



**EFFECTS OF SELECTED ECONOMIC GROWTH INDICATORS ON THE
FINANCIAL PERFORMANCE OF SACCO SOCIETIES IN KENYA**

(A Case Study of Kenya Achievas Sacco Society Limited)

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Abstract

The purpose of this study was therefore to assess the effects of economic growth indicators on the financial performance of the SACCO's in Kenya taking Kenya Achievas Sacco Society limited as a case study. Four theories that were adopted for the research were; Irvin Fisher's theory on real interest rates, Bentil Ohlin's loanable Funds Theory, John Maynard Keynes' classical theory of interest rate and Keynesian Theory of inflation. The research found out that there was strong positive relationship between economic growth indicators with financial performance of SACCOs in Kenya. It was also discovered that high inflation rates and high interest rates had strong effect on financial performance of SACCOs in Kenya since they affected the members savings and borrowing for investments from SACCOs.

Keywords: Effects, Growth Indicators, Financial Performance, Savings and Credit Co-operative (SACCO)

1. Introduction

The pioneers of modern cooperation emerged in working class environments in European Industrial cities of the 19th Century. The first Co-operative Society in the world was formed by Rochdale Pioneers in 1844 in Rochdale village, England. This was the time when Britain was undergoing the industrial revolution. In 1860s, Agricultural cooperatives emerged which enabled families of farmers and livestock raisers to organize their own supply systems of agricultural inputs and market their products and no longer depended on merchants and businessmen in the cities.

In Africa, the idea was brought by a Roman Catholic priest, in Jirapa, a town in Ghana, in 1955. Father McNulty helped the Jirapa villagers to form a Savings and Credit Cooperative. The cooperative assisted the members to address their financial problems which they couldn't individually. The first entrants into SACCO community include Ghana, Uganda, Nigeria, Tanzania and Kenya. Most of the Non-English speaking nations in Africa started appreciating SACCOs in 1960s, with major influx into SACCO community in 1970s (Mwakajumilo, 2011). SACCOs in Africa are still crawling as they are newcomers, among those offering savings and credit. In fact they small share in providing financial services, their market share is insignificant when compare to other player in financial service provision (Mwakajumilo, 2011). There are 28 countries in Africa that have established SACCOs (Savings Plus, 2010).

In Kenya, the first Cooperative Society was Lumbwa Co-operative Society at kipkelion, formed in 1908 by the European Farmers with the main objective of supporting agricultural activities and products to take advantage of economies of scale (Gamba and komo, 2012). In 1930, Kenya Farmers Association was registered as a Co-operative Society to take over the role of supply of farm inputs played by Lumbwa Co-operative Society (Gardeklint, 2009). At independence in 1963, the number of co-operative societies had grown to 1,030 with 655 active SACCOs with a total membership of 355,000 (Gardeklint, 2009). In 1965, the Africa Confederation of Co-operative Society Savings and Credit Association (ACCOSSA) was formed in Nairobi, Kenya as a Pan African body. It was formed to promote the SACCO Society principles, provide a forum for discussion, offer insurance to SACCO Society members on life savings and loan protection and educate affiliate members on a wide variety of credit union issues (Ng'ombe&Mikwamba, 2004). Accordingly, steps were taken by the Government which saw the rapid growth and expansion of the SACCO Society movement in the country. These SACCOs offered a range of financial services, most significantly loans against members share capital (Gardeklint, 2009).

SACCOs in Kenya are currently among the leading sources of the cooperative credit for socio-economic development (Alila and Obado, 1990). Notably, after independence, the Government of Kenya recognized cooperatives as suitable vehicles with appropriate framework to achieve their aspirations and participate in the economic development of the nation. In fact, the Kenyan cooperative movement is considered by the government as one of the economic pillars of the nation. More precisely, the co-operative movement contributes over 30 per cent of the country's national savings (Ndung'u, 2010; Republic of Kenya (RoK), 2008). By the year 2010, Kenya had over 5,000 registered SACCOs with a membership of about 7 million. These SACCO societies had mobilized savings of over Ksh.200billion (Ndung'u, 2010). It is also prudent to note that on average, SACCOs have 25 million shillings of deposits in 400 accounts. Three quarters of their members may have borrowed an average of Kshs 64,000. To service these clients, rural as well as urban SACCOs have opened Front Office Service Activities (FOSA) to serve as banks for their members. FOSA is also one of the most profitable income-generating business activities for SACCOs (KUSCCO, 2008).

2. Statement of the Problem

Lending and savings mobilization is the main business of financial institutions and loan interest is generally the main source of revenue for SACCOs (Kwambai and Wandera, 2013). Many SACCOs have collapsed in Kenya since 1986 due to non-performing loans, reduced savings culture and high interest rates charged by financial institutions and effects of global inflation. This high inflation rate has a sustained effect of increasing the general price level of goods and services in an economy over a period of time. Consequently, inflation reflects a reduction in the purchasing power with an overall effect of discouraging savings and investments. The trickledown effect is reduced SACCO activities by its members. Therefore, the study seeks to assess the effects of economic growth indicators on the financial performance of SACCOs in Kenya.

3. Objectives of the Study

General objectives

The main objective of the study was to examine the effects of economic growth indicators on the financial performance of SACCOs in Kenya, with a case study of Kenya Achievas Sacco society limited.

Specific objectives

- i. To determine the influence of inflation rates as an indicator of economic growth on financial performance.
- ii. To examine how loan demanded as an indicator of Economic growth influence the financial performance.
- iii. To investigate how levels of savings as an indicator of economic growth affect the financial performance.
- iv. To assess whether high interest rates as an indicator of economic growth affect the financial performance.

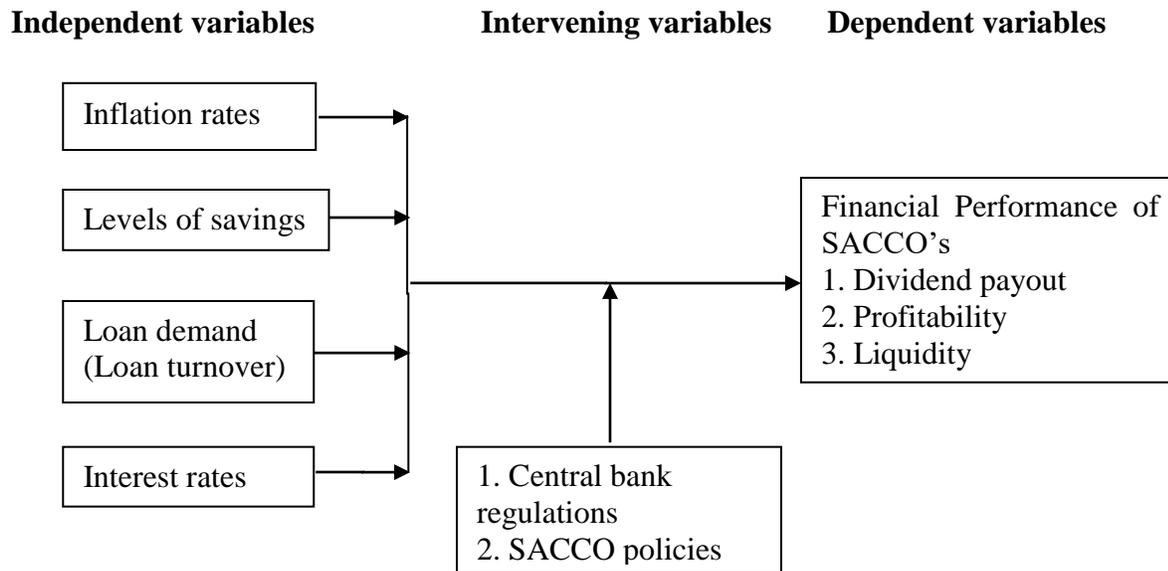


Fig1: Conceptual Framework

4. Research Methodology

A descriptive research design was applied. The target population for this study was 120 management staff and employees of Kenya Achievas Sacco Society limited registered in Nyamache Sub County of Kisii County, Kenya. Census technique was used to collect data from all the 120 respondents and data was collected using questionnaires.

DISCUSSION OF FINDINGS

5. Effects of High Inflation rates on financial performance of SACCOs in Kenya.

Inflation is a situation where there are persisted price increases of goods and services in the economy.

Table 1: Effects of High Inflation Rates on financial performance of Sacco's in Kenya

| Correlations | | | | | | | |
|---|---------------------|--|--|---|--------------------------------------|--------------------------------|-------------------------------|
| | | Reduction in services members seek from SACCOs | Revenue reserves for the SACCO is greatly affected | Strong Mechanisms to deal with high inflation | Leads to Reduction in loans turnover | Detection of inflation in time | Leads to high cost of capital |
| Reduction in services members seek from SACCOs | Pearson Correlation | 1 | | | | | |
| Revenue reserves for the SACCO is greatly affected | Pearson Correlation | .454** | 1 | | | | |
| Strong Mechanisms to deal with high inflation | Pearson Correlation | .507** | .638** | 1 | | | |
| Leads to Reduction in loans turnover | Pearson Correlation | .299** | .458** | .511** | 1 | | |
| Detection of inflation in time | Pearson Correlation | .456** | .406** | .512** | .214* | 1 | |
| Leads to high cost of capital | Pearson Correlation | .357** | .620** | .449** | .349** | .288** | 1 |
| **. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed). Number of respondents is 100 | | | | | | | |

Table 1 reveals that high inflation rates affect the activities of SACCOs in Kenya especially Kenya Achievas Sacco Society Limited. The study found out that there was a significant positive relationship between high inflation rates and reduction in services members seek from SACCOs. It was clear, that services members seek from the Sacco during high inflation rates reduces since it had a significant positive relationship with revenue turnover and mechanisms the Sacco set to reduce effect of high inflation at $r = +.4$ and $r = +.5$ at significant level of zero. This might be true because during high inflation rates most members might not be able to borrow since the interest rates might be so high in way of cushioning the high inflation rates. This study agrees

with findings of (Mankiw, 2002). The study posited that high inflation rates had effects of ensuring that central banks adjust real interest rates upwards and encourages investment in non-monetary capital projects to lower inflation rates in the economy. This means that economic growth of SACCOs may be affected negatively; hence low level of activities carried out with members and the Sacco itself.

It was also discovered that the cost of acquiring loans increased greatly during high inflation rates since it had a positive significant relationship of $r = +.6$ at sig. of Zero meaning that as the inflation increases, the cost of obtaining loans also increases making capital expensive for SACCOs hence they opt to reserve their revenue to use for the development in the Sacco's. This is evident from the study of (Choi et al, 1996) who found out that the cost of doing business increases as the inflation rates increases in the economy, hence it may lower the development of the Sacco as it was stated by Bett (2006). This did not conquer with Barro (1995) that SACCOs are able to detect inflation in time so that they are able to control it, since it had weak positive weak relationship at sig. of 0.04 which is slightly below the normal set stand of $r = .05$. It is therefore clear from this study that high inflation rates affects financial performance of SACCOs in Kenya. This is because the cost of capital increases and members are not able work with the SACCOs normally.

Table 2: Reliability test for effects of high inflation rates on financial performance of Sacco's.

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| 0.848 | 0.849 | 7 |

The study revealed that the Cronbach's Alpha Based on Standardized Items for internal consistency was 0.849, which was mentioned by (George and Mallery, 2003) and (Tavakol and Dennick, 2011) that the closer alpha coefficient is to 1.0 the greater the internal consistency of the items in the Likert scale. Given the study had 0.849 from the thumb rule: " ≥ 9 = Excellent, ≥ 8 = Good, ≥ 7 = Acceptable, ≥ 6 = Questionable, ≥ 5 = Poor and ≤ 5 = Unacceptable". This means the variables that were measuring the extent to which high inflation rates as an indicator for economic growth were excellent measure for effects of high inflation rates on financial performance of Kenya Achievas SACCO society limited in Kenya.

Table 3: Item-Total test for reliability of high inflation rates on financial performance SACCOs in Kenya.

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| Reduction in SACCO services due to High inflation rates | 19.09 | 38.790 | .546 | .335 | .836 |
| Reduction in liquidity transactions due to High inflation rates | 19.24 | 35.093 | .650 | .495 | .821 |
| High inflation rates affects revenue reserves | 19.52 | 34.232 | .733 | .571 | .807 |
| Mechanisms of dealing with high inflation rates | 19.63 | 36.134 | .743 | .586 | .809 |
| Reduction in loan turnover due to high inflation rates | 19.70 | 38.596 | .484 | .300 | .845 |
| SACCOs are able to detect inflation in time | 19.27 | 38.765 | .491 | .326 | .844 |
| Leads to high cost of capital | 19.75 | 36.977 | .618 | .496 | .826 |

From the above table 3, it was established that the internal consistency of each item was within the range of acceptability since all the items used to test reliability lying between alpha of 0.807 and 0.845. The study discovered that reduction in SACCO services accessed by members was as result of high inflation rates which also led to reduction in liquidity transactions which in turn affected the revenue reserves of the SACCO. But also if the SACCO would have mechanisms of dealing with high inflation rates it would help them to discover inflation in time as this will assist the performance of the SACCO. But due to high rates of inflation experienced by SACCOs their loan turnover always reduces as it was evidenced Fisher (1993) who found out that negative associations between inflation and economic growth. He argued that inflation impedes the efficient allocation of resources by obscuring the signaling role of relative price changes; the most important guide to efficient economic decision, making reduction in services members seek from SACCOs, revenue reserves for the SACCO is greatly affected. Therefore, strong mechanisms to deal with high inflation leads to reduction in loans turnover, whereas detection of inflation in time leads to high cost of capital.

6 Effects of High Savings rate on financial performance for SACCOs in Kenya.

Table 4: Effects of Savings levels on financial performance of SACCOs in Kenya

Correlations

| | | Savings increase improves liquidity | Savings are done regularly before borrowing | SACCO has policy on savings | Members are motivated to save more | Members are given bonuses to save more | Prudent management of savings | Diversification in savings for members | members savings subject to competitive opportunities in the market | members savings earn interest in the SACCO |
|---|---------------------|-------------------------------------|---|-----------------------------|------------------------------------|--|-------------------------------|--|--|--|
| Increase in savings improves liquidity | Pearson Correlation | 1 | .336** | .305** | .459** | .214* | .233* | .261** | .386** | .420** |
| Savings are done regularly before borrowing | Pearson Correlation | .336** | 1 | .269** | .203* | .264** | .230* | .430** | .261** | .449** |
| SACCO has policy on savings | Pearson Correlation | .305** | .269** | 1 | .690** | .184 | .470** | .432** | .466** | .496** |
| Members are motivated to save more | Pearson Correlation | .459** | .203* | .690** | 1 | .469** | .550** | .626** | .726** | .425** |
| Members are given bonuses to save more | Pearson Correlation | .214* | .264** | .184 | .469** | 1 | .255* | .543** | .560** | .542** |
| Prudent management of savings | Pearson Correlation | .233* | .230* | .470** | .550** | .255* | 1 | .529** | .700** | .443** |
| Diversification of savings for members | Pearson Correlation | .261** | .430** | .432** | .626** | .543** | .529** | 1 | .660** | .637** |
| members savings subject of competition | Pearson Correlation | .386** | .261** | .466** | .726** | .560** | .700** | .660** | 1 | .514** |

| | | | | | | | | | | |
|--|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|---|
| ve opportunities in the market | | | | | | | | | | |
| members savings earn interest in the SACCO | Pearson Correlation | .420** | .449** | .496** | .425** | .542** | .443** | .637** | .514** | 1 |
| <p>** . Correlation is significant at the 0.01 level (2-tailed).</p> <p>* . Correlation is significant at the 0.05 level (2-tailed).</p> <p>Number of respondents is 100</p> | | | | | | | | | | |

From the study it was discovered that members are motivated to save more because they are given bonuses. The bonuses, prudent financial management policy on savings and diversification in savings for members had high significant positive relationship of +0.69, +0.7, +0.67, +0.65 and +.726 are some of the variables that explain the relationship between savings and financial performance of SACCOs. Table 4, shows that all the variable that were used to measure the financial performance of SACCOs due to saving done by members. This study therefore, agrees with the studies done Sundaram-Stukel (2006) who posits that emphasis should be laid on savings because savings are useful for development; and partnerships with small-scale and large-scale producers had the potential to enhance welfare and improve access to financial services for the SACCOs to be able to develop their SACCOs.

Table 5 Reliability testing for savings levels on financial performance of Sacco’s in Kenya

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | No. of Items |
|------------------|--|--------------|
| 0.872 | 0.874 | 9 |

The study revealed that the Cronbach's Alpha Based on Standardized Items for internal consistency was 0.874, which was mentioned by (George and Mallery, 2003) and (Tavakol and Dennick, 2011) that the closer alpha coefficient is to 1.0 the greater the internal consistency of the items in the Likert scale. Give the study had 0.874 from the thumb rule: “ ≥ 9 = Excellent, ≥ 8 = Good, ≥ 7 = Acceptable, ≥ 6 = Questionable, ≥ 5 = Poor, and ≤ 5 = Unacceptable”. This means the variables (Increase in savings improves liquidity, Savings are done regularly before borrowing, SACCO has policy on savings, Members are motivated to save more, Members are given bonuses to save more, Prudent management of savings, Diversification of savings for

members, members' savings subjected to competitive opportunities in the market, members' savings earn interest in the SACCO) that were measuring the extent to which savings act as indicator for financial performance were excellent measure for effects of high savings levels on financial performance of Kenya Achievas Sacco Society limited.

Table 6: Item-Total test for reliability of Savings levels on financial performance of SACCOs in Kenya

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|--|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| Savings increase improves liquidity | 25.93 | 61.379 | .450 | .424 | .873 |
| Savings are done regularly before borrowing | 25.85 | 61.563 | .415 | .321 | .877 |
| SACCO has policy on savings | 26.04 | 57.736 | .583 | .647 | .861 |
| Members are motivated to save more | 26.11 | 56.200 | .747 | .794 | .846 |
| Members are given bonuses to save more | 26.20 | 61.778 | .521 | .558 | .866 |
| Prudent management of savings | 26.66 | 58.267 | .602 | .568 | .859 |
| Diversification in savings for members | 26.25 | 56.634 | .736 | .665 | .847 |
| members savings subject of competitive opportunities in the market | 26.75 | 55.260 | .766 | .734 | .844 |
| members savings earn interest in the SACCO | 26.21 | 57.117 | .698 | .666 | .851 |

From the above table 6, it was established that the internal consistency of each item was within the range of acceptability since all the items used to test reliability lying between alpha of 0.844 and 0.877. The study discovered that increase in savings improves liquidity of SACCOs as well savings are done regularly before borrowing to enhance capital base of SACCOs. It was also disclosed that SACCOs have policies on savings that motivate members to save more. But bonuses given to members encouraged them more followed by prudent management on savings

and diversification in savings for members that are subjected to competitive opportunities in the market for members to earn interest on savings. (Levin and Zervos, 1993) showed that the cross-section correlation between savings and financial growth depends on extreme savings rate in the SACCOs. This proves that for SACCOs in Kenya to do well financially, then savings must be increased in order to encourage vibrant economic activities.

7: Effects of loan demanded on financial performance of SACCOs in Kenya

Table 7: Correlation on the effects of Loans demanded on financial performance of SACCOs in Kenya

| | | High defaulting loans affects the SACCO activities | Loans are offered at fixed interest rates | Borrowers always provide security for the loans they take | Loans are insured to caution members' wealth | There is recovery method for loans before they are bad debts | Non remittance affects liquidity of the SACCO | Operations depends on the loans and remittances in the SACCO | Clear records are maintained for Loans taken |
|--|---------------------|--|---|---|--|--|---|--|--|
| High defaulting loans affects the SACCO activities | Pearson Correlation | 1 | .387** | .685** | .586** | .607** | .485** | .350** | .479** |
| Loans are offered at fixed interest rates | Pearson Correlation | .387** | 1 | .590** | .696** | .606** | .190 | .499** | -.067 |
| Borrowers always provide security for the loans they take | Pearson Correlation | .685** | .590** | 1 | .542** | .511** | .460** | .354** | .235* |
| Loans are insured to caution members' wealth | Pearson Correlation | .586** | .696** | .542** | 1 | .723** | .443** | .430** | .232* |
| There is recovery method for loans before they are bad debts | Pearson Correlation | .607** | .606** | .511** | .723** | 1 | .487** | .535** | .299** |
| Non remittance affects liquidity of the SACCO | Pearson Correlation | .485** | .190 | .460** | .443** | .487** | 1 | .419** | .629** |
| Operations depends on the loans and remittances in the SACCO | Pearson Correlation | .350** | .499** | .354** | .430** | .535** | .419** | 1 | .266** |

| | | | | | | | | | |
|--|---------------------|--------|-------|-------|-------|--------|--------|--------|---|
| Clear records are maintained for Loans taken | Pearson Correlation | .479** | -.067 | .235* | .232* | .299** | .629** | .266** | 1 |
| <p>** . Correlation is significant at the 0.01 level (2-tailed). * . Correlation is significant at the 0.05 level (2-tailed).</p> <p>Number of respondents is 100</p> | | | | | | | | | |

The study was conducted to establish the effect of loans on the economic development of SACCOs in Kenya, specifically Kenya Achievas SACCO Society limited. From table 7 analysis established that high defaulting of loans affects the SACCO activities with a strong positive significant relationship of +.685 with security given by borrowers to take loans. This may mean that the security given by members may not cushion the loans they take if they fail to repay back hence the SACCOs end up making losses that will affect their economic development as it was witnessed by a study conducted by Chege (2006) which found that loan default was subjected to changes in interest rates; demographic changes, credit scores effect, loan default; and values of collateral as security. The recommendations were that there should be; lower interest rates; participatory involvement in regulating monetary policy; introduction of new loan products; and issue of loans of low value for growth to be experienced. The study also found out that insurance for the loans to cushion members' wealth and the recovery method for loans before they are bad debts with fixed interest rates for the loans taken were strongly positively correlated as shown in table 4.7. Also having recovery method for loans before they are bad debts were among significant variables that explain why loans from the SACCOs have positive effects on the economic development of the SACCOs in Kenya. The study of Roselyne (2007) conducted a study on factors that influenced repayment of loans in SACCOs where salary, nature of loans and control recovery measures that the SACCO Society have in place to check defaulters contributed a lot on loans repayments. The study recommended that there was need for SACCOs to implement sound management, sound control and loan recovery measures. Loan advance should be based on past repayment history of the borrower, salary levels and contributions; and there should be diverse loan products.

In a study by Muruana, (2007) it was found that failing loan portfolio; erosion in value of member's shares and loss of value affected Sacco's wealth. The study recommended that SACCOs should make adjustment on lending rate in line with inflation, adjust interest rates; and

Ministry of Industrialization and Enterprise Development, Cooperative department should develop a policy on how to counter inflation in SACCOs in Kenya.

Table 8 Reliability test for loans' turnover effects on financial performance of SACCOs in Kenya

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | No. of Items |
|------------------|--|--------------|
| 0.902 | 0.902 | 11 |

Table 8 revealed that the Cronbach's Alpha Based on Standardized Items for internal consistency was 0.902 which was the highest compared among the four variables of economic growth for the SACCOs. (George and Mallery, 2003) and Tavakol and Dennick, (2011) posited that the closer alpha coefficient is to 1.0 the greater the internal consistency of the items in the Likert scale. Given the study had 0.902 from the thumb rule: “ ≥ 9 = Excellent, ≥ 8 = Good, ≥ 7 = Acceptable, ≥ 6 = Questionable, ≥ 5 = Poor and ≤ 5 = Unacceptable” This means the variables (high defaulting of loans affects the SACCO activities, loans are offered at fixed interest rates, borrowers always provide security for the loans they take, loans are insured to cushion members' wealth, recovery method for loans before they are bad debts, non-remittance affects liquidity of the SACCOs, operations depends on the loans remittances in the SACCO and clear records are maintained for loans taken) which were measuring the extent to which loan lending as an indicator for economic growth were excellent measure for effects of high loans defaultancy rates on financial performance of Kenya Achievas SACCO Society limited in Kenya.

Table 9: Item-Total test for reliability of loan demanded on financial performance of SACCOs in Kenya.

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| SACCO has loan policy | 32.40 | 85.717 | .620 | .503 | .894 |
| Loans demanded are affected by inflation rates in the economy | 32.10 | 87.889 | .547 | .654 | .898 |
| Loans demanded are affected by the interest rates in the market | 32.14 | 82.526 | .770 | .708 | .886 |

| | | | | | |
|---|-------|--------|------|------|------|
| High loan defaulting affects the SACCO activities | 31.81 | 83.408 | .742 | .743 | .887 |
| Loans are offered at fixed interest rates by the SACCO | 32.48 | 87.727 | .624 | .752 | .894 |
| Borrowers always provide security for the loans they take | 32.35 | 83.442 | .706 | .698 | .889 |
| Loans are insured to caution members' wealth | 31.94 | 83.572 | .729 | .695 | .888 |
| SACCO has recovery method for loans before they are bad debts | 31.94 | 82.259 | .749 | .679 | .887 |
| Non remittance affects liquidity of the SACCO | 32.02 | 87.050 | .569 | .730 | .897 |
| Operations of the SACCO depends on the loans and remittances | 32.22 | 86.173 | .591 | .480 | .896 |
| Clear records are maintained for Loans taken | 32.30 | 90.434 | .396 | .693 | .907 |

Testing the reliability for each item that were used for the analysis of lending and their effects on financial performance, table 9 established that the internal consistency of each item was within the range of acceptability since all the items used to test reliability lied between alpha of 0.886 and 0.902. The study discovered that high defaultancy of loans affects the SACCO activities as well as high interest rates will affect the borrowers who would not wish to borrow instead try to save their money for future development. But the SACCOs cushion the members' money by insuring loans taken; this will encourage more members to join the SACCOs as they are guaranteed their safety in terms of saving. Recovery methods for loans before they are bad debts, non-remittance affects liquidity of the SACCOs, operations depends on the loans and remittances in the SACCO and clear records are maintained for loans taken are the variables that explained a clear connection between the economic development and lending terms in the SACCOs). This marries the ideas of Adeyemo and Bamire (2005) in their study found that unavailability and inadequacy of credit was a major problem; loan repayment and amount of money borrowed were significant variables that influenced economic patterns; and fund

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borrowed significantly influenced investment patterns. This led to their recommendations that saving and investment level could be enhanced if loans were adequately made available and proper supervision and monitoring of funds was put in place.

Table 10: Correlations for Interest rates as indicators of economic growth on financial performance of SACCOs in Kenya

| | | Loans demanded are affected by the interest rates in the market | Clear mechanism for adjusting long term and short term interest rates | past trends of evaluation forms the current management decisions | High savings rates to investment reduces interest rates | Wealth of members is affected by volatility of interest rates | Government taxes affects the interest rates for the borrowers | policy for settling CCO interest rates | Guarantees fixed returns for the members fixed deposit investment | Variety interest rates for different investments | records for tracking volatility of interest rates in the market |
|---|---------------------|---|---|--|---|---|---|--|---|--|---|
| Loans demanded are affected by the interest rates in the market | Pearson Correlation | 1 | .582** | .656** | .610** | .432** | .288** | .366** | .427** | .497** | .294** |
| Clear mechanism for adjusting long term and short term interest rates | Pearson Correlation | .582** | 1 | .442** | .262** | .160 | .350** | .216* | .550** | .414** | .208* |
| past trends of evaluation forms the current management decisions | Pearson Correlation | .656** | .442** | 1 | .666** | .562** | .280** | .486** | .469** | .653** | .264** |
| High savings rates to investment reduces interest rates | Pearson Correlation | .610** | .262** | .666** | 1 | .585** | .424** | .458** | .607** | .561** | .200* |
| Wealth of members is affected by volatility of interest rates | Pearson Correlation | .432** | .160 | .562** | .585** | 1 | .304** | .569** | .438** | .308** | .189 |
| Government taxes affects the interest rates for the borrowers | Pearson Correlation | .288** | .350** | .280** | .424** | .304** | 1 | .225* | .721** | .411** | .000 |

| | | | | | | | | | | | |
|---|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| policy for settling CCO interest rates | Pearson Correlation | .366** | .216* | .486** | .458** | .569** | .225* | 1 | .337** | .493** | .635** |
| Guarantees fixed returns for the members fixed deposit investment | Pearson Correlation | .427** | .550** | .469** | .607** | .438** | .721** | .337** | 1 | .550** | .073 |
| Variety interest rates for different investments | Pearson Correlation | .497** | .414** | .653** | .561** | .308** | .411** | .493** | .550** | 1 | .197* |
| records for tracking volatility of interest rates in the market | Pearson Correlation | .294** | .208* | .264** | .200* | .189 | .000 | .635** | .073 | .197* | 1 |

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

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

Number of respondents is 100

It was established from the study that high interest rates had great effect on economic growth. Table 10 revealed that loans demanded are affected by the interest rates in the market since it had a positive significant (.65) relationship with financial performance of SACCOs. This study approves the study that was done by Giovanni and Shambaugh (2007) who explored the connection between interest rates in major industrial countries and annual real output growth in other countries. The results show that high foreign interest rates have a contractionary effect on annual real GDP growth in the domestic economy, but that this effect is centred on countries with fixed exchange rates. It was true from the study that past trends of evaluation forms the current management decisions and government taxes affects the interest rates for the borrowers since they also had a strong positive significant relationship with economic growth and financial performance. This means as the interest rates increase members will shy away from borrowing since capital will be expensive to be acquired in the market rates. Findings are in line with study of Bett (2006) who studied the effect of lending interest rates on performance of SACCOs in Kenya. He noted that the positive correlation between lending interest rates and performance of SACCOs as revealed by a positive multiple correlation coefficients.

Table 11: Reliability for High interest rates on financial performance of Sacco's in Kenya

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | Based on N of Items |
|------------------|--|---------------------|
| .873 | .874 | 10 |

Table 11, revealed that the Cronbach's Alpha Based on Standardized Items for internal consistency was 0.874. George and Mallery, (2003) and Tavakol and Dennick, (2011) posited that the closer alpha coefficient is to 1.0 the greater the internal consistency of the items in the Likert scale. Given the study had 0.874 from the thumb rule: “ ≥ 9 = Excellent, ≥ 8 = Good, ≥ 7 = Acceptable, ≥ 6 = Questionable, ≥ 5 = Poor and ≤ 5 = Unacceptable”. This means the variables which were measuring the extent to which high interest rates acts as indicator for economic growth were excellent measure for effects of high interest rates on financial performance of Kenya Achievas SACCO Society limited in Kenya.

Table 12: Item-Total reliability test for high interest rates on financial performance of SACCOs in Kenya

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| Loans demanded are affected by the interest rates in the market | 27.90 | 65.133 | .684 | .652 | .853 |
| Clear mechanism for adjusting long term and short term interest rates | 27.69 | 70.095 | .507 | .589 | .868 |
| Past trends of evaluation forms the current management decisions | 27.68 | 68.058 | .735 | .672 | .850 |
| High savings rates to investment reduces interest rates | 27.78 | 67.399 | .714 | .680 | .851 |
| Wealth of members is affected by volatility of interest rates | 27.42 | 70.206 | .570 | .598 | .862 |
| Government taxes affects the interest rates for the borrowers | 27.82 | 72.518 | .482 | .532 | .869 |
| Policy for setting SACCO interest rates | 27.58 | 68.696 | .604 | .695 | .860 |

| | | | | | |
|---|-------|--------|------|------|------|
| Guarantees fixed returns for the members fixed deposit investment | 27.94 | 66.139 | .674 | .734 | .854 |
| Variety interest rates for different investments | 27.80 | 70.347 | .662 | .601 | .856 |
| Records for tracking volatility of interest rates in the market | 27.86 | 75.633 | .325 | .517 | .880 |

From the table 12 above, the examined data exposit that the internal consistency of each item was within the range of acceptability since all the items used to test reliability lying between alpha of 0.851 and 0.880. The study discovered that increase in interest rates led to lowering the loans demanded in the SACCOs because the loans become expensive for the members to borrow. Clear mechanism for adjusting long term and short term interest rates, past trends of evaluation forms the current management decisions. High savings rates to investment reduce interest rates; wealth of members is affected by volatility of interest rates while Government taxes affected the interest rates for the borrowers. It was also disclosed that SACCOs have policies on interest rates to motivate members to borrow. In a study by Muruana, (2007) it was found that failing loan portfolio; erosion in value of member's shares and loss of value affected Sacco's wealth. The study recommended that SACCOs should make adjustment on lending rate in line with inflation, adjust interest rates; and Ministry of Industrialization and enterprise development, cooperative department should develop a policy on how to counter inflation in SACCOs.

8 Effects of inflation rates on financial performance of SACCOs in Kenya.

The study sort to establish the effects of inflation rates on financial performance of SACCOs in Kenya and from the regression analysis that was carried out it was discovered that high inflation rates have strong effects on financial performance of SACCOs as indicated in table 13.

Table 13: Regression Model for high inflation rates on financial performance

| Model | R | R Square | Std. Error of the Estimate |
|-------|--------------------|----------|----------------------------|
| 1 | 0.947 ^a | 0.897 | 1.069 |

a. Predictors: (Constant), High cost of capital, detection of inflation in time , Reduction in loan turnover, Reduction in liquidity transactions, Reduction in revenue reserves, Policies dealing with high inflation rates

b. Dependent Variable: Financial Performance of SACCOs in Kenya

The regression model in table 13, established R value (multiple correlation coefficients) of 94.7% which indicated that there was a good relationship between the independent variable high inflation rate and dependent variable financial performance of SACCOs in Kenya. The R-square (coefficient determination) indicated a high goodness-of-fit for the model, the value 89.7% of variance in the dependent variable was explained by the independent variable in the model that was 89.7% of variability in the financial performance was accounted for by high inflation rate variable in the financial performance while the remaining 10.3% could be attributed to the random fluctuation on the other unspecified variables that was the (stochastic error term).

Table 14: ANOVA Analysis for Effects of Inflation rates on Financial Performance of SACCOs in Kenya

| | | ANOVA ^b | | | | |
|-------|--------------|--------------------|-----------|-------------|--------|-------------------|
| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
| 1 | Regression | 53.592 | 6 | 8.932 | 47.822 | .000 ^a |
| | Residual | 106.198 | 93 | 1.142 | | |
| | Total | 159.790 | 99 | | | |

a. Predictors: (Constant), High cost of capital, detection of inflation in time , Reduction in loan turnover, Reduction in liquidity transactions, Reduction in revenue reserves, Policies dealing with high inflation rates

b. Dependent Variable: Financial Performance of SACCOs in Kenya

Table 14 above, describes the overall variance accounted for in the model. The F statistics tested the null hypothesis that the expected values of the regression coefficients were equal to each other and that they were equal to zero. A large value of F (47.822) and a small significant level ($p < .000$) two tailed, indicated that six predictor variables were not equal to each other and could be used to predict the dependent variable financial performance. Therefore we failed to accept the null hypothesis (H_0); hence there was a significant relationship between effects of economic indicator (high inflation rate) and financial performance of SACCOs in Kenya.

Table 15: Variable Regression Analysis for effects of inflation on financial performance of SACCOs in Kenya

| Coefficients^a | | | | | | |
|---------------------------------|--|-----------------------------|------------|---------------------------|-------|-------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 1.391 | 0.363 | | 3.836 | 0.000 |
| | Reduction in liquidity transactions | 0.007 | 0.100 | 0.008 | 0.067 | 0.007 |
| | Reduction of revenue reserves | 0.112 | 0.111 | 0.130 | 1.010 | 0.015 |
| | Policies dealing with high inflation rates | 0.241 | 0.129 | -0.340 | 1.859 | 0.006 |
| | Reduction in loan turnover | 0.030 | 0.091 | 0.033 | 0.330 | 0.002 |
| | Detection of inflation in time | 0.229 | 0.092 | -0.347 | 2.482 | 0.015 |
| | High cost of capital | 0.076 | 0.111 | 0.081 | 0.685 | 0.005 |

a. Dependent Variable: Financial Performance of SACCOs in Kenya

Table 15, provided the effect of individual variables on the dependent variable. The coefficients indicated that increase in the value of the dependent variable for each unit led to increase in the predictor variable. The standardized coefficient or the Beta column provided a common scale (Z score; all variables had a mean of zero and a standard deviation of one and were expressed in the same unit of measurement). These values gave the following regression model:

$$Y = 1.391 + 0.08X_1 + 0.13X_2 + .033X_3 + 0.081X_4 + .368X_5 + .470X_6$$

Where;

Y = Financial Performance of Sacco Societies in Kenya

X1 = reduction in liquidity transactions

X2 = reduction of revenue reserves

X3 = Reduction in loan turnover

X4= High cost of capital

X5 = policies dealing with high inflation rates

X6= detection of inflation in time and

The regression model indicated a positive relationship among the variable; reduction in liquidity; transactions; reduction of revenue reserves; policies dealing with high inflation rates; reduction

in loan turnover; detection of inflation in time and high cost of capital. Hence a unit increase in each variable it caused; 8%, 13%, 3.3%, and 8.1% in the reduction of financial performance of SACCOs respectively while a unit increase in the other two variables that is policies dealing with high inflation 36.8% and detection of inflation in time 47.0% contributed to a unit increase in the financial performance of the SACCOs in Kenya. This means that inflation as variable explaining financial performance of SACCOs in Kenya contributed 87.7% in establishing the effects of inflation rate on financial performance of SACCOs in Kenya as shown in the model while the remaining percentage was attributed to the error in sampling (12.3%). To be more relevant, SACCOs needed to capitalize in making good policies dealing with high inflation rates and recognize inflation in time if they needed to be more meaningful in financial performance.

9 Effects of saving levels on financial performance of SACCOs in Kenya.

The study through the variable high savings rates was targeting to understand how savings were supporting financial performance of SACCOs in Kenya and it was revealed that for better financial performance of SACCOs they should encourage more savings from their members as it was established by the model in table 16.

Table 16: Regression model for high savings rates as indicator for financial performance

| Model | R | R Square | Std. Error of the Estimate |
|-------|--------------------|----------|----------------------------|
| 1 | 0.869 ^a | 0.756 | 1.075 |

Regression model in table 16, recognized that R value (multiple correlation coefficients) of 86.9% which indicated that there was a good relationship between the independent variable high levels of savings and dependent variable financial performance of SACCOs in Kenya. The R-square (coefficient determination) indicated a high goodness-of-fit for the model, the value 75.6% of variance in the dependent variable was explained by the independent variable in the model that was 89.7% of variability in the financial performance was accounted for by high levels of savings variable in the financial performance while the remaining 24.1% could be attributed to the random fluctuation on the other unspecified variables that was the (stochastic error term).

Table 17: ANOVA Analysis for High Inflation rates on Financial Performance of SACCOs in Kenya

| ANOVA ^b | | | | | | |
|--------------------|------------|----------------|----|-------------|-------|-------------------|
| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
| 1 | Regression | 77.356 | 7 | 9.669 | 8.368 | .000 ^a |
| | Residual | 105.154 | 91 | 1.156 | | |
| | Total | 182.510 | 99 | | | |

a. Predictors: (Constant), Savings earn interest, Members are motivated to save more, Savings are done regularly, prudent management for savings, and Bonuses are given to members, Diversification of savings, savings subject to competitive opportunities in the market

b. Dependent variable: Financial performance of Sacco's in Kenya

Table 17 described the overall variance accounted for in the model. The F statistics tested the null hypothesis that the expected values of the regression coefficients were equal to each other and that they were equal to zero. A value of F (8.368) and a small significant level ($p < .000$) two tailed, indicated that eight predictor variables were not equal to each other and could be used to predict the dependent variable financial performance. Therefore we failed to accept the null hypothesis (H_0); hence there was a significant relationship between effects of economic indicator (high levels of savings) and financial performance of SACCOs in Kenya.

Table 18: Variable Regression Analysis for high savings levels on financial performance of SACCOs in Kenya

| Coefficients ^a | | | | | | |
|---------------------------|--|-----------------------------|------------|---------------------------|-------|-------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.357 | 0.435 | | 3.891 | 0.000 |
| | Savings earn interest | 0.260 | 0.088 | 0.202 | 2.943 | 0.004 |
| | SACCO has policy on savings | 0.301 | 0.121 | 0.023 | 2.492 | 0.015 |
| | Members are given bonuses to save more | 0.748 | 0.162 | 0.073 | 4.626 | 0.000 |

| | | | | | |
|--|-------|-------|-------|--------|-------|
| Savings are done regularly | 0.322 | 0.134 | 0.209 | 2.402 | 0.018 |
| Prudent management of savings | 0.173 | 0.118 | 0.105 | 1.462 | 0.017 |
| Diversification in savings for members | 0.420 | 0.136 | 0.004 | -3.088 | 0.003 |
| members savings subject of competitive opportunities in the market | 0.209 | 0.151 | 0.012 | 1.386 | 0.009 |
| a. Dependent Variable: Financial Performance of SACCOs in Kenya | | | | | |

Table 18, provided the effect of individual variables on the dependent variable. The coefficients indicated that increase in the value of the dependent variable for each unit led to increase in the predictor variable. The standardized coefficient or the Beta column provided a common scale (Z score; all variables had a mean of zero and a standard deviation of one and were expressed in the same unit of measurement). These values gave the following regression model:

$$Y = .357 + .202X_1 + .023X_2 + .073X_3 + .209X_4 + .105X_5 + .004X_6 + .012X_7$$

Where;

Y = Financial Performance of Sacco Societies in Kenya

X1 = Savings earn interest

X2 = SACCO has policy on savings

X3 = Members are given bonuses to save more

X4 = Savings are done regularly

X5 = Prudent management of savings

X6 = Diversification in savings for members

X7 = members savings subject of competitive opportunities in the market

The regression model indicated a positive relationship among the variable; Savings earn interest, SACCOs have policies on savings, bonuses are given to save more, savings are done regularly, prudent management of savings, diversification in savings and savings are subject of competitive opportunities in the market. Hence a unit increase in each variable it caused; 20.2%, 2.3%, 7.3%, 20.9%, 10.5%, 4% and 1.2% increase of financial performance of SACCOs in Kenya respectively. This means that savings levels as variable explaining financial performance of SACCOs in Kenya contributed 98.5% in establishing the effects of high levels of savings on financial performance of SACCOs in Kenya as shown in the model while the remaining percentage was attributed to the error in sampling (1.5%). To be more relevant, SACCOs needed

to capitalize in dealing with policies that will encourage members to save more in the SACCOs if they desired better financial performance.

10 Effects of loans demanded on financial performance of SACCOs in Kenya

Loans demanded in SACCOs contribute revenue that helps the SACCOs to develop. Therefore, the study sort to establish if the loans demanded had any effects on the SACCOs' financial performance. The model found out that high level of defaulting of loans by members had great effects on the financial activities of the SACCOs in Kenya as indicated in the analysis.

Table 19: Regression model for effects of levels of loans demanded on financial performance

| Model | R | R Square | Std. Error of the Estimate |
|-------|--------------------|----------|----------------------------|
| 1 | 0.842 ^a | 0.709 | 0.971 |

a. Predictors: (Constant), Clear records are maintained for Loans taken, Loans are offered at fixed interest rates, Operations depends on the loans and remittances, High loan defaulting affects activities, SACCOs have recovery method for loans, Security for the loans taken, Loans are insured to caution members' wealth, Non remittance affects liquidity of the SACCOs

b. Financial performance of Sacco's in Kenya

Regression model in table 19, recognized that R value (multiple correlation coefficients) of 84.2% which indicated that there was a good relationship between the independent variable high levels of savings and dependent variable financial performance of SACCOs in Kenya. The R-square (coefficient determination) indicated a high goodness-of-fit for the model, the value 70.9% of variance in the dependent variable was explained by the independent variable in the model that was 84.2% of variability in the financial performance was accounted for by high level of loans demanded variable in the financial performance while the remaining 29.1% could be attributed to the random fluctuation on the other unspecified variables that was the (stochastic error term).

Table 20: ANOVA Analysis for loans demanded on Financial Performance of SACCOs in Kenya

| ANOVA ^b | | | | | | |
|--------------------|------------|----------------|----|-------------|-------|--------------------|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 84.958 | 8 | 8.496 | 9.007 | 0.000 ^a |
| | Residual | 83.952 | 89 | 0.943 | | |
| | Total | 168.910 | 99 | | | |

a. Predictors: (Constant), Clear records are maintained for Loans taken, Loans are offered at fixed interest rates, Operations of the SACCO depends on the loans and remittances, High loan defaulting affects the SACCO activities , Loans demanded are affected by inflation rates in the economy , SACCO has recovery method for loans before they are bad debts, Borrowers always provide security for the loans they take , Loans demanded are affected by the interest rates in the market , Loans are insured to caution members' wealth, Non remittance affects liquidity of the SACCO

b. Dependent Variable: Financial performance of Sacco's in Kenya

Table 20, described the overall variance accounted for in the model. The F statistics tested the null hypothesis that the expected values of the regression coefficients were equal to each other and that they were equal to zero. A value of F (9.007) and a small significant level ($p < .000$) two tailed, indicated that eight predictor variables were not equal to each other and could be used to predict the dependent variable financial performance. Therefore we failed to accept the null hypothesis (Ho); hence there was a significant relationship between effects of economic indicator (high levels of loans demanded) and financial performance of SACCOs in Kenya.

Table 21: Variable Regression Analysis for loans demanded on financial performance of SACCOs in Kenya

| Coefficients ^a | | | | | | |
|---------------------------|--|-----------------------------|------------|---------------------------|-------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.219 | 0.389 | | 1.078 | .000 |
| | High loan defaulting affects the SACCO | 0.177 | 0.149 | 0.103 | 1.186 | .009 |

| | | | | | | |
|---|-------|-------|-------|-------|------|--|
| activities | | | | | | |
| Loans are offered at fixed interest rates | 0.072 | 0.171 | 0.064 | .424 | .003 | |
| Borrowers always provide security for the loans | 0.362 | 0.128 | 0.209 | 2.837 | .006 | |
| Loans are insured to caution members' wealth | .120 | .137 | .118 | .876 | .013 | |
| SACCOs have recovery method for loans before they are bad debts | .118 | .127 | .102 | .931 | .005 | |
| Non remittance affects liquidity of the SACCO | .005 | .146 | .005 | .032 | .015 | |
| Operations of the SACCO depends on the loans and remittances | .224 | .100 | .007 | 2.250 | .007 | |
| Clear records are maintained for Loans taken | .164 | .129 | .009 | 1.266 | .009 | |

b. Dependent Variable: Financial Performance of SACCOs in Kenya

Table 21, provides the effect of individual variables on the dependent variable. The coefficients indicated that increase in the value of the dependent variable for each unit led to increase in the predictor variable. The standardized coefficient or the Beta column provided a common scale (Z score; all variables had a mean of zero and a standard deviation of one and were expressed in the same unit of measurement). These values gave the following regression model:

$$Y=0.219+0.103X1+0.064X2+0.209X3+0.118X4+0.102X5+0.005X6+0.007X7+0.009X8$$

Where;

Y = Financial Performance of Sacco Societies in Kenya

X1 = High loan defaulting affects the SACCO activities

X2 = Loans are offered at fixed interest rates

X3 = Loans are insured to caution members' wealth

X4= Security for the loans

X5 = Recovery method for loans

X6= Non-remittance affects liquidity

X7=Operations depends on the loans and remittances

X8= Clear records are maintained for Loans taken

The regression model indicated a positive relationship among the variable; high loan defaulting affects the SACCO activities, loans are offered at fixed interest rates, loans are insured to caution members' wealth, security for the loans, recovery method for loans, non-remittance affects liquidity, operations depends on the loans and remittances and clear records are maintained for loans taken. Hence a unit increase in each variable it caused; 21.9%, 10.3%, 6.47, 20.9%, 11.85, 10.2%, 5%, 7% and 9% increase of financial performance of SACCOs in Kenya respectively. This means that loan demanded as a variable explaining financial performance of SACCOs in Kenya had 83.6% in establishing the effects of high levels of loans demanded on financial performance of SACCOs in Kenya as shown in the model while the remaining percentage was attributed to the error in sampling (16.4%). To be more relevant, SACCOs needed to capitalize in more on loaning as this will improve the financial performance SACCOs in Kenya.

11 High level of interest rates as indicator for financial performance of SACCOs in Kenya.

The study was conducted to examine the effects of high interest rates on the financial performance of SACCOs in Kenya. From the regression model it was discovered that policies on interest rates had significant effect on financial performance of SACCOs in Kenya.

Table 22: Regression model for effects of loans demanded on financial performance of Sacco's in Kenya.

| Model | R | R Square | Std. Error of the Estimate |
|-------|--------------------|----------|----------------------------|
| 1 | 0.882 ^a | 0.778 | 0.953 |

a. Predictors: (Constant), High interest rates affects the financial performance, fixed returns for deposit, records for tracking volatility of interest rates, Wealth of members is affected by volatility of interest rates, Variety of interest rates for different investments, Policies for adjusting long term and short term interest rates, Government taxes affects the interest rates, High investment reduces interest rates, past trends of interest rates forms the current management decisions, policy in place for setting interest rates.

b. Financial performance of Sacco's in Kenya

Regression model in table 22, recognized that R value (multiple correlation coefficients) of 88.2% which indicated that there was a good relationship between the independent variable high

levels of interest rates and dependent variable financial performance of SACCOs in Kenya. The R-square (coefficient determination) indicated a high goodness-of-fit for the model, the value 77.8% of variance in the dependent variable was explained by the independent variable in the model that was 84.2% of variability in the financial performance was accounted for by high level of interest rates variable in the financial performance while the remaining 22.2% could be attributed to the random fluctuation on the other unspecified variables that was the (stochastic error term).

Table 23: ANOVA Analysis for high interest rates as indicator for Financial Performance of SACCOs in Kenya

| | | ANOVA ^b | | | | |
|-------|------------|--------------------|----|-------------|--------|--------------------|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 155.321 | 13 | 11.948 | 13.158 | 0.000 ^a |
| | Residual | 77.184 | 85 | 0.908 | | |
| | Total | 232.505 | 98 | | | |

a. Predictors: (Constant), fixed interest rates for deposit, records for tracking volatility of interest rates, Wealth of members is affected by volatility of interest rates, Variety of interest rates for different investments, Policies for adjusting long term and short term interest rates, Government taxes affects the interest rates, High investment reduces interest rates, past trends of interest rates forms the current management decisions, policy in place for setting interest rates

b. Dependent Variable: Financial performance of Sacco's in Kenya

Table 23, defined the overall variance accounted for in the model. The F statistics tested the null hypothesis that the expected values of the regression coefficients were equal to each other and that they were equal to zero. A value of F (13.158) and a small significant level ($p < .000$) two tailed, indicated that the mean of nine predictor variables were not equal to each other and could be used to predict the dependent variable financial performance. Therefore we failed to accept the null hypothesis (Ho); hence there was a significant relationship between effects of economic indicator (high levels of interest rates) and financial performance of SACCOs in Kenya.

Table 24: Variable Regression Analysis for high interest rates on financial performance of SACCOs in Kenya

| Coefficients ^a | | | | | | |
|--|--|-----------------------------|------------|---------------------------|-------|-------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.103 | 0.710 | | 2.372 | 0.020 |
| | Policies for adjusting long term and short term interest rates | 0.486 | 0.092 | 0.257 | 5.264 | 0.000 |
| | past trends of evaluation forms the current management decisions | 0.260 | 0.135 | 0.208 | 1.931 | 0.057 |
| | High savings rates to investment reduces interest rates | 0.443 | 0.121 | 0.178 | 3.671 | 0.000 |
| | Wealth of members is affected by volatility of interest rates | 0.138 | 0.115 | 0.118 | 1.202 | 0.233 |
| | Government taxes affects the interest rates for the borrowers | 0.027 | 0.112 | 0.022 | 0.241 | 0.810 |
| | policy for setting SACCO interest rates | 0.157 | 0.125 | 0.141 | 1.259 | 0.211 |
| | fixed returns for the members deposit | 0.248 | 0.126 | 0.138 | 1.968 | 0.052 |
| | Variety of interest rates for different investments | 0.108 | 0.133 | 0.081 | 0.818 | 0.416 |
| | records for tracking volatility of interest rates in the market | 0.147 | 0.108 | 0.123 | 1.370 | 0.174 |
| b. Dependent Variable: Loans demanded are affected by the interest rates in the market | | | | | | |

Table 24, established that the effect of individual variables on the dependent variable. The coefficients indicated that increase in the value of the dependent variable for each unit led to increase in the predictor variable (policies for adjusting long term and short term interest rates, past trends of evaluation forms the current management decisions, high savings rates to investment reduces interest rates and fixed returns for the members deposit) It was also discovered from the regression analysis that other variables were not significant in measuring the

high interest rates and financial performance since the ($p > .000$) which meant that we reject the variables as measure for financial performance that is; wealth of members is affected by volatility of interest rates, Government taxes affects the interest rates for the borrowers, policy for setting interest rates, variety of interest rates for different investments and records for tracking volatility of interest rates in the market. The standardized coefficient or the Beta column provided a common scale (Z score; all variables had a mean of zero and a standard deviation of one and were expressed in the same unit of measurement). These values gave the following regression model:

$$Y = 0.103 + 0.257X_1 + 0.208X_2 + 0.178X_3 + 0.138X_4$$

Where;

Y = Financial Performance of Sacco Societies in Kenya

X1 = policies for adjusting long term and short term interest rates

X2 = past trends of evaluation forms the current management decisions

X3 = high savings rates to investment reduces interest rates

X4 = fixed returns for the members deposit

The regression model indicated a positive relationship among the variable; policies for adjusting long term and short term interest rates, past trends of evaluation forms the current management decisions, high savings rates to investment reduces interest rates and fixed returns for the members deposit. Hence a unit increase in each variable it caused; 25.7%, 20.8%, 17.8%, and 13.8% increase of financial performance of SACCOs in Kenya respectively. This means that high interest rates as a variable explaining financial performance of SACCOs in Kenya had 88.4% in establishing the effects of high interest rates on financial performance of SACCOs in Kenya as shown in the model while the remaining percentage was attributed to the error in sampling (11.6%). To be more relevant, SACCOs needed to capitalize in more on policies for adjusting long term and short term interest rates as this will improve the financial performance of SACCOs in Kenya.

12. Summary of the findings

The study intended to find out the effects economic growth indicators on financial performance of SACCOs in Kenya. The information was collected from Kenya achievas Sacco society limited. The findings summary is presented objective by objective.

Findings on effects of inflation rates as an indicator of economic growth on financial performance of SACCOs in Kenya

Findings from the study revealed that high inflation rates affects the activities of SACCOs in Kenya especially Kenya Achievas Sacco Society Limited. The study found out that there was a significant positive relationship between high inflation rates and reduction in services members seek from SACCOs. This might be true because during high inflation rates most members might not be able to borrow since the interest rates might be so high which will scare them away. It was also discovered that the cost of acquiring loans increased greatly during high inflation rates since it had a positive significant relationship to financial performance meaning that; as the inflation increases the cost of obtaining loans also increases hence making capital expensive for SACCOs. Hence members opt to reserve their revenue to use thus affecting the financial performance of SACCOs due to lack of capital from savings. It is therefore clear from this study that high inflation rates affects financial performance of SACCOs in Kenya. This is because the cost of capital increases and members are not able work with the SACCOs normally.

Findings on levels of savings as indicator of economic growth on financial performance of SACCOs in Kenya

As regards to levels of savings the researcher found out that members are motivated to save more because they are given bonuses to encourage them save more with prudent management policy on savings and diversification in savings for members. This had high significant positive relationship for encouraging SACCOs grow. Savings are impeded for economic growth of many financial sectors including SACCOs. Therefore SACCOs needs to encourage the members to save more in order to get capital that will assist them in development.

Findings on the loan demanded (turnover) as indicator of economic growth on financial performance of SACCOs in Kenya

The study was conducted to establish the effect of loans on the economic development of SACCOs in Kenya, specifically Kenya Achievas SACCO. Findings established that high defaultancy of loans affects the SACCO activities with a strong positive significant relationship. Although members provide security for the loans they take but it may not cushion the loans they take if they fail to repay back, hence the SACCOs end up making losses that will affect their financial performance as it was witnessed by many studies conducted on the effects of loan defaultancy. But if loans were available at cheap interest rates, it will encourage more investments since members will be willing to take loans. The study found that inflation is the

major discouraging factor for members of SACCOs in taking loans. Since during the period of high inflation rates, loans' interest rates are so high, as a result so many members are not will to borrow from SACCOs in Kenya.

High interest rates as indicator for economic growth on financial performance of SACCOs in Kenya

It was established from the study that high interest rates had great effect on financial performance of SACCOs in Kenya. It was clear from the findings that loans demanded are affected by high interest rates in the market. This means as the interest rates increases, members will shy away borrowing since the cost of capital will be expensive to be acquired at the market rates. Therefore, high interests have effects of reducing lending rates thus affecting the performance of SACCOs in Kenya due to the multiplier effect. For a positive financial performance to be realized the interest rates have to be checked to be within the normal standards.

13. Conclusions

Based on the findings, the study concludes that the management on SACCOs should consider adopting new technologies. This will allow the management to create a comprehensive understanding that can be leveraged to influence stakeholders and create better decisions. The study also advices that it's very crucial that the organization evaluate managerial abilities as this will help the organization to gather valuable information that will provide valuable insights in the strategy and the necessary input to find effective responses to optimize Sacco's financial performance despite challenges they are facing in the financial sector due to macroeconomic dynamics.

14 Recommendations

The study recommends that emphasis should be laid on savings because savings are useful for investments. This will result to improvement and increased SACCO services.

On loan defaultancy, SACCO's should put in place mechanisms and loan recovery measures that will check defaulters like sound loan portfolio management, sound control and loan recovery measures, loan advances is based on past history, proper loan disbursement etc. This will contribute to improved loan repayment.

It is recommended that the SACCO should have mechanisms in place to deal with diverse effects on high interest rates like; lower interest rates products, participatory involvement in regulating monetary policy.

The study recommends also that SACCOs should make adjustment on lending rate in line with inflation, adjust interest rates; and Ministry of industrialization and enterprise development, cooperative department should develop a policy on how to counter inflation in SACCOs in Kenya e.g. through legal framework to ensure that institutional capital is used to grow SACCOs to cushion them against inflation.

The study also recommends that SACCOs should develop staff recruitment policies. They should employ and retain staff with higher academic and professional qualifications.

15 Suggestion for Further Studies

In light of the recommendations drawn above, there is a need for further research on the ways of cautioning inflation rates for SACCOs in Kenya to help the SACCOs develop themselves. Further for the purposes of generalization of these findings further researcher should be done on other SACCOs' in a different sector to establish if the findings are the same with financial sector SACCOs in Kenya.

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