EFFECT OF SOLVENCY ON FINANCIAL PERFORMANCE OF DEPOSIT TAKING SACCOS IN KENYA

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ABSTRACT

The deposit taking SACCOs (DTS) play a vital role in the socioeconomic advancement of countries as they largely use authority they have over the movement of cash from surplus sources to those who need the funds through financial intermediation. However, it has been observed that the daily activities of Deposit taking SACCOs are faced with challenges. The financial performance of Deposit taking SACCOs in terms of return on asset in Kenya has been declining from the year 2016 to 2020. The main objective of the study was to determine the effect of solvency on financial performance of Deposit taking SACCOs in Kenya. The study was guided by Pecking Order Theory. This study adopted cross sectional research design. The target population was 164 Deposit Taking SACCOs that operated from 2016 to 2020. The sample size was 61 Deposit Taking SACCOs in Kenya which were registered under SASRA. The study adopted stratified random sampling technique. The study employed the use of secondary data which was collected from the published annual financial statements of the Deposit taking SACCOs. Data was analysed using descriptive statistics and inferential statistics. Descriptive statistics involved mean, standard deviation, minimum and maximum. Inferential statistics included correlation analysis, panel regression data. The study identified that; solvency had strong positive and highly significant correlation with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya.

Key Words: Solvency, Financial Performance, Deposit Taking SACCOs
INTRODUCTION
A SACCO's management can determine if it is running at break-even by looking at the financial performance of its deposit-taking DTS. A DTS that performs well attracts new members, which leads to an increase in deposits. Therefore, measuring financial performance is essential for effective business management (Aziidah, 2017). Rachdi (2013). The administration of SACCOs should work to improve financial performance in order to maximize the advantages to members. The ongoing expansion of DTS's profitability and performance also guarantees that investors continued to get rewards, which promotes additional investment.

Solvency, according to Acharya Gale and Yorulmazer (2010), ensures that deposit-taking SACCOs would fulfill their obligations in the event of a suspension of operations or liquidation in the USA. It speaks to a SACCO’s capacity to meet long-term liabilities and its long-term financial stability. If the entire assets surpass the total liabilities, a deposit-taking SACCO is deemed solvent. The SACCOs suffer an insolvency risk and are deemed technically insolvent if total assets fall short of total obligations.

A SACCO’s capacity to satisfy its short-, middle-, and long-term financial commitments is known as "solvency." In Nigeria, a SACCO is said to be solvent if its current assets and total liabilities are equal. However, the SACCOs face an insolvency risk and won't be able to pay its debts if total assets are less than current liabilities (Ogege 2012).

The connection between borrowed funds and owner's funds is determined by solvency. The whole assets, operations, and financial expansion of the SACCO in Kenya were all funded by debt and common stock. Solvency ratios are used to gauge a SACCO's capacity to pay down its long-term obligations. Additionally, the solvency ratio offers a prediction of the possibility that a SACCO would keep consolidating its debt commitments (Kaigu and Theuri 2019).

Statement of the Problem
Deposit taking SACCOs play a vital role in the re-distribution of economic resource from who have it. Application of solvency leads to enhanced Deposit taking SACCOs’ financial performance deposit taking SACCOs in Kenya. When credit risk is managed appropriately then it leads increased financial performance for the SACCOs. Financial performance of Deposit taking SACCOs is important since the soundness of Deposit taking SACCOs sector is closely connected to the soundness of the whole economy, the financial strength of Deposit taking SACCOs is unquestionably associated to its financial performance, thus, that most important need of any Deposit taking SACCOs improve financial performance.

The financial performance of some Deposit Taking SACCOs in Kenya has been declining in Return on asset from the year 2016 to the 2020. The profit after tax in 2016 was 14.32%, 2017 was 13.68%, 2018 was 13.07%, 2019 was 12.98% and 2020 was 11.19%. Such a declining trend is a worrying issue since the primarily aim of any business is to increase profit (SASRA 2020).

Although some studies have been done in Kenya, there is little that has been documented to disclose the link between solvency, liquidity, leverage and capital adequacy on one hand and financial performance on the other. For instance, Kamoyo (2016) determinants the effect of solvency on financial performance of deposit taking SACCOs in Kenya, with bias on multiple regression analysis as the study variables. This study did not involve any of the study statistics analysis (Correlation and panel regression model analysis) that the current study seeks to address. Mishra and Pradhan (2015) Impact of liquidity management on profitability among the private sector SACCOs of India. Although the study also used inferential statistics analysis, it failed to look at descriptive statistics analysis. Besides, its findings cannot be used to generalize about Deposit taking SACCOs since it was done in micro finance institutions whose mode of regulation and operation is distinct from those of commercial banks. Khalifa Tailab (2012) evaluate the effect of capital adequacy on financial performance of SACCOs in America. Quasi experimental research design. The study did not focus on the cross sectional used in the current study. It is therefore evident that not much has been documented in this area, hence the reason why this study
is being undertaken so as to fill the gap. Inflation raises interest rates. Higher interest rates provide more opportunity for Deposit taking SACCOs to generate profits. The important aspect is to keep both in balance. Hence it was important to study the effects of inflation of ROA, ROE and Net profit to know the financial performance of the Deposit taking SACCOs.

Objectives of the Study
The objective of the study was to determine the effect of solvency on financial performance of Deposit taking SACCOs in Kenya, moderated by inflation rate.

Research Hypotheses
The study was guided by the following hypotheses:

- \( H_0: \) Solvency has no statistically significant effect on financial performance of Deposit Taking SACCOs in Kenya.

LITERATURE REVIEW

Theoretical Literature
Agency Theory
Jensen and Mecking created this idea in 1976. The idea seeks to clarify the connection between the two parties known as principals and agents. According to the idea, agency relationships are agreements in which one or more principals engage a third party (an agent) to carry out a variety of tasks on their behalf and transfer some decision-making authority to the agent (Solikhah, Hastuti and Asrori, 2020). This idea states that there is an information gap that causes information asymmetry, where one party (often the agent) appears to have more information than the other. This theory implies that one of the deciding criteria in the selection of accounting procedures is the knowledge asymmetry between agent and principal.

Siregar and Farahmita (2012) contend that this information asymmetry forces management to select accounting techniques that can aid in conveying to the market the true value of the market.

The Agency hypothesis is predicated on the idea that everyone strives to their greatest advantage. In other words, the more information asymmetry there is, the more probable the agent would act in an opportunistic manner (Andrijasevic and Pasic, 2018). The paper claims that two fundamental strategies might function as a check on opportunism: control and contractually obliging the agent.

The fundamental drawback of this hypothesis is that, after the venture capital agrees to invest in the new firm, its explanatory power is reduced for three reasons. The objectives of the venture capital and the entrepreneur are the cause things would probably align, which would help to mitigate the possible agency issue. It's possible that the venture capital switches from being a skeptical investor to an eager partner after opting to invest in the new business. The original founder still holds a sizable legal ownership stake in the business, albeit at a smaller percentage, and continues to make significant, personally relevant investments in it (Moore, 2015).

This theory has been criticized for concentrating only on two stakeholders: the agents and the principals. According to the critics, it's not prudent for a healthy for a corporation to focus on merely two stakeholders and neglect all the other stakeholders that also play key roles in the organization (Cuevas-Rodriguez-Mejia and Wiseman, 2012).

This theory was deemed fit and is relevant to this study because it was used to explain the relationship between solvency and financial performance of deposit taking SACCOs in Kenya. Deposit taking SACCOs borrows funds form external sources to fund its operational. Credit payment is done according to various priorities set with the Deposit taking SACCOs. Top management of Deposit taking SACCOs may sometimes violate the agreed manner of debt settlement. Such violation causes conflicts between Deposit taking SACCO management and creditors. This theory informs objective one of this study.
Empirical Review

Solvency and financial performance

Bourke (2013) determined the connection between bank profitability and solvency for 90 banks in Europe. A multiple regression model was employed in the study to examine performance from 2005 to 2009. Profit margin (PM) and return on assets were used to assess performance, and long-term debt to total assets (LTDTA), short-term debt to total assets (STDTA), and total debt to equity were used to assess solvency (TDE). The study found that ROA and PM had a negligible negative relationship with STDA and LTDTA. In contrast to its unfavorable and negative association with PM, the TDE was discovered to have a good link with ROE. Thus, the study's conclusion that solvency was not a significant factor in determining the firm's success was reached. The research was pertinent to this study's research since it offers a framework for evaluating performance. Descriptive and correlation analyses, which are useful for determining how closely related variables are, were not used. The current study addresses the gaps by using up to date data and adopting descriptive and correlation analysis.

Graham and Brodeleau (2013), conducted research on the effect of solvency on the financial performance of financial institutions in Canada. The purpose of the study was to determine how financial institution performance that is listed on the Canadian Securities Exchange is impacted by solvency. The study used a descriptive research design, and secondary data was taken from 19 financial institutions' balance sheets, income statements, and notes on the Canada Securities Exchange for the years 2010 to 2014. According to the findings, solvency was a reliable indicator of financial performance. The current study uses sample size of 61 which inferences to the larger population.

Abera (2014) investigated how solvency affected the banking sector's profitability in Ethiopia. This study used a mixed methods research strategy, including documentary analysis and in-depth interviews, to analyze the solvency determinants impacting bank profitability for a total of eight commercial banks in Ethiopia for the years 2000–2011. The study found that bank solvency was one of the key factors influencing Ethiopian banks' profitability, despite the regression analysis' conclusions to the contrary. The study came to the conclusion that further research is needed to clarify the effect of Ethiopian banks' solvency on their performance. Regarding the methodology employed in the analysis, there is a need to utilities more inferential analysis such as Analysis of Variance (ANOVA) and regression. The study incorporated inferential analysis tools such as (correlation, simple and multiple regression ) in the current study to enhance generalizations and conclusions.

Laertey, Antwi, and Boadi (2014) examined the solvency and financial performance of banks listed on the Ghana Stock Exchange. The study used a target population of 9 commercial banks listed on the Ghana Stock Exchange and a sample of 7 banks to attempt to characterize the link between the solvency and financial performance of banks on the Ghana Stock Exchange. Correlation analysis was employed in the study. The approach of purposeful sampling was adopted. In conclusion, between 2005 and 2010, listed banks' levels of solvency and financial performance both declined. The solvency and financial performance of the listed banks had a very shaky positive association. The research didn't incorporate descriptive analysis and panel regression. Gaps to be filled by considering of descriptive analysis and panel regression and conducting the study locally.

Omari, Warrad, and Al-Nimer (2015) looked into how solvency affected the financial health of industrial sectors. In this study, financial performance was measured by variables like earnings before interest and tax (EBIT), net profit margin (NPM), return on assets (ROA), and return on equity (ROE), while solvency was measured by debt ratio and equity ratio. For the analysis, multiple regressions covered the years 2008 to 2011. According to the survey, the glass and ceramic industries and the mining and extraction industry had the greatest and lowest EBIT, NPM, ROA, and ROE, respectively. According to the study's findings, solvency and a firm's financial success are significantly related. A gap exists as deposit Taking SACCOs as key players in the financial performance have not been adequately studied in past scholarly work. This current study shift focused to Deposit Taking SACCOs as key players in the financial performance.
Kamoyo (2016) conducted a study on the determinants of solvency on financial performance of deposit-taking SACCOs in Kenya. 40 SACCOs registered by SASRA and operating in Kenya from 2006 to 2010 were sampled for the study. To identify the factors influencing the solvency of deposit-taking SACCOs, the study used multiple regression analysis, investigative questionnaires, descriptive statistics, and investigative questionnaires. The study's findings suggested a negligible significant positive relationship between solvency and financial performance. The study failed to use correlation analysis and panel regression model to limit generalization ability. The current study applies correlation and panel regression model as well which allow inferences to the larger population.

Ongore and Kusa (2017) conducted research on the factors that influence the financial performance of Kenyan commercial banks' solvency. On panel data, the authors estimated the parameters using a multiple regression model and generalized least squares. For ten years, from 2001 to 2010, this explanatory analysis is based on secondary data collected from published statements of accounts of all commercial banks in Kenya, CBK, IMF, and World Bank publications. 37 commercial banks were taken into account in this investigation. Thirteen of these banks have foreign ownership, while 24 are locally held. Except for the solvency variable, the results indicated that bank-specific factors significantly influenced the performance of commercial banks in Kenya. ROA, ROE, and NIM were all positively correlated with solvency management, although the relationship was quite feeble. Correlation analysis, which deals with the relationship between independent factors and dependent variables, was not used in the study. The current study addresses the correlation analysis from local perspectives to address the gaps.

Macharia (2017) aimed to investigate the connection between the success and solvency of Kenyan savings and credit cooperative societies. All 43 Savings and Credit Co-operative Societies in Kenya that were in operation from 2008 to 2012 made up the study's population. To quantify profitability and CBK solvency ratio, the study collected secondary data on return on assets. To determine the link between the research variables, descriptive statistics and regression analysis were utilized in the study. The study discovered a significant correlation between the profitability and solvency of Kenyan Savings and Credit Co-operative Societies; nonetheless, the coefficients from the analysis were discovered to be insignificant. The results of the study cannot be trusted because a lower sample size of 43 was employed to analyze the data. The current study tries to fill the gaps in the research.

Mwangi (2018) investigated how Kenyan SACCOs' financial performance was impacted by their solvency. The research used borrowings, capital and asset adequacy, profits and liquidity to gauge financial performance. The research design for the study was descriptive. The 43 SACCOs in Kenya that have received licenses as of December 2013 were the study's intended population. ANOVA was used to evaluate the study's primary and secondary data. The study's findings demonstrated a strong inverse association between solvency and SACCOs' financial success. Additionally, the analysis came to the conclusion that having more solvency assets than total assets would maintain greater solvency assets in comparison to total deposits would result in lower returns to Kenyan SACCOs, whereas the opposite would be true. Cross-sectional design was not included in the research. The current study focused on cross-sectional design in the research to fill the gaps.

**Conceptual Framework**

The conceptual framework of this study spelt out the relationship between the Financial Performance which is the dependent variable and Solvency, as the independent variable.

**Figure 1: Conceptual Framework**

<table>
<thead>
<tr>
<th>Solvency</th>
<th>Financial performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Long-term debt to equity ratio</td>
<td>Return on assets</td>
</tr>
</tbody>
</table>

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METHODOLOGY

Research design: Research design can be defined as the method used to carry out the entire research or the way the research is designed (Ezeoha, 2011). This study adopted cross-sectional research designs. The study was cross-sectional because it used data from various Deposit Taking SACCOs under study over a five-year period, that is, from 2016-2020 (Kothari 2004). The study by Barasa (2017), adopted cross-sectional research design in his research entitled effect of credit risk on financial performance of SACCOs in Kenya.

Study Area: The study was carried out in Deposit Taking SACCOs registered under SASRA in Kenya for a period of five years from 2016 to 2020. According to SASRA, there are 164 Deposit Taking SACCOs registered in Kenya. Kenya is located in East Africa, it borders South of Ethiopia, Somalia to the west, Tanzania to the south and Uganda to the east. The 164 Deposit Taking SACCOs were actively operating in Kenya as at 31 Dec 2020.

Target Population: A population is a set of events, services, things or households or a set of people that is well defined and being investigated (Ngechu, 2004). The target population for this study was all the Deposit Taking SACCOs which were in operation from 2016 to 2020. The latest listing as at December 2020 had 164 Deposit Taking SACCOs. The target population of 164 SACCOs has been shown on Appendix III. These 164 SACCOs operated continuously from 2016 to 2020.

<table>
<thead>
<tr>
<th>Table 1: Target Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deposit Taking SACCOs</td>
</tr>
<tr>
<td>Teacher based SACCOs</td>
</tr>
<tr>
<td>Government based SACCOs</td>
</tr>
<tr>
<td>Farmers based SACCOs</td>
</tr>
<tr>
<td>Private Institutions based SACCOs</td>
</tr>
<tr>
<td>Community based SACCOs</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Source: SASRA 2020

Sample Size: The sample size of 61 Deposit Taking SACCOs participated in the study. The study used scientific formula by (Kothari, 2004) to determine the sample size as follows: According to Rose Loru (2020) who applied Kothari formula in her study indicated that, the formula is useful in determining a sample size from a target population that is fairly large. The sample size was therefore 61 Deposit taking SACCOs in Kenya operating from 2016 to 2020.

<table>
<thead>
<tr>
<th>Table 2: Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deposit Taking SACCOs</td>
</tr>
<tr>
<td>Teacher based SACCOs</td>
</tr>
<tr>
<td>Government based SACCOs</td>
</tr>
<tr>
<td>Farmers based SACCOs</td>
</tr>
<tr>
<td>Private Institutions based SACCOs</td>
</tr>
<tr>
<td>Community based SACCOs</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Source: Researcher 2020

Sampling Frame: Caselli and Negri (2018), defined a sampling frame as a schedule or list of events, people, things, and what relate to the entire population from where a sample is selected. The sample frame for the study was all the Deposit Taking SACCOs which are operating in Kenya over the period 2016-2020.

Sampling Procedure: A sampling procedure is a method or technique for selecting a subset of a population to take part in a research; it is the process of picking a number of people in such a manner that they fairly and transparently reflect the broader group that was chosen (Ogula, 2005). The study obtained a complete list of
Deposit Taking SACCOs that were operating in Kenya as at December 2020. From this list, the researcher identified those Deposit Taking SACCOs which continuously SACCOs from 2016 up to the year 2020. The study adopted stratified random sampling technique to select 61 SACCOs from 164 SACCOs which continuously operated from 2016 up to the year 2020.

**Data collection:** The study employed the use of secondary data. These data was collected from the published annual financial statements of the SACCOs. Specifically, the balance sheet and income statement over the years under study (2016-2020) was extracted so as to provide the necessary data. From these quantitative data, Return on Assets (ROA), was calculated and used to make conclusions. The data was collected using document analysis guide.

**Data Analysis and Presentation:** The study used descriptive and inferential statistics to analyze data. In descriptive statistics, the study applied minimum, maximum, mean and standard deviation. Further, the study applied simple regression, multiple regressions and Pearson product moment correlation analysis was used to assess the effect of the independent variable on the outcome in the study. Correlations analysis was used to measure the association between the variable and quantitate the strength of their relationship. Regression analysis was adopted to determine the effects of independent variables on financial performance of DT SACCOs.

**Inferential**

**Analytical Model**
The Panel regression model used was as follow;
To establish objective and test out its hypothesis which sought to establish the relationship between solvency and financial performance deposit taking SACCOs in Kenya, the following simple regression model used was.

\[ Y_{it} = \alpha + \beta_1 X_{1it} + \epsilon_{it} \]  

Equation (1)

Where:
- \( Y_{it} \) = Financial performance of deposit taking SACCOs \( i \) for \( t \) year,
- \( \alpha \) = Constant (coefficient of intercept)
- \( \beta_1 \) = change in deposit taking SACCOs financial performance for 1 unit increment change in
- \( X_{1it} \) = score on the leverage
- \( \epsilon_{it} \) = the error term reflecting other factors outside the model that affects deposit taking SACCOs \( i \) for years \( t \),

**Hypothesis Testing**

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Statistical Test</th>
<th>Model</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>( H_01 ): solvency has no statistically significant effect on financial performance of Deposit Taking SACCOs in Kenya</td>
<td>Simple Regression Analysis</td>
<td>Simple Regression Analysis ( Y_{it} = \alpha + \beta_1 X_{1it} + \epsilon_{it} )</td>
<td>( \beta ) for leverage are positive F, ( \beta ) and are significant ( (p \leq 0.05) ). Then, leverage positive and significant relationship on financial performance</td>
</tr>
</tbody>
</table>

\( \epsilon_{it} \) = the error term reflecting other factors outside the model that affects deposit taking SACCOs \( i \) for years \( t \).
Correlation analysis
The study wanted to find out the nature of relationship that existed between independent variables (solvency, liquidity, leverage and capital adequacy and financial performance. The findings of the study were presented below.

The study identified that; solvency had strong, positive and significant correlation with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. \( r = .604 (** \) \( P = .000 < 0.01 \). These findings disagreed with Bourke (2013) who found that ROA and performance management, had a negligible negative relationship with short-term debt and long term debt. In contrast to its unfavorable and negative association with performance management, the TDE was discovered to have a good link with ROE. Thus, the study's conclusion that solvency was not a significant factor in determining the firm's success was reached.

Table 4: Correlations analysis

<table>
<thead>
<tr>
<th></th>
<th>solvency</th>
<th>Financial Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>.604**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>305</td>
<td>305</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.604</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: field data 2022
** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Multicollinearity Test
The study used a VIF to test for multicollinearity in a regression model of the predictors. A variance inflation factor (VIF) of more than 10 or a tolerance of less than 0.1 both suggest the presence of multicollinearity. As shown in table 5 below.

Table 5: Multi-collinearity Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.000</td>
<td>.353</td>
</tr>
<tr>
<td>Solvency</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field data 2022
a. Dependent Variable: Financial performance

The study established that, the VIF value for solvency was 2.836, The VIF values for the variable was <10. Thus, Multicollinearity was not present.

Homoscedasticity Test
Homoscedasticity is the property that all levels of the independent variables have the same error variance. Heteroscedasticity is demonstrated when the variance of errors varies at various values of the independent variables. Homoscedasticity was examined using Levene's test. The alpha value for the study was 0.05. If the P value were more than 0.05 Homogeneity existed. The findings were presented in table 6 below.

Table 6: Test of Homogeneity of Variances

<table>
<thead>
<tr>
<th></th>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvency</td>
<td>4.859</td>
<td>4</td>
<td>300</td>
<td>.001</td>
</tr>
</tbody>
</table>

Source: Filed data 2022
The study established that, the p Value for solvency was .001 <.05. Thus, the null hypothesis was rejected and hence, data was not homogenous.

Solvency and financial performance

The study sought to find out how solvency affected financial performance. The carried out a panel regression and findings were presented in tables 7 below

Table 7: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.604</td>
<td>.364</td>
<td>.362</td>
<td>.02818</td>
</tr>
</tbody>
</table>

Source: field data 2022

Predictors: (Constant), solvency

The results of the study revealed that, R was =.604. Hence, solvency had a positive correlation with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Furthermore, the study established that, the model had an R square of .364. Thereby, change in solvency led to 36.4% change in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. According to Abera (2014), bank solvency is one of the key factors influencing directly profitability of banks in Ethiopia.

Table 8: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.138</td>
<td>1</td>
<td>.138</td>
<td>173.753</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>.241</td>
<td>303</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.379</td>
<td>304</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: field data 2022

a. Predictors: (Constant), solvency
b. Dependent Variable: Financial performance

The study identified that, F test was 173.753, P=.000<0.05. Therefore, the overall regression model was fit for the study. Further, the results revealed that, solvency had a significant effect on financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya.

Table 9: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.070</td>
<td>.007</td>
<td>9.911</td>
</tr>
<tr>
<td></td>
<td>solvency</td>
<td>.555</td>
<td>.042</td>
<td>604</td>
</tr>
</tbody>
</table>

Source: Filed data 2022

a. Dependent Variable: Financial performance

The study revealed that solvency had a positive and significant effect of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. B= .555, t=13.182, P=.000< 0.05. Taking other factors to be constant at zero, solvency led to 7% change in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Additionally, the study noted that, a change in solvency led to 60.4% change in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Thus, variation in solvency led to significant increase in of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. These findings agreed with Omari, Warrad, and Al-Nimer (2015) who established that, solvency and a firm's financial success were significantly related

\[ Y = \beta_0 + \beta_1 X_1 + \epsilon \]

\[ Y = .070 + .555X_1 \]
Hypothesis Testing

Table 10: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.123</td>
<td></td>
<td>16.548</td>
<td>.000</td>
</tr>
<tr>
<td>Solvency</td>
<td>0.384</td>
<td>0.453</td>
<td>26.707</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: field data 2022

Dependent Variable: Financial performance

The study further, found out that, solvency had a positive and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. B = 0.384, t=26.707, P = 0.000 < 0.05. To this end, change in solvency led to a change in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya by 45.3%. Thus, unit increase in solvency led to a significant increase in financial performance. According to Ongore and Kusa (2017), bank-specific factors significantly influenced the performance of commercial banks in Kenya. ROA, ROE, and NIM were all positively correlated with solvency management, although the relationship was quite feeble.

H0: Solvency has no statistically significant effect on financial performance of Deposit Taking SACCOs in Kenya.

The study established that, solvency had a positive and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. B = 0.384, t=26.707, P = 0.000 < 0.05. Thus, the null hypothesis was rejected.

Summary of findings

Solvency and financial performance

The study noted that, solvency for the majority of SACCOs was less than the generally acceptable level of 30%. For instance, the solvency ratio of Acumen SACCO Society Ltd Afya SACCO society Ltd Airport SACCO Society Ltd, Ardhi SACCO Society Ltd, Bandari SACCO society Ltd and Baraton University SACCO Society Ltd among others. Further, the study established that, the solvency of a few SACCOs such as Capital SACCO Society Ltd was Chuna SACCO Society ltd, Imarisha SACCO Society Ltd, Mwito SACCO Society Ltd and Safaricom SACCO Society Ltd was above the generally recommended levels. Additionally, the study identified that; solvency had strong, positive and highly significant relationship with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. The study further, found out that, solvency had a positive and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya.

CONCLUSIONS AND RECOMMENDATIONS

The study concluded that; solvency for the majority of SACCOs was less than the generally acceptable level of 30%. Additionally, the it was concluded that, solvency had strong positive and highly significant correlation with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. As result, SACCOs are encouraged to be solvent so that can significantly increase their financial performance.

The study further, concluded that, solvency had a positive and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Thus, unit increase in solvency led to a significant increase in financial performance as measured by return on assets.

5.3.1 Solvency and financial performance
The study recommended that, SACCO whose solvency was above the generally accepted level, ought to reduce their debt, costs, restructure debts through for instance combining different loans into one, lowering interest rates paid on loans, and re-negotiating terms or extending payment period, increase members, prices and reduce frequency of borrowing. This would make them increase their solvency and hence, financial performance. Further, the study recommended that, deposit taking savings and credit cooperative societies (SACCOS) in Kenya should be more vigilant on solvency levels as it directly and significantly affects their financial performance.

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