



Effects of Debt Collection Practices and Credit Risk Governance on Profitability of Deposit Taking Sacco's In Nairobi County

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Abstract

Prudential lending procedures in financial institutions involve identifying high-risk loan applicants, modifying lending conditions such as collateral requirements, loan duration and monitoring subsequent repayments. Credit risk management is an emerging phenomenon that lies within SACCO's. Many researchers have attempted to unravel the benefits of the credit risk management. However, it has remained unclear for the SACCO's management on the effects of sound credit risk management practices among deposit taking SACCO's. The General objective of this study was to analyze the effects of credit risk management practices on the profitability of deposit taking SACCO's in Nairobi County. Specifically, to investigate the effect of debt collection practices on the profitability of deposit taking SACCO's in Nairobi and to establish the effect of credit risk governance on the profitability of deposit taking SACCO's in Nairobi. This study was carried out through a descriptive research method. The target population of this study was 80 respondents directly linked to credit management drawn from the 40 deposit taking SACCO's, in Nairobi county. Simple random sampling technique was used. The questionnaire was used to obtain and gather information from the respondents. Responses in the questionnaires was tabulated, coded and processed by use of a computer Statistical Package for Social Science (SPSS v.21) programme to analyze the data. The regression results revealed that debt collection practices and credit risk governance Practices had a positive and significant effect on the financial profitability of SACCOs in Nairobi. Based on the findings above the study concluded that debt collection practices and credit risk governance practices have a positive effect on the financial profitability of the SACCOs. The study recommended that management of SACCOs should

adopt debt collection practices and credit risk governance practices to enhance effective and efficient performance.

Keywords: *debt collection practices, credit risk governance practices, profitability*

1.1 Introduction

The credit function of financial institutions enhances the ability of investors to exploit desired profitable ventures. Credit creation is the main income generating activity of financial institutions (Kargi, 2011). The Sacco Society Regulatory Authority (SASRA) Supervision report (2012) defined credit risk as the possibility of losing the outstanding loan partially or totally, due to credit events (default risk). Credit risk is an internal determinant of bank profitability. The higher the exposure of a financial institution to credit risk, the higher the tendency of the institution to experience financial crunch and vice-versa. Financial profitability is the company's ability to generate new resources, from day- to- day operations, over a given period of time; profitability is measured by net income and cash from operations. A portfolio is a collection of investments held by an institution or a private individual (Apps, 1996). Risk management is the human activity which integrates recognition of risk, risk assessment, developing strategies to manage it, and mitigation of risk using managerial resources (Apps, 1996). Whereas Credit risk is the risk of loss due to a debtor's non-payment of a loan or other line of credit (either the principal or interest /coupon or both) (Campbell, 2007), default rate is the possibility that a borrower will default, by failing to repay principal and interest in a timely manner (Campbell, 2007). Credit risk management is defined as the identification, measurement, monitoring and control of risk arising from the possibility of default in loan repayments (Early, 1996; Coyle, 2000). Credit extended to borrowers may be at risk of default such that whereas banks extend credit on the understanding that borrowers will repay their loans, some borrowers usually default and as a result, banks income decrease due to the need to provision for the loans. Where a financial institution does not have an indication of what proportion of their borrowers will default, earnings will vary thus exposing the institutions to an additional risk of variability of their profits. Every financial institution bears a degree of risk when the institution lends to business and consumers and hence experiences some loan losses when certain borrowers fail to repay their loans as agreed. Principally, the credit risk of a financial institution is the possibility of loss arising from non-repayment of interest and the principle, or both, or non-realization of securities on the loans (Kithinji, 2010).

Credit risk management is very important to financial institutions as it is an integral part of the loan process. It maximizes an institution risk, adjusted risk rate of return by maintaining credit risk exposure with view to shielding the financial institution from the adverse effects of credit risk. Financial institutions are investing a lot of funds in credit risk management modeling (Campbell, 2007). Credit risk management is a structured approach to managing uncertainties through risk assessment, developing strategies to manage it and mitigation of risk using managerial resources. The strategies include transferring to another party, avoiding the risk, reducing the negative effects of the risk, and accepting some or all of the consequences of a particular risk (Chen, 2008).

Adequately managing credit risk in financial institutions (FIs) is critical for the survival and growth of the FIs. In the case of Savings and Credit Co-operative Societies (SACCO's), the issue of credit risk is of even greater concern because of the higher levels of perceived risks resulting from some of the characteristics of clients and business conditions that they find themselves in. SACCO's 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 SACCO's. 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).

According to SASRA Supervision report 2012 the growth and development of the Sacco industry from small welfare institutions to large, multiple-branches financial outfits is testimony to the importance of Sacco societies in provision of affordable financial services to Kenyans of all walks of life. The SACCO's have ensured that Kenyans regardless of their economic status can access savings and credit services in an ethical and dignified manner. The quasi banking services, now known as Front Office Services Activity (FOSA), was a response to the high demands that banks required for one to operate a bank account in the late 1990s that subsequently led to massive closure of bank branches in rural Kenya. Thanks to this innovation by SACCO's, the FOSA gave renewed hope to thousands of low income earners who were practically excluded from the banking system. Twenty years on and in spite of the large and increasingly sophisticated banking industry, Sacco industry remains resilient and dear to millions of Kenyans in financing their developmental needs (Saunders & Cornett, 2002).

In 2007 the International Co-operative Alliance (ICA) ranked the Co-operative Sector in Kenya number seven (7) in the world and one (1) in Africa in terms of number of enterprises, membership, capital and contribution to national economy. Today, Kenya has about 15,000 registered Co-operatives with over 3.5 million members and a \$2 billion loan portfolio. The study of credit risk management practices will help credit unions reduce their exposure to risks and enhance their ability to compete with other well established financial institutions like banks in the market as postulated by Iqbal & Mirakhor, 2010. Saunders & Cornett, 2005 concluded that reduction of SACCO exposure to credit risk will enhance achievement of its set objectives and ascertain its profitability. Therefore, it is necessary for SACCO'S to have in place comprehensive credit risk management practices and reporting process to identify, measure, monitor, manage, report and control credit risks. Efficient credit risk management practices have been vital in nurturing the phenomenal growth and sustainability in financial institutions.

Ileve, (2008) states that SACCO'S have tried to maintain relevance and market and have therefore been tempted to invest in information and technology and at the same time offer the latest hot products such as automatic teller machines and other tailor made loan products.

Unfortunately, they are unable to flex the financial muscle needed to come up with these products. With the fierce competition experienced from banks and other financial institutions, they will have to adapt to prudential practices in order to survive. Previously these products were viewed as pushing the organization beyond its means but with the playing field being tilted in favour of banks and the other financial institutions, it may be necessary to look into this direction in order to sustain SACCO's (Saunders & Cornett, 2002).

However, the mere perception of high credit risk can dissuade credit unions from entering a particular market segment whereas the major contributing factor to that perception may be due to lack of adequate credit risk evaluation and management practices. In addition, if the practices are identified and the risk controllable, management can take certain calculated steps to improve its potential for success. Failure to control credit risk may lead to firms' insolvency, significant drain on capital and net worth that they adversely affect firms' growth prospect and ability to compete with others (Saunders & Cornett, 2002).

Credit risk management practices is an issue of concern today and there is need to develop improved processes and systems to deliver better visibility into future profitability of the credit unions. According to Saunders and Cornett (2002), when a good selection strategy for risk monitoring is adopted this implies good pricing of the products in line with the estimated risk which greatly affect their profitability. Wambugu (2008) who studied credit risk practices by micro finance institutions (MFIs) in Kenya found that most MFIs had clearly defined credit policies which will be reviewed annually and goals which will be formulated by credit committees and credit control department. Ngare (2008) on the other hand did a survey of credit risk management practices by financial institutions in Kenya. 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 SACCO'S in Kenya remain relatively high. For example the Amount of defaulted loans for Kenyan SACCO'S rose from Ksh.5 Billion in the year 2007 to over with Ksh10 Billion in 2012 (MOCD,2009). Various issues such as the capital adequacy levels in the SACCO system, the role of rating agencies in financial regulation and the fair-value assessment of SACCO assets are the most debated challenges. In response to these crises, significant reformations have been carried out in the SACCO regulatory system. However, issues such as lack of risk sensitive measures of the creditworthiness and weak incentives for SACCO'S to strengthen risk management system emerge as shortcomings (Porvali, 2011).

1.2 Statement of the Problem

The diversification of financial products and services by the SACCO's has to be consumed with some caution and prudence as this involves a great deal of risk. According to the SACCO supervision report for 2011, loans disbursed to members accounted to three quarters of the total assets. The quality of loans has therefore been a challenge as the average gross non-performing loans (NPL) stood at 9.6% for the licensed SACCO'S contrary to the Sasra prudential guidelines which provide that the level of non-performing debts should not exceed 5%. According to World Council of Credit Unions (WOCCU) 2008 the financial discipline of provisioning for loan losses has not been part of the SACCO development since

SACCO'S have relied on the check-off system of automatic salary deductions for loan repayment for decades. Many SACCO'S are faced with weak credit management systems, inefficient management information systems, huge portfolio of nonperforming loans, non compliance to SASRA capital adequacy requirements and ineffective liquidity management systems among others. The SACCO'S have extremely low net institutional capital and do not meet the WOCCU prudential standard of excellence of a minimum of 10% net institutional capital. The researcher sought to unravel these challenges by assessing the level of effects of the practices with a view of enhancing services delivery and general management.

Locally studies have been done on effects of credit risk management, among them Silikhe (2008) on credit risk management in microfinance institutions in Kenya found out that despite the fact that microfinance institutions have put in place strict measures to credit risk management loan recovery is still a challenge to majority of the institutions. Kimeu (2008) conducted a survey of credit risk management techniques of unsecured bank loans. The fundamental question is how significant are the credit risk management practices on the financial profitability of SACCO'S and by extension their survival in the future. Kibui. & Moronge, (2014) Therefore this study sought to address current challenges by studying the effects of debt collection practices and credit risk governance on Profitability of Deposit Taking Sacco's In Nairobi County.

1.3 Research Objectives

- i. To investigate the effect of debt collection practices on the profitability of deposit taking SACCO's in Nairobi.
- ii. To establish the effect of credit risk governance on the profitability of deposit taking SACCO's in Nairobi.

2.0 Literature Review

2.1 Theoretical Literature

The study presented various theories that informed the variables underlined in the current study. These theories included portfolio theory of investment and Portfolio Theory of Investment theory.

2.1.1 Portfolio Theory of Investment

According to Reilly & Brown, (2011), Portfolios are an effective way of increasing returns while decreasing risk in investment. For this reason, portfolio selection strategies have received quite some attention in financial literature. The modern portfolio theory introduces approximate 'mean-variance' analysis to simplify the portfolio selection problem. Markowitz (1959) attempted to quantify risk and quantitatively demonstrate why and how portfolio diversification works to reduce risk for investors. The 'risk' of a portfolio is quantified as a standard deviation of return from period to period, and the portfolio selection problem is reduced to computing an 'efficient' portfolio, that is, one that minimizes the risk for a fixed level of return in a single period.

According to the portfolio theory, the larger the expected return the better the investment, and the smaller the standard deviation of the return the more attractive the investment.

Furthermore, the theory shows that we can reduce the standard deviation of the return or risk by combining anti-covariant securities. However, each asset class generally has different levels of return and risk and also behaves uniquely so that one asset may be increasing in value as another is decreasing or at least not increasing as much, and vice versa. This theory, however, has a shortcoming; it cannot allow both more and less risk averse investors to find their optimal portfolio, a problem surmounted by the capital asset pricing model (CAPM) (Sharpe, 1964). The CAPM, associated with Sharpe (1964), Lintner (1965) and Black (1972) explains the risk of a particular asset or portfolio using the excess return on the market portfolio (Black, 1971). The model suggests that investors should hold diversified portfolios, and predicts that investors will hold some fraction of the market portfolio. Furthermore, an important implication of the CAPM, also referred to as efficient markets hypothesis, is that investors lacking special investment knowledge would be well advised to buy and hold diversified portfolios (Black, 1971).

The CAPM shows that investors require high levels of expected returns to compensate them for high expected risk. However, it is now widely recognized that in the presence of informational asymmetries and contract enforcement problems, it is not necessarily true that the banking system will allocate resources to projects or firms with the highest returns. Empirical evidence based on mean-variance portfolio selection, simulation analysis, and out of sample portfolio profitability suggests that correcting for estimation error, particularly in the means, can substantially improve investment profitability (for example Jobson and Korkie, 1979; Jorion, (1985, 1991).

Despite attempts to verify or refute the CAPM, there is no consensus on its legitimacy. The modeling approach employed in this paper is therefore that of the portfolio theory. This paper therefore assumes that deposits are one of the items in a bank's portfolio. A bank's portfolio consists of both assets and liabilities. It is the bank's managers' job to construct a portfolio to yield a high return and at the same time reduce the risk (standard deviation) of such a portfolio.

2.1.2 Adverse Selection Theory

In the adverse selection model theory developed by Pagano and Jappelli (1993), information sharing improves the pool of borrowers, decreases defaults and reduces interest rates. It can also lead to an expansion of lending. When banks are local monopolists, however, in some cases lending diminishes, because the exchange of information increases the banks' possibility of price discrimination between safe and risky borrowers and the increase in lending to safe borrowers does not fully compensate for the reduction in lending to the risky types. When credit markets are contestable, lending activity is more likely to increase: competition limits the banks' ability to extract rents from their customers, and information sharing increases banking competition (Jappelli and Pagano, 2002).

This model further implies that that information sharing should reduce default rates and interest rates and increase lending, either because credit bureaus foster competition by reducing informational rents or because they discipline borrowers. In extreme cases, information exchange may make lending feasible in markets where no credit would be extended otherwise. In these models, whenever banks choose to communicate they bring

about a Pareto improvement by raising customers' welfare along with their own profits (Pagano, 2001).

2.2 Empirical Literature Review

2.2.1 Debt Collection Practices and Profitability

Nelson, (2009) conducted a study on financial institution crises in Kenya: cause and remedies'. The statement of the problem for the study is many financial institutions that collapsed in Kenya since 1986 failed due to non-performing loans. This study investigated the causes of nonperforming loans, the actions that financial institution's managers have taken to mitigate that problem and the level of success of such actions. Using a sample of 30 managers selected from the ten largest financial institutions, the study found that national economic downturn was perceived as the most important external factor. Customer failure to disclose vital information during the loan application process was considered to be the main customer specific factor. The study further found that lack of an aggressive debt collection policy was perceived as the main bank specific factor, contributing to the non performing debt problem in Kenya.

Shanmugan and Bourke (1992), in their study found that close and informal relationship between MFIs and borrowers help in monitoring and early detection of problems that may arise in non-repayment of loans that finally lead to credit risk. In addition, cooperation and coordination among various agencies that provide additional support to borrowers may help them success in risk management in their business. Method used is that quantitative research method.

Laurentis and Mattei (2004) conducted research on Lessors' recovery risk management capability and found that the development of modern reliable systems of risk management can enhance even more those management capabilities. This means that credit institutions should invest significant resources in projects aimed at correctly implementing rating systems and risk models, and highlights once more the importance of these tools well beyond the scope of regulatory compliance. The research method used is that mixed research method.

2.2.2 Credit Risk Governance Practices and profitability

Kibet (2008) concluded that internal audit function played a role in corporate governance. The limitations of the study were time constraints, restriction to state owned corporations and having to make prior arrangement in order to meet the heads of IADs. Recommendations of further study were effectiveness and contribution of internal audit in promoting corporate governance for companies listed in the NSE. Additionally, a study on the influence of internal audit and audit committee on financial reporting quality was recommended

Nagarajan (2001) in his study of risk management for credit unions in Mozambique found that risk management is a dynamic process that could ideally be developed during normal times and tested at the wake of risk. It requires careful planning and commitment on part of all stakeholders. It is encouraging to note that it's possible to minimize risks related losses through diligent management of portfolio and cash-flow, by building robust institutional

infrastructure with skilled human resources and inculcating client discipline, through effective coordination of stakeholders improving management efficiency of the credit unions.

Vassileios (2011) noted that the global credit crisis that began in summer 2007 has raised a number of significant issues concerning corporate governance and risk management practices. Banking sector worldwide has been severely challenged in an extreme financial crisis, causing some to fail and others to be taken into various degrees of national ownership. This paper analyzes the role of risk management and corporate governance in the outburst of the financial crisis. The present study analyzes corporate governance as a cause of the credit crisis, its relation with failures and weaknesses in risk management practices and routines in order to reveal the extent to which corporate governance did not serve its purpose permitting excessive risk in a number of major financial institutions.

2.3 Conceptual Framework

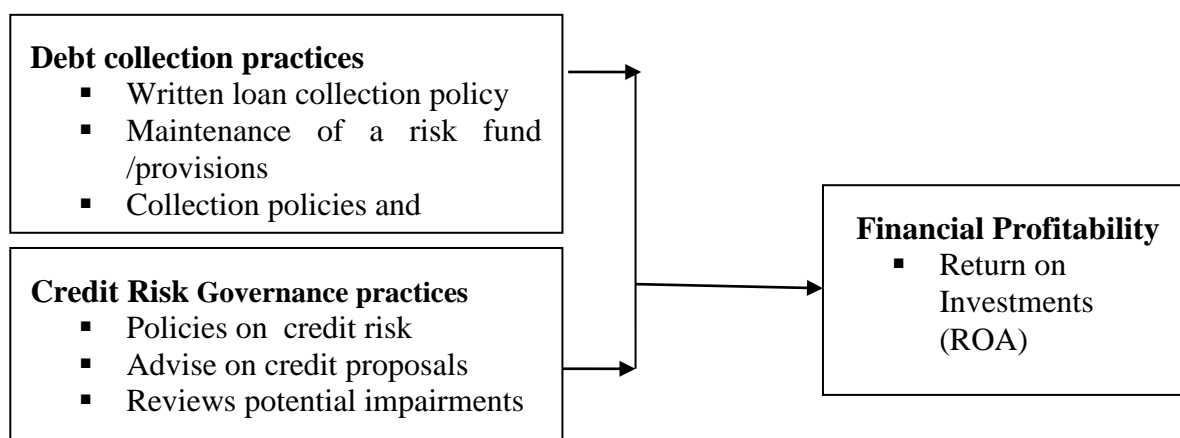


Figure 1: Conceptual Framework

3.0 Research Methodology

Descriptive study design was used as they are concerned with describing the characteristics of a particular individual, or of a group. The target population of this study was 80 respondents (2 respondents per SACCO) directly linked to credit management drawn from the 40 deposit taking SACCO's, in Nairobi (SASRA 2015). Primary data was collected through the administration of the questionnaires. Validity and reliability tests were conducted. Data analysis was conducted using descriptive and inferential statistics. The multivariate model was as follows;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \mu$$

Where; Y = Financial profitability

Financial profitability was measured using secondary data on ROA.

X₁ = Debt collection practices

Debt collection practices were measured by seven statements which are based on a Likert scale. The mean scores for all statements were used

X_2 = Credit risk governance

Credit governance practices were measured by five statements. The mean scores for all statements were used

4.0 Analysis, Results and Discussions

4.1 Response Rate

The number of questionnaires that were administered was 80. A total of 75 questionnaires were properly filled and returned. This represented an overall successful response rate of 93.75% as shown on Table 1. According to Mugenda and Mugenda (2003) and also Kothari (2004) a response rate of above 50% is adequate for a descriptive study. Babbie (2004) also asserted that return rates of above 50% are acceptable to analyze and publish, 60% is good and 70% is very good.

Based on these assertions from renowned scholars, 93.75% response rate is very good for the study.

Table 1: Response Rate

Response	Frequency	Percent
Returned	75	92.75%
Unreturned	5	7.25%
Total	80	100%

4.2 Descriptive statistics

4.2.1 Debt collection practices

The first objective of the study was to investigate the effect of debt collection practices on the profitability of deposit taking SACCO's in Nairobi. The results are presented in table 2 show 70.6% (29.3%+41.6%) of the respondents agreed that there exists a written loan collection policy. Further results found that collection policies and procedures apply equally to all borrowers regardless of their professional or social standing as indicated by 69.3% of the respondents.

Table 2: Debt collection practices

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std Dev
There exists a written loan collection policy	6.70%	18.70%	4.00%	29.30%	41.30%	3.8	1.336
Collection policies and procedures apply equally to all borrowers regardless of their professional or social standing.	12.00%	10.70%	8.00%	21.30%	48.00%	3.83	1.437
A loan is always marked for closer attention, even if not delinquent, if there is reason to believe future payments may be in doubt.	6.70%	4.00%	16.00%	34.70%	38.70%	3.95	1.15
A loan is always considered delinquent when it is one day past due and payment has not been made	6.70%	8.00%	16.00%	26.70%	42.70%	3.91	1.232
All loans are always subject to penalties after a specified number of days of delinquency	12.00%	4.00%	9.30%	32.00%	42.70%	3.89	1.331
Average						3.87	1.29

Results also showed that 73.4% of the respondents agreed that a loan is always marked for closer attention, even if not delinquent, if there is reason to believe future payments may be in doubt. In addition, results show that 69.4% of the respondents agreed that a loan is always considered delinquent when it is one day past due and payment has not been made. Further, 74.7% of the respondents agreed that all loans are always subject to penalties after a specified number of days of delinquency. These results imply that debt collection practices influences the profitability of deposit taking SACCO's in Nairobi. The average likert scale of the responses is 3.87 which indicates that majority of the respondents agreed to the statements. The standard deviation was 1.29 which indicates that the responses were varied.

4.2.2 Credit risk governance practices

The forth objective of the study was to establish the effect of credit risk governance on the profitability of deposit taking SACCO's in Nairobi. Results in table 3 show that 81.4%(34.7%+46.7%) of the respondents agreed that the board credit risk committee reviews and recommends for board approval on an annual basis the risk tolerance and other material credit risk policies for the banks, 69.4% of the respondents agreed that the board Credit risk committee reviews and recommend for board approval on an annual basis the credit Risk Governance framework, 68.0 % of the respondents agreed that The board credit risk committee monitors compliance with the risk tolerance and credit risk governance Framework at least quarterly through the receipt of periodic reports and provide the board of directors with periodic compliance updates.69.3% indicated that the board credit risk committee considers any prospective breaches or exceptions to the portfolio management limits and review management exposure reduction plans and/or ratify an excess limit request on an ongoing basis, while 85.4% of the respondents indicated that the board Credit risk committee reviews and recommend for Board approval on an as-needed basis management

proposals to introduce new risk types, product lines and services that involve credit risk outside the scope of existing businesses.

On an average likert scale the responses had an overall mean of 3.97 which indicated that the respondents agreed to the majority of the questions asked. The standard deviation of 1.04 indicates that the responses were varied. The results imply that credit risk governance influence the profitability of deposit taking SACCO's.

Table 3: Credit risk governance practices

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std Dev
The board Credit risk committee reviews and recommends for Board approval on an annual basis the Risk Tolerance and other material credit risk policies for the banks	4.00%	4.00%	10.70%	34.70%	46.70%	4.16	1.04
The board Credit risk committee reviews and recommend for board approval on an annual basis the credit Risk Governance framework	4.00%	9.30%	17.30%	42.70%	26.70%	3.79	1.069
The board credit risk committee monitors compliance with the Risk Tolerance and credit risk governance Framework at least quarterly through the receipt of periodic reports and provide the board of directors with periodic compliance updates.	4.00%	10.70%	17.30%	26.70%	41.30%	3.91	1.176
The board credit risk committee considers any prospective breaches or exceptions to the portfolio management limits and review management exposure reduction plans and/or ratify an excess limit request on an ongoing basis	8.00%	10.70%	12.00%	33.30%	36.00%	3.79	1.266
The board Credit risk committee reviews and recommend for Board approval on an as-needed basis management proposals to introduce new risk types, product lines and services that involve credit risk outside the scope of existing businesses	0.00%	0.00%	14.70%	46.70%	38.70%	4.24	0.694
Average						3.97	1.04

4.3 Correlation Analysis

Table 4 presents the results of the correlation analysis. The results revealed that debt collection practices and profitability were positively and significantly related ($r=0.168$, $p=0.015$). Similarly, results showed that credit risk governance practices and profitability

were positively and significantly related ($r=0.348$, $p=0.002$). This implies that an increase in any unit of the variables leads to an increase in the profit.

Table 4: Correlation Matrix

		profitability	Debt collection practices	Credit risk governance practices
profitability	Pearson Correlation	1.000		
	Sig. (2-tailed)			
Debt collection practices	Pearson Correlation	0.168**	1.000	
	Sig. (2-tailed)	0.015		
Credit risk governance practices	Pearson Correlation	.348**	.719**	1.000
	Sig. (2-tailed)	0.002	0.000	

** Correlation is significant at the 0.01 level (2-tailed).
 * Correlation is significant at the 0.05 level (2-tailed).

4.4 Regression Analysis

The results presented in table 5 present the fitness of model used of the regression model in explaining the study phenomena debt collection practices and credit risk governance practices were found to be satisfactory variables in explaining profitability. This is supported by coefficient of determination also known as the R square of 26.0%. This means that debt collection practices and credit risk governance practices explain 26.0% of the variations in the dependent variable which is profitability of Saccos. This results further means that the model applied to link the relationship of the variables was satisfactory.

Table 5: Model Fitness

Indicator	Coefficient
R	0.510
R Square	0.260
Adjusted R Square	0.218
Std. Error of the Estimate	0.436

In statistics significance testing the p-value indicates the level of relation of the independent variable to the dependent variable. If the significance number found is less than the critical value also known as the probability value (p) which is statistically set at 0.05, then the conclusion would be that the model is significant in explaining the relationship; else the model would be regarded as non-significant.

Table 6 provides the results on the analysis of the variance (ANOVA). The results indicate that the overall model was statistically significant. Further, the results imply that the independent variables are good predictors of implementation of youth development projects. This was supported by an F statistic of 6.144 and the reported p value 0.000 which was less than the conventional probability of 0.05 significance level.

Table 6: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.663	4	1.166	6.144	0.000
Residual	13.283	70	0.19		
Total	17.947	74			

Regression of coefficients results in table 7 shows that debt collection practices and profitability were positively and significantly related ($r=0.570$, $p=0.006$). Similarly, results showed that credit risk governance practices and profitability were positively and significantly related ($r=0.201$, $p=0.010$).

Table 7: Regression of Coefficients

Variable	B	Std. Error	t	Sig.
(Constant)	2.414	0.484	4.985	0.000
Debt collection practices	0.570	0.098	0.580	0.006
Credit risk governance	0.201	0.102	0.009	0.010

5.0 Conclusions

Based on the findings above the study concluded that debt collection practices and credit risk governance practices have a positive effect on the financial profitability of the SACCOs.

In addition, the study concluded that effective credit risk management policy maximize a financial sector's risk adjusted rate of return by maintaining credit exposure within acceptable limits.

6.0 Recommendations

The following recommendations based on the study findings are suggested to help boost the profitability of Saccos in Kenya. The study recommended that management of SACCOs should adopt debt collection practices and credit risk governance practices to enhance effective and efficient performance.

The study recommended that there is need to manage credit risk in the entire portfolio as well as the risk in individual credits transactions. It also requires a greater investment of management focus, analytical skills, and technology. The credit risk question should be addressed strategically and deemed to be a continuous phenomenon so as to improve on the profitability of Saccos.

7.0 References

- Apps. R, (1996). The Monetary and Financial System. London, Bonkers Books Ltd, 3rd Edition.
- Black F. (1971): Implications of the random walk hypothesis for portfolio management. *Financial Analysts Journal* 27:16–22.
- Black, F. (1972): Capital market equilibrium with restricted borrowing. *Journal of Business* 45: 3–18.
- Campbell, A. (2007). Bank insolvency and the problem of nonperforming loans. *Journal of Banking Regulation*, 9(1), 25-45.
- Coyle B. (2000), Framework for Credit Risk Management; Chartered Institute of Bankers, United Kingdom
- Early J.S. (1966). Problems in the Measurement of the Quality of Credit. Proceedings of the Business and Economic Statistics Section of the American Association, 202-217
- Jappelli, T., & Pagano, M. (2002). Information sharing, lending and defaults: Cross-country evidence. *Journal of Banking & Finance*, 26(10), 2017-2045.
- Jobson, J.D. and B. Korkie (1980). Estimation for Markowitz efficient portfolios. *Journal of the American Statistical Association* 75:544–554.
- Jobson, J.D. and B. Korkie (1981). Putting Markowitz theory to work. *Journal of Portfolio Management* 7:70–74.
- Jobson, J.D., B. Korkie, V. Ratti (1979). Improved estimation for Markowitz portfolios using James-Stein type estimators. 'Proceedings of the American Statistical Association, Business and Economics Statistics Section 41:279–284.
- Jorion, P. (1991). Bayesian and CAPM estimators of the means: Implications for portfolio selection. *Journal of Banking and Finance* 15:717–727.

- Kibui, N. & Moronge, M. (2014). Effects of credit risk management on financial profitability of SACCO'S: A case study of Harambee SACCO. *International Journal of Social Sciences and Project Planning Management*, 1 (3), 157-172.
- Kimeu, T. K. (2008). *A survey of credit risk management techniques of unsecured bank loans of commercial banks in Kenya* (Doctoral dissertation).
- Kithinji, A. M. (2010) Credit Risk Management and Profitability of Commercial Banks In Kenya. A published Masters Thesis university of Nairobi
- Laurentis, R. & Mattei, B. (2004). Financial development and the transmission of monetary shocks Research Report, University of Groningen, Research Institute management approach (4th edition). McGraw Hill, New York.
- Markowitz, H.M. (1959). Portfolio Selection. New York: John Wiley and Sons
- Nagarajan, S. (2001). Microfinance in Mozambique and the Caribbean, Sustainable Development Department Best Practice Papers Series. *Inter-American Development Bank*. Washington, D.C
- Ngare, E. M. (2008). A Survey of Credit Risk Management Practices by Commercial Banks in Kenya. *Unpublished MBA research project* University of Nairobi.
- Porvali, H. (ed) (2013) The Development Of Cooperatives and Other Rural Organizations, Agriculture and Rural Development Series, No.8, The World Bank, Washington, D.C.
- SASRA, (2013). Deposit taking SACCO Societies Licensed by the Sacco Regulatory Authority
- Saunders M., Thorn H. A., Lewis P. (2007). Research Methods for business student 4th Edition, London, Pitman Publishers Ltd.
- Shanmugan, B. & Bourke, P (1992). Risk and Financial Management: Mathematical and Computational Methods. *International Journal of Bank Marketing*, 10 (3), 24-33

Wambugu, E. M. (2008). Credit risk management practices in savings and credit cooperative societies (SACCO's) offering Front Office Service Activity (FOSA) in Kenya (Doctoral dissertation, University of Nairobi, Kenya).

Kothari, C. (2004). *Research Methodology: Methods & Techniques*, 2nd edition. New age International Publishers, New Delhi, India

Mugenda, O. M., and Mugenda, A. G. (2008). *Research Methods: Quantitative and Qualitative Approaches*, Acts Press, Nairobi-Kenya