEW

Theoretical review

Markowitz Modern Portfolio Theory

Markowitz (1953) developed the portfolio theory. Markowitz portfolio theory which asserts that under reasonable assumptions, the variance (or standard deviation) of the expected rate of return was a meaningful measure of portfolio risk. That is, from his model, the expected rate of return of a portfolio is the weighted average of the expected return for the individual assets in the portfolio. This theory includes not only expected return, but also includes the level of risk for a particular return. Markowitz assumed the following about an individual's investment behavior: Given the same

level of expected return, an investor will choose the investment with the lowest amount of risk. Investors measure risk in terms of an investment's variance or standard deviation. For each investment, the investor can quantify the investment's expected return and the probability of those returns over a specified time horizon. Investors seek to maximize their utility. Investors make decision based on an investment's risk and return, therefore, an investor's utility curve is based on risk and return.

Signaling Dividend Theory

Crafted by Bhattacharya in 1979, signaling theory of dividends states that managers use dividend policy to send signals about the firm's future earnings (Al-Malkawi, 2007). The intuition underlying this signaling theory of dividends is based on the information asymmetry between managers (insiders) and outside investors, where managers have private information about the current and future fortunes of the firm that is not available to outsiders. In order to bridge this gap, management use dividends as a tool to convey private information about a firm's future prospects to shareholders (Al-Malkawi, 2007). Therefore the signaling dividend theory applies to this study in that it will assess whether dividend policies enacted by SACCO management team really influences financial performance of SACCOs in Vihiga County, Kenya.

Risk Aversion Theory

This theory by Fischer, (1972) asserts that risk aversion is an investor's general desire to avoid participation in "risky" behavior or, in this case, risky investments. That is Investors typically wish to maximize their return with the least amount of risk possible. When faced with two investment opportunities with similar returns, good investor will always choose the investment with the least risk as there is no benefit to choosing a higher level of risk unless there is also an increased level of return. Insurance is a great example of investors' risk aversion. Given the potential for a car accident,

an investor would rather pay for insurance and minimize the risk of a huge outlay in the event of an accident (Fischer, 1972). Therefore given the risky nature of taking SACCO loans by the borrower and the credit risks associated with non-performing loans on the part of the SACCOs this theory connects to this study by investigating whether risks from loan portfolios, core capital requirements and dividend policies affect financial performance of SACCOs in Vihiga County, Kenya.

Empirical Review of Literature related to the study Loan Portfolio and financial performance of SACCOs

Basically loan portfolio management involves, proper investment decision making of what to buy and sell, proper money management in terms of investment in a basket of assets so as to satisfy the asset preferences of investors, reduce the risk and increase returns (Rubinstein, 2006). Further, Rubinstein (2006) argues that the other ancillary aspects are as per needs of investors, namely: regular income or stable return, appreciation of capital, Marketability and liquidity, Safety of investment and Minimizing of tax liability. Loan Portfolio Management is thus a process encompassing many activities of investment in assets and securities. It is a dynamics and flexible concept and involves regular and systematic analysis, judgment and actions (Campbell, 2002). For instance Portfolio Management deals with selection of securities from the number of opportunities available with different expected returns and carrying different levels of risk and the selection of securities is made with a view to provide the investors the maximum yield for a given level of risk or ensure minimum risk for a level of return (Campbell, 2002).

Empirically, Gongera et al. (2013), studied on the effect of loan portfolio management on organization profitability; a case of Commercial Banks in Kenya. The variables studied were loan portfolio management, interest expense, administration costs and assets value. A descriptive

survey design was employed in this study. The population of the study was the management employees working for commercial banks in Kenya. The sample was accessed by use of both stratified and simple random sampling. A structured questionnaire was used to gather the primary information. Statistical package for social sciences (SPSS) was used to analyze primary data while the SAS v.6 of 2009 was used to analyze the secondary data. Study results revealed that loan portfolio management was a significant predictor of liquidity.

Dividend Policy and financial performance of SACCOs

McGuigan, Kretlow and Moyer (2009), in their book of Contemporary Corporate Finance, they assert that successful firms generate net operating profits after taxes. Thus a firm's growth opportunities and replacement requirements, identified through capital budgeting and financial planning determine the amount that should be invested in operating capital. Subtracting the investment in operating capital from net operating profits after taxes results in free cash flows, which is the amount of cash flow available for distribution to investors after paying expenses and taxes and making the necessary investments in operating capital.

With the regulation of the SACCO sector especially SACCOs operating FOSAs by SASRA, dividend policy has to be developed to guide distribution of surpluses. The SACCO Societies Act, 2008 Section 14(4)(d), 68 (2) (a), SACCOs are prohibited from declaring dividends if they have not met the liquidity provisions which stipulate that a SACCO should at a minimum retain 15% of its savings deposits and short term liabilities in liquid assets and if they have not met other administrative requirements. The liquidity has a direct relationship with dividend policy which stipulates when and how much to distribute and the effects of cash outflows. Bhana (1991) examined the share market response to substantial changes in dividend policies by Japan Stock Exchange firms during the period 1970-1988. The results provide a strong support for the information content of dividend hypothesis. The

empirical evidence suggests that large dividend changes on the Japan Stock Exchange convey valuable information to investors over and above that contained in the earnings announcements and that the hypothesis that investors revise their expectations in response to announcement of significant changes (signaling effect) is affected. However, another study was to be done on SACCOs to compare results.

Core Capital and financial performance of SACCOs

Core capital is defined as completely paid up retained earnings, member's shares, grants and donations and disclosed reserves that a SACCO should expand unless they are faced with liquidation. According to the Sacco Society Regulations, 2010, establishing a core capital for deposit taking Sacco's will improve the efficiency and effectiveness of how SACCOS conduct their deposit taking business. The improved effectiveness will result into better productivity thus improved financial performance which is a key measure of productivity in monetary terms (SACCO society's regulations, 2010).

Empirically, Kahuthu, Muturi and Kiweu (2015) investigated influence of core capital on performance of SACCOs. The study used census Survey design and a linear regression model to establish the influence of core capital and membership retention SACCO's financial Position. The study compared the Beta coefficients of various independent and dependent variables before and after the regulatory reforms. The study revealed that core capital and membership growth has positive impact on SACCO's financial performance. However the major gap in the study is that the data analyzed was a set of various SACCOS within Kenya which might not give a correct view of the SACCOs in Vihiga County as the needs of SACCO members in Vihiga County may be different to those within urban settings.

Conceptual Framework

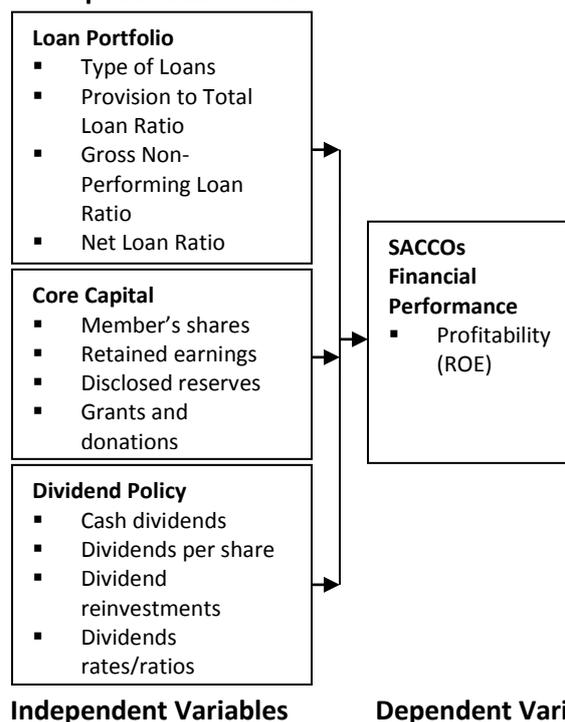


Figure 1: Conceptual Framework
Source (Author, 2019)

Loan Portfolio and Financial Performance of Saccos

Portfolio Management is a process encompassing many activities of investment in assets and securities (Campbell, 2002). In this regard, one of the principal activities of commercial banks and MFIs in is to grant loans to borrowers. Loans are among the highest yielding assets a bank can add to its balance sheet, and they provide the largest portion of operating revenue. In this respect, the banks are faced with liquidity risk since loans are advanced from funds deposited by customers. Hamisu (2011) notes that credit creation involves huge risks to both the lender and the borrower. The risk of a trading partner not fulfilling his or her obligation as per the contract on due date or anytime thereafter can greatly jeopardize the smooth functioning of bank's business. On the other hand, a bank or SACCO with high credit risk has high bankruptcy risk that puts the depositors in jeopardy. In a bid to survive and maintain adequate profit level in this highly competitive environment, banks and SACCOS have tended to take excessive risks. But then the increasing tendency for greater

risk taking has resulted in insolvency and failure of a large number of the banks and SACCOs. However, the higher the volume of loans extended the higher the interest income and hence the profit potentials for commercial banks and SACCOs (Hamisu, 2011). Dividend Policy and Financial

Performance of Saccos

Dividend is a portion of shareholders earnings, which is distributed among the shareholders of the entity while dividend policy determines the division of earning between payment to shareholders and retained earnings. According to Rigar and Mansouri (2003), the policy of dividends practiced by a SACCO is a robust signal of a firm's performance, even though relationship between the two variables does not meet unanimity of theoretical research. Indeed, generous distribution of profits in favour of shareholders may be considered as a signal of treasury ease as it can be interpreted as revealing obstacles at the level of investment horizons. Similarly, maintaining profits to be reinvested is an action that is generally less appreciated by some shareholders, and often badly interpreted by the market, especially in the case of listed companies, but this may also be considered as a signal of strong growth potentials for SACCOs (Rigar & Mansouri, 2003).

Core Capital and Financial Performance of Saccos

Core capital is one of the components of capital and is defined as completely paid up retained earnings, member's shares, grants and donations and disclosed reserves that a SACCO should expand unless they are faced with liquidation. According to the Sacco Society Regulations, 2010, establishing a core capital for deposit taking Sacco's improves the efficiency and effectiveness of how SACCOS conduct their deposit taking business. The improved effectiveness is assumed to result into better productivity thus improved financial performance which is a key measure of productivity in monetary terms (SACCO society's regulations, 2010).

Financial Performance

Kotey and Meredith (1997) contends that, financial performance is measured by either subjective or objective criteria; arguments for subjective measures include difficulties with collecting qualitative performance data from small firms and with reliability of such data arising from differences in accounting methods used by firms. Hitt *et al.* (1996) believes that many firms' low performance is the result of poorly performing assets (businesses). Low performance from poorly performing assets is often related to strategic errors made in the acquisition process in earlier years. For example, some firms acquire businesses with unrealistic expectations of achieving synergy between the acquired assets and their current sets of assets. In this study, financial performance of SACCOs will be measured by Return on Equity.

METHODOLOGY

This study employed explanatory survey research design. The design is suitable for doing causal studies (cause-effect relationships), which are conducted in order to explain any behaviour or reactions of people to a given phenomenon in the society (Peshkin, 1990). The target population of the study was 132 senior management staff of 12 registered Saccos in Vihiga County, Kenya. Primary data was collected by means of self-administered structured questionnaires. Data collected from the field was coded, cleaned, tabulated and analyzed using both descriptive and inferential statistics with the aid of specialized Statistical Package for Social Sciences (SPSS).version 24 software. The output of analysis was presented using tables to make them reader friendly.

Study conceptualized Regression Model;

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

Y = Financial Performance of SACCOs in Vihiga County

β_0 = Constant

X_1 = Loan portfolio

X_2 = Dividend policy

X_3 = Core Capital

$\{\beta_0-\beta_3\}$ = Beta coefficients
 e = the error term

FINDINGS

Descriptive statistics in this study are summation of responses based on independent variables (loan portfolio, dividend policy and core capital, and the dependent variable (financial performance as subjectively measured by ROE. Descriptive statistics thus showed the outcomes of responses to each of the statements on the study variables using Likert scale with values ranging from 5 to 1; that is; 5=Strongly Agree, 4=Agree, 3= Uncertain, 2=Disagree and 1= Strongly Disagree. The results were presented in the table form showing frequencies of responses as per each statement and

its corresponding percentage score in brackets.

Loan Portfolio and SACCOs’ Financial Performance

This assessed objective one of the study; that is, the influence of loan portfolio on financial performance of SACCOs in Vihiga County, Kenya. Respondents were asked to respond to 6 statements namely; (i) Short term loans affects Financial Performance of this SACCO; (ii) Long term loans affects Financial Performance of this SACCO (iii) Type of loan affects Financial Performance of this SACCO; (iv) Provision to Total Loan Ratio affects Financial Performance of this SACCO; (v) Net Loan Ratio affect Financial Performance of the SACCO and (vi) Gross Non-Performing Loan Ratio affects Financial Performance of the SACCO. The results are presented in the table 1.

Table 1: Descriptive Statistics; Loan Portfolio

Statement	Frequency and Percentage (%)					Mean	Std.Dev
	5	4	3	2	1		
1.Short term loans affects Financial Performance of this SACCO	13(14.3)	55(60.4)	2(2.2)	14(15.4)	7(7.7)	3.58	.946
2.Long term loans affects Financial Performance of this SACCO	12(13.2)	57(62.6)	3(3.3)	15(16.5)	4(4.4)	3.64	.849
3 The type of loan affects Financial Performance of this SACCO	15(16.5)	54(59.3)	6(6.6)	9(9.9)	7(7.7)	3.67	.806
4 Provision to Total Loan Ratio affects Financial Performance of this SACCO	16(17.6)	56(61.5)	3(3.3)	10(11.0)	6(6.6)	3.73	.986
5Net Loan Ratio affect Financial Performance of the SACCO	9(9.9)	59(64.8)	5(5.5)	14(15.4)	4(4.4)	3.60	.810
6 Gross Non-Performing Loan Ratio affects Financial Performance of the SACCO	10(11.0)	58(63.7)	4(4.4)	15(16.5)	4(4.4)	3.60	.831
Valid N (listwise) 91							
Grand mean = 3.637							

From table 1, most respondents agreed (60.4%) and strongly agreed (14.3%) that short term loans affects financial Performance of this SACCO implying that most SACCOs in Vihiga County encouraged application of short loans to members which were perceived to impact positively of financial performance of SACCOs. Further, most respondents also agreed (62.6%) and strongly agreed (13.2%) that long term loans affected financial performance of the SACCO, implying that

SACCOs in Vihiga County also engaged their customers in long term loans which consequently impact positively on SACCOs’ financial performance as measured by return on equity.

In regard to type of loan, most respondents agreed (59.3%) and strongly agreed (16.5%) that the type of loan affects financial performance of the SACCO. This implied that SACCO in crafting loan policies defined loan types that could positively impact on

their financial performance, thus attracting less losses from non- performing loans.

In regard to loan loss provisioning, most respondents agreed (61.5%) and strongly agreed (17.6%) that provision to total loan ratio affected financial performance of the SACCO in question. This implied that most SACCOs had adopted loan loss provisioning strategies to cater for non-performing loan and consequently counter loan delinquency ratios.

Furthermore, most respondents agreed (64.8%) and strongly agreed (9.9%) that Net Loan Ratio affected financial performance of the SACCO while a further 63.7% and 11.0% agreed and strongly agreed that Gross Non-Performing Loan Ratio affects financial performance of the SACCO. This confirmed that Net Loan Ratio and Gross Non-Performing Loan Ratio are significant determinants of SACCO's financial

performance because the volume of loans extended to customers can have a significant impact on profitability of SACCOs (Hamisu, 2011).

Dividend Policy and Financial performance of SACCOs

This assessed objective two of the study; that is, the influence of dividend policy on financial performance of SACCOs in Vihiga County, Kenya. Respondents were asked to respond to 6 statements namely; (i) SACCO consistently pays annual cash dividends; (ii) The SACCO reimbursements share dividend as bonus share or additional shares instead of cash (iii) SACCO engages members in share repurchase instead of paying out cash dividends; (iv) The SACCO gives bonus deposits to members who capitalize their dividends; (v) SACCO has good dividend pay-out ratio and (vi) The SACCO dividend policy influences its ROE The results are shown in table 2.

Table 2: Descriptive Statistics; Dividend Policy

Statement	Frequency and Percentage (%)					Mean	Std.Dev
	5	4	3	2	1		
1. SACCO consistently pays annual cash dividends	9(9.9)	54(59.3)	3(3.3)	15(16.5)	10(11.0)	3.41	.802
2. The SACCO reimbursements share dividend as bonus share or additional shares instead of cash	11(12.1)	23(25.3)	2(2.2)	49(53.8)	6(6.6)	2.82	.935
3. The SACCO engages members in share repurchase instead of paying out cash dividends.	8(8.8)	31(34.0)	7(7.7)	40(44.0)	5(5.5)	2.97	.869
4. The SACCO gives bonus deposits to members who capitalize their dividends	12(13.2)	39(42.9)	3(3.3)	28(30.8)	9(9.9)	3.19	.782
5. The SACCO has good dividend pay-out ratio	6(6.6)	38(41.7)	26(28.6)	17(18.7)	4(4.4)	3.27	0.990
6. The SACCO dividend policy influences its ROE	10(11.0)	53(58.2)	3(3.3)	17(18.7)	8(8.8)	3.44	.876
Valid N (listwise) 91							
Grand mean = 3.183							

From table 2, most respondents agreed (59.3%) and strongly agreed (9.9%) that SACCO consistently pays annual cash dividends. This implies that consistent payment of annual dividends confirms financial stability of a SACCO and can attract and retain customers. However, a noticeable percentage of respondents disagreed (16.5%) and strongly

disagreed (11.0%) that SACCO consistently pays annual cash dividends. This confirms that there could be SACCOs in Vihiga County that do not consistently pay out annual dividends to its members due to may be financial instability, a major weakness of some underperforming SACCOs in Kenya.

Secondly, a high percentage of respondents disagreed (53.8%) while only a small percentage agreed (25.3%) that the SACCO engages in reimbursements of share dividend as bonus share or additional shares instead of cash. This implies that most SACCOs in Vihiga County have not yet embraced capitalization strategy to mobilize savings from members so as to boost their capital base. This is further confirmed by many respondents who disagreed (44.0%) that SACCO engages members in share repurchase instead of paying out cash dividends confirming the need for most SACCOs in Vihiga County to embrace capitalization as a viable financial management practice. However a fairly good percentage of respondents agreed (42.9%) and strongly agreed (13.2%) that the SACCO gives bonus deposits to members who capitalize their dividends. This implies that some SACCOs in Vihiga County have initiated dividend capitalization practices as a strategic financial management practice.

Interestingly, while a fairly good percentage of respondents agreed (41.7%) that the SACCO has good dividend pay-out ratio, 28.6% were uncertain while 18.7% disagreed. This implies that the 28.6% of respondents who were uncertain possibly could

not be having comparative figures of dividend pay-out ratios while those who disagreed (18.7%) could be those have knowledge of some SACCOs with higher dividend pay-out ratios.

On overall, most respondents agreed (58.2%) and strongly agreed (11.0%) that the SACCO dividend policy influences its return on equity. This confirms Rigar and Mansouri (2003) assertion that maintaining profits to be reinvested is an action that is generally less appreciated by some shareholders but may be considered as a signal of strong financial growth potentials for SACCOs.

Core capital and financial performance of SACCOs

This assessed objective three of the study; that is, the influence of core capital on financial performance of SACCOs in Vihiga County, Kenya. Respondents were asked to respond to 6 statements namely; (i) SACCO has adequate share capital inform of members' shares (ii) SACCO has enough retained earnings; (iii) SACCO has adequate disclosed reserves; (iv) SACCO attracts grants and donations from investors (v) SACCO engages in savings mobilization from old & new members and (vi) generally, SACCO's share capital influence its ROE. The results are presented in table 3.

Table 3: Descriptive Statistics; Core capital

Statement	Frequency and Percentage (%)					Mean	Std.Dev
	5	4	3	2	1		
14.The SACCO has adequate share capital in form of members' shares	8(8.8)	36(39.5)	3(3.3)	34(37.4)	10(11.0)	2.98	.856
15.The SACCO has enough retained earnings	10(11.0)	39(42.8)	2(2.2)	34(37.4)	6(6.6)	3.14	.825
16.The SACCO has adequate disclosed reserves	9(9.9)	38(41.7)	9(9.9)	30(33.0)	5(5.5)	3.18	.960
17.The SACCO attracts grants and donations from investors	13(14.3)	37(40.6)	3(3.3)	29(31.9)	9(9.9)	3.18	.896
18 .SACCO engages in savings mobilization from old & new members	7(7.7)	50(54.9)	11(12.1)	18(19.8)	5(5.5)	3.40	.863
19.Generally, SACCO's share capital influence its ROE	8(8.8)	61(67.0)	6(6.6)	11(12.1)	5(5.5)	3.62	0.997
Valid N (listwise) 91							
Grand mean = 3.25							

In summary, most respondents agreed (67.0%) and strongly agreed (8.8%) that generally, SACCO's share capital influenced its ROE. This was supported by SACCO society's regulations, which emphasize that establishing a core capital for deposit taking Sacco's improves the efficiency and effectiveness of

how SACCOS conduct their deposit taking business. That is, the improved effectiveness is assumed to result into better productivity thus improved financial performance which is a key measure of productivity in monetary terms (SACCO society's regulations, 2010).

Inferential Analysis

Table 4: Testing of Regression Model Assumptions

	Statistic	Sig.
Loan portfolio	.031	.102
Dividend Policy	.016	.134
Core Capital	.063	.075
IT	.018	.129
ROE	.075	.143

Linearity of the study variables was tested using Pearson's product moment correlation coefficient so as to show that independent variables provide significant predictions which were considered prerequisite for running regression analysis. Since the items in the questionnaire had an admissible Cronbach alpha coefficient that reliably measured the study variable, the summation scores of the

items for the study variable were computed and used in correlation analysis. Therefore the correlation analysis in table 5 shows that all independent variables (loan portfolio, dividend policy and core capital) had significant bivariate relationship with the dependent variable (financial performance of SACCOS in Vihiga County).

Table 5: Correlation Analysis

		Loan Portfolio	Dividend Policy	Core Capital	ROE
Loan Portfolio	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	91			
Dividend Policy	Pearson Correlation	.703**	1		
	Sig. (2-tailed)	.000			
	N	91	91		
Core Capital	Pearson Correlation	.530**	.515**	1	
	Sig. (2-tailed)	.000	.000		
	N	91	91	91	
ROE	Pearson Correlation	.779**	.770**	.774**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	91	91	91	91

Number of cases of the independent variable ought to be at least 20. This study had four independent

variables; therefore, the minimum cases ought to be $4 \times 20 = 80$. This study sample size was 99, hence met this assumption.

Accuracy of data was also checked since the scales of measurement were all valid and reliable since questions had content validity and cronbach's alpha (which is a measure of reliability) values were 0.7 and above thus met this assumption.

Multicollinearity was checked using correlations between all pairs of independent variables (loan portfolio, core capital and dividend policy). Most researchers asserts that if correlation coefficient, (r) is close to 1 or -1, then there is multicollinearity but if correlation coefficient (r) is not above 0.8, then there is no multicollinearity In this study (table 5 on correlation analysis), the highest correlation

coefficient between all pairs of independent variables was 0.738, which was below the threshold of 0.8, thus multicollinearity assumption was met.

Further, multicollinearity was assessed using variance inflation factor (VIF). According to Hair et al. (2006) a common threshold is a tolerance value of 0.10 which corresponds to a VIF value of 10. This implies that there is no threat of multi-collinearity when tolerance is up to 0.10 or VIF value is below 10 (Saunders et al., 2009). The Variance Inflated Factors (VIF) for loan portfolio, dividend policy, core capital and ROE was 1.469, 1.447, 1.330 and 1.269 respectively. This is less than 10 indicating that there was no threat of multi-collinearity among the variables as indicated in table 6.

Table 6: Collinearity

	Collinearity Statistics	
	Tolerance	VIF
Loan portfolio	.978	1.469
Dividend policy	.955	1.447
Core capital	.529	1.330
ROE	.541	1.269

Table 7: Direct Influence of loan portfolio on financial performance

Model Summary										
Change Statistics										
Model	R	R Square	Adjusted R Square	R Std. Error of the Estimate	Square Change	F Change	df1	df2	Sig. Change	F
1	.779 ^a	.607	.603	.68674	.607	137.431	1	89	.000	
ANOVA ^b										
Model		Sum of Squares	Df	Mean Square	F	Sig.				
1	Regression	64.814	1	64.814	137.431	.000 ^a				
	Residual	41.974	89	.472						
	Total	106.788	90							
Coefficients ^a										
Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.			
		B	Std. Error	Beta						
1	(Constant)	.299	.086			3.488	.001			
	Loan Portfolio	.816	.070	.779		11.723	.000			

a. Dependent Variable: ROE

The model summary in table 7 showed that R squared was 0.607 which implied that 60.7% of variation in financial performance of SACCOs in Vihiga County is explained by loan portfolio while other factors not in the model accounts for 39.3% variation in financial performance of SACCOs in Vihiga County. Further, coefficient analysis reveal that there exists a positive and significant effect of loan portfolio on financial performance of SACCOs in Vihiga County ($\beta = 0.816$ (0.070); *at* $p < .01$). The results therefore imply that a single improvement in effective loan portfolio management will lead to

0.816 unit increase in financial performance of SACCOs in Vihiga County as measured by ROE. Therefore, the linear regression equation model is;

$$(i) Y = 0.299 + 0.816X_1$$

Where:

Y = financial performance of SACCOs

X_1 = loan portfolio

Direct influence of dividend policy on financial performance of SACCOs

This tested the direct linear influence of dividend policy on financial performance of SACCOs in Vihiga County, Kenya. The results are shown in table 8.

Table 8: Direct influence of Dividend policy on financial performance

Model Summary

		Change Statistics						
Model	R	Adjusted R Square	Std. Error of the Estimate	R Square	F Change	df1	df2	Sig. Change
1	.770 ^a	.593	.69884	.588	129.656	1	89	.000

ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	63.322	1	63.322	129.656	.000 ^a
	Residual	43.466	89	.488		
	Total	106.788	90			

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.997	.219		4.545	.000
	Dividend Policy	.784	.069	.770	11.387	.000

a. Dependent Variable: ROE

The above model summary in table 8 showed that R squared was 0.593 which implied that 59.3% of variation in financial performance of SACCOs in Vihiga County was explained by dividend policy while other factors not in the model accounts for 40.7% variation in financial performance of SACCOs in Vihiga County. Further coefficient analysis revealed that there exists a positive and significant effect of dividend policy on financial performance of SACCOs in Vihiga County ($\beta = 0.784$ (0.069); *at* $p < .01$). The results therefore implied that a single

improvement in effective loan dividend policy formulations led to 0.784 unit increase in financial performance of SACCOs in Vihiga County as measured by ROE. Therefore, the linear regression equation model was;

$$(ii) Y = 0.997 + 0.784X_2$$

Where:

Y = financial performance of SACCOs

X_2 = dividend policy

Direct influence of core capital on financial performance of SACCOs

This tested the direct linear influence of core capital on financial performance of SACCOs in Vihiga County, Kenya. The results were shown in table 9.

The model summary in table 9 showed that. R squared is 0.599 which implies that 59.9% of variation in financial performance of SACCOs in Vihiga County is explained by core capital while other factors not in the model accounts for 40.1% variation in financial performance of SACCOs in Vihiga County. Further coefficient analysis reveal

that there exists a positive and significant effect of core capital on financial performance of SACCOs in Vihiga County ($\beta = 0.748$ (0.065); at $p < .01$). The results therefore imply that a single increase in growth of core capital will lead to 0.748 unit increase in financial performance of SACCOs in Vihiga County as measured by ROE. Therefore, the linear regression equation model is;

$$(iii) Y = 1.058 + 0.748X_3$$

Where:

Y = financial performance of SACCOs
 X_3 = core capital

Table 9: Direct Influence of Core capital on financial performance

Model Summary									
Model R	R Square	Adjusted Square	R Std. Error of the Estimate	Change Statistics				Sig. Change	F
				Square	Change	df1	df2		
1	.774 ^a	.599	.595	.69349	.599	133.045	1	89	.000
ANOVA ^b									
Model		Sum Squares	df	Mean Square	F	Sig.			
1	Regression	63.985	1	63.985	133.045	.000 ^a			
	Residual	42.803	89	.481					
	Total	106.788	90						
Coefficients ^a									
Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.		
		B	Std. Error	Beta					
1	(Constant)	1.058	.212			4.999	.000		
	Core Capital	.748	.065	.774		11.534	.000		

a. Dependent Variable: ROE

Table 10: Multiple Regression Results

Model Summary									
Model R	R Square	Adjusted Square	R Std. Error of the Estimate	Change Statistics				Sig. Change	F
				Square	Change	df1	df2		
1	.921 ^a	.848	.841	.43497	.848	119.603	3	87	.000

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	90.517	3	22.629	119.603	.000 ^a
	Residual	16.271	87	.189		
	Total	106.788	90			

a. Predictors: (Constant), Loan Portfolio, Dividend Policy, Core Capital

b. Dependent Variable: ROE

The results showed that the F-statistics produced was significant ($F=119.603$, significant at $p<.001$), thus confirming the fitness of the model. For an R square of 0.848, we can say that the study model explains 84.8% of the variations in financial performance of SACCOs in Vihiga County, while other factors not in this study model accounts for 15.2%, thus, it is a very good model.

Further, from the values of unstandardized regression coefficients with standard errors in parenthesis, all the independent variables (loan portfolio; $\beta = 0.314$ (0.065) at $p<0.01$; dividend policy; $\beta = 0.269$ (0.065) at $p<0.01$; and core capital; $\beta = 0.325$ (0.063) at $p<0.01$, were significant

predictors of financial performance of SACCOs in Vihiga County (dependent variable). Therefore, the multiple regression equation for overall significant influence of the independent variables (loan portfolio, dividend policy and core capital) on financial performance of SACCOs in Vihiga County (dependent variable) is;

$$(v) Y= 0.245 +0.314X_1+0.269X_2+ 0.325X_3$$

Where;

Y= financial performance of SACCOs

X_1 = loan portfolio

X_2 = dividend policy

X_3 = core capital

Table 11: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	.245	.046		18.443	.000
	Loan Portfolio	.314	.065	.300	4.821	.000
	Dividend Policy	.269	.065	.264	4.116	.000
	Core Capital	.325	.063	.336	5.167	.000

a. Dependent Variable: ROE

Hypothesis Testing

Research Hypothesis one stated that loan portfolio does not significantly influence financial performance of SACCOs in Vihiga County, Kenya. The study results indicate that there exists a positive and significant effect of loan portfolio on financial performance of SACCOs in Vihiga County ($\beta= 0.314$ (0.065), at $p<.01$. Hypothesis one was thus rejected. The study results therefore implied that a single increase in effective loan portfolio management led to 0.314 unit improvement in

financial performance of SACCOs in Vihiga County. Further, secondary data from Mwalimu SACCO, Vihiga branch, using key performance indicators showed that lending activity in the year 2018 registered good performance. That is; during the year 2018, members applied for loans worth Kshs 17,152,841,461.00 and Kshs16, 753,616,207.00 (98%) amount applied was disbursed; this disbursement translated to loans disbursement growth of Kshs2,635,471,863(19%). Further, loan portfolio grew from Kshs.27, 578,678,076 in 2017 to

Kshs. 30,844,971,154 in the year 2018 representing a growth of 3,266,293,078 (12%).

Research Hypothesis two stated that dividend policy does not significantly influence financial performance of SACCOs in Vihiga County, Kenya. The study results indicate that there exists a positive and significant effect of dividend policy on financial performance of SACCOs in Vihiga County ($\beta = 0.269$ (0.065), at $p < .01$). Hypothesis two is thus rejected. The study results therefore implied that a single effective formulation and application of dividend policies in SACCOs will lead to 0.269 unit improvement in financial performance of SACCOs in Vihiga County.

Lastly, research Hypothesis three stated that core capital does not significantly influence financial performance of SACCOs in Vihiga County. The study results indicate that there exists a positive and significant effect of core capital on financial performance of SACCOs in Vihiga County ($\beta = 0.325$ (0.063), at $p < .01$). Hypothesis three is thus rejected. The study results therefore implied that a single increase in SACCOs' core capital will lead to 0.325 unit improvement in financial performance of SACCOs in Vihiga County.

Further, secondary from Mwalimu SACCO, Vihiga branch showed that the year under review the Society balance sheet grew to Kshs46,375,542,764B from Kshs40,511,459,785B (2017) a 14% growth while previous period 2017 the balance sheet growth was 8%. Comparatively, Vihiga Teachers SACCO, total assets grew from Kshs.15,498,000 to Kshs16,500,000 while in Vihiga County Council employee SACCO; profits grew from kshs.3,540,138 in the year 2017 to kshs.3,550,227 in the year 2018; assets grew from kshs.10,129,400 in the year 2017 to Kshs.11,250,500 in the year 2018; and revenue grew from Kshs.9,839,000 in the year 2017 to Kshs.10,950,000 in the year 2018.

CONCLUSIONS

First, the study concludes that there is a positive and significant effect of loan portfolio on financial

performance of SACCOs in Vihiga County, Kenya; implying that SACCOs that adopt effective loan portfolio management practices can really have a positive impact on their financial performance.

Secondly, the study concludes that effective formulation and application of dividend policies in SACCOs can lead to improvement in financial performance of SACCOs in Vihiga County.

Lastly, the study further concludes that SACCOs' core capital significantly influences financial performance of SACCOs in Vihiga County; implying that any single increase in SACCOs' core capital yields a positive increase in financial performance of SACCOs.

RECOMMENDATIONS

First, SACCOs should craft and implement effective loan portfolio management practices so as to boost their financial performance.

Secondly, SACCOs should engage in effective formulation and application of dividend policies so as to realize positive improvements in SACCO's overall performance.

Lastly, SACCOs should adhere to core capital requirement and craft capital mobilization strategies which can fund SACCO's core activities that can have a significant bearing on SACCO's overall performance.

Areas for Further Research

First, a similar study can be done but targeting customers of SACCOs so as to capture their perceptions about the financial performance of SACCOs where they belong.

Secondly, a longitudinal study can be done on SASRA regulated SACCOs using time series data for a span of example four years so as to capture a trend analysis on SACCO performance

REFERENCES

- Al-Malkawi, H. N. (2007). Determinants of corporate dividend policy in Jordan: An application of the Tobit model. *Journal of Economic and Administrative Sciences*, 23(2), 44-70
- Bhana (1991). Share Market Response to Substantial Changes in Dividend Policies by JSE firms , period 1970-1988; 7(4)
- Boateng, B (2008) *Principles for the Management of Credit Risk. Basel Committee on Banking Supervision, Basel*
- CBK, (2007). Bank supervision Annual Report. Nairobi: Government printers
- Campbell, J & Vicera, M (2002). "Strategic Asset Allocation: Portfolio Choice for Long Term Investors". Clarendon Lectures in Economics.
- Cooper, D., & Schinder, P. (2007). *Business Research methods* (8th Ed.). New Delhi: tata
- Desai c, Deshmukh, S. (2001).The effect of Asymmetric Information on dividend policy. *Quarterly Journal of Business and Economics*. 44 (1/2), 107-127
- Dillman,K(2000).*Proposal and Thesis writing: An introduction*. Nairobi: Pauline’s Publications Africa.
- Druly, C., (2000). *Management and Cost Accounting*, (5th ed.). London WCIR 4LR: Thomson high Holborn House 50 – 51 Bedford Row.
- Evans, A. C. (2001). *Strengthening Credit Unions in Sri Lanka: Research Monograph*, World Council Of Credit Unions, Madison:WI, USA.
- Fama, Eugene F.; French, Kenneth R. (1993). "Common Risk Factors in the Returns on Stocks and Bonds". *Journal of Financial Economics* 33 (1): 3–56.
- Fischer, C.W (1972). The Treynor Capital Asset Pricing Model, *Journal of Investment Management, Vol. 1, No. 2, pp. 60–72*.
- Gardeklint, A. (2009). Facts about the Co-operative movement. Nairobi, Kenya National Federation of Co-operatives.
- Goddard, J., Molyneux, P. and Wilson, J.O.S. (2004) "The Profitability of European Banks: A Cross-Sectional and Dynamic Panel Analysis". *Manchester School*, 72 (3), 363-381.
- Gongera, E. G, Miroga, J.B. Njoroge, W. N et al.,(2013). An Analysis of Loan Portfolio Management on Organization Profitability: Case of Commercial Banks in Kenya
- Hair, J. F, Black, W, C, Babin, B. J, & Anderson, R. E. (2006). *Multivariate data analysis. 7th edition Prentice Hall NY*.
- Hamisu S, (2011). Credit Risk and the Performance of Nigerian Banks. Ahmadu Bello University, Zaria–Nigeria.
- Hwang, L., Park K., and Park R. (2004) Do Firms with Good Corporate Governance Practice Pay More Dividends? Evidence from Korean Business Groups. A Paper presented at the Korean Finance Association Annual Meeting.

- Hitt, M., Hoskisson, R., Johnson, M. and Moesel, D. (1996). *The Market for Corporate Control and Firm Innovation. Prentice Hall NY.*
- ICA (2002). Statement on the co-operative Identity. Available from the University of Wisconsin Center for Co-operatives
- Iminza,R (1997)The relationship between dividend policies and profitability of companies quoted at the NSE. Unpublished MBA project. University of Nairobi.
- Kabethi, L. (2013). The Effect of Working Capital Management Practices on the Financial Performance of Small and Medium Enterprises in Kenya. *Interdisciplinary Journal of Contemporary Research in Business*, 2(3), 36–40.
- Kahuthu, A Muturi, S and Kiweu P (2015). Saving and investment Patterns of farmers' Co-operatives. *Journal of Social Science*, 11(3), 183-192.
- Kegan,M, Kimata, O.N. (2005),Effects of Financial Innovation on the Performance of Deposit Taking Saccos in Nairobi County. Unpublished Research project, University of Nairobi.
- Karanja, P(1987)*The dividend practices of publicly quoted companies in of Kenya.* Unpublished MBA project. University of Nairobi.
- Karagu, J.M & Okibo, B. (2014) financial factors influencing performance of Savings and credit cooperative organization in Kenya. *International Journal of academic research in accounting, finance and management science* 4(2), 295- 306.
- Kioko, K, J (2016)*Factors contributing to liquidity problems on saving credit co-operatives.* MA thesis, Moi University, Eldoret, Kenya.
- Kioko, D (2006), *The relationship between dividend changes and future profitability of the companies quoted at the NSE.* Unpublished MBA project. University of Nairobi.
- Kiprop (2006). Effects of Lending Interest Rates on SACCOs in Kenya, Unpublished MBA Project, University of Nairobi
- Koduk, S.C. (2015). The electronic banking and financial performance of Savings and Credit Cooperative Societies in Nairobi County. Unpublished MBA project. University of Nairobi
- Kotey, B. and Meredith, G. (1997). *Relationships Among Owner/ Manager Personal Values, Business Strategies and Enterprise Performance.* J. Small Bus. Manage. pp. 37-64.
- Kothari, C.R., (2007), *Research Methodology: Methods and Techniques*, New Age International Publishers.
- Lagat, F.K., R. Mugo and R. Otuya, (2013). Effect of credit risk management practices on lending portfolio among savings and credit cooperatives in Kenya. *European Journal of Business and Management*, 5(19): 2222-2839
- Maingi, M. S. (2012). Factors affecting the financial performance of Saccos in Kenya: A case of selected Saccos. *The International Journal of Business & Management* .6(5)
- Manjoj, K and Varun, G, (1998). Construct to Theory in Grover: An assessment of Survey Research in POM. *Journal of operations Management*, 16, 407-426.
- Manyara, M. (2003). *The development of cooperative law and policy in Kenya.* Nairobi: Oscan print.

- Markowitz, H.M. (1953). *Portfolio Selection: Efficient Diversification of Investments*. New York: John Wiley & Sons. (reprinted by Yale University Press, 1970,; 2nd ed. Basil Blackwell.
- Merton, R.C. (1973). "An Intertemporal Capital Asset Pricing Model". *Econometrica* 41 (5): 867–887.
- Mirie J. (2014). *The Influence of members' Income and Conduct of SACCOs in the Relationship between Characteristics and Efficiency of SACCOs in Kenya*. Unpublished PhD thesis, Nairobi: University of Nairobi.
- Mishkin, F & Eakins S. (2011). *Financial institutions and the markets* (7th ed.), New York: Pearson Education Ltd.
- Mouawad, M. and Kleiner B. (1996). New developments in Customer Service Training. *Managing Service Quality*, 6(2), 49-56.
- MOCD&M, (2013).Ministry of Co-operative Development; Annual Review Report.
- Mumanyi, E. A. L. (2014). Challenges and opportunities facing SACCOs in the current devolved system of government of Kenya: A case study of Mombasa County. *International Journal of Social Sciences and Entrepreneurship*, 1 (9), 288-314.
- Mugenda, O, M. & Mugenda, A. G., (2003), *Research Methods: Quantitative and Qualitative Approaches*, ACTS Press
- Mugenda, O, M. & Mugenda, A. G., (2008), *Research Methods: Quantitative and Qualitative Approaches*, ACTS Press
- Murungi, M. (2014). *Factors affecting sacco performance in Meru South district: a case of Tharaka Nithi Teachers Sacco*. Unpublished MBA project, Kenyatta University.
- Ndung'u, G. (2010). Orderly movement. *Business Post*, 1, 28-30.
- Neuman, W, L (2005) *Social Research Methods: Quantitative and Qualitative Approaches* (6th Ed). Boston, MA; Ally & Bacon
- Njiru, N (2003), *Determinants of Dividend Payout by SACCOs in Kenya*, unpublished MBA of the University of Nairobi
- Ombado, G. (2010). Identifying and maximising SACCO's potential. *ACCOSA Newsletter*. 2(2), 2-6.
- Oyugi, I.G. (2014). The effect of automated service on financial performance of Savings and Credit Cooperative Societies licensed by SASRA in Kenya. Unpublished MBA Project. University of Nairobi.
- Petit, R (1977). *Taxes, Transaction Costs and Clientele Effects of Dividends*. *Journal of Financial Economics*, Pages 419 – 436
- Peshkin (1990). *Qualitative Inquiry in Education*. Teachers College press. New York.
- Rigar, R and Mansouri, A (2003) .*The determination of Financial Structure: The incentive signaling approach*. The bell Journal of Economics.
- Ross ,M (1977). *The Capital Structure Puzzle*, National Bureau of Economic Research, working paper no.1393.
- Rubinstein, M (2006). *A History of the Theory of Investments*. Hoboken: John Wiley & Sons, Inc.
- Sathye, (2005) *Information Systems: Foundation of e-business*. New Jersey, Prentice-Hall Inc.

- Santomer, C and Seater, B (1997),The Impact of e- banking on the Profitability of Banks; A study of Pakistan Banks, *Journal of Public Administration and Governance* 13(1):960-989.
- SASRA, (2010); capital-adequacy-for-deposit-taking SACCOs.The Sacco Societies Regulatory Authority (SASRA). Supervision Report. Nairobi, Kenya.
- SASRA, (2014). The Sacco Societies Regulatory Authority (SASRA). Supervision Report. Nairobi, Kenya.
- Saunders, A., & Cornett, M.M., (2007). *Financial Markets and Institutions: An Introduction to a Risk Management Approach. 3rd Ed.* New Delhi.
- Sinkey, J. F. (1992). *Commercial Bank Financial Management.* Macmillan Perspective Publishing Company.
- Steel, C. (1998). Conflicting views on ITIL implementation. Proceedings of 1998 International Conference on Information Resources Management (pp. 18-20). Canada: University of Southern Queensland.
- Wilson, D Wall, L.D., & Peterson, D (2010) Banking holding company capital targets in the early 1990"s: the regulators versus the markets, *journal of banking and finance* 19 (6), 563-574.
- WOCCU. (2012). About World Council of Credit Unions. Retrieved from <http://www.WOCCU.org>.