



The Effect of Capital Structure on Profitability of Deposit Taking SACCOs in Western Kenya

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ABSTRACT

Financial management decisions are important aspects of SACCOs to succeed as they determine the strengths and weakness of these SACCOs. Worldwide, there are over 57000 credit unions which were introduced in order to assist people overcome economic problems. In some countries in the world, SACCOs perform better and are even larger than commercial banks. In Africa, an estimated 60 million people depend on SACCOs. Even though SACCO challenges in Africa are similar to those in Kenya and other countries globally, they perform an important role in the finance sector through wealth creation and savings mobilization. As per SASRA supervision report 2020, SACCO's non-performing loans increased from 6.15% to 8.39% between 2019 and 2020. Also, there was a slight increase in external borrowing from 3.67% to 3.88% during the same period which lowered profitability. A few studies have provided valuable insights on financial management decisions and profitability of SACCOs but have done so focusing on all SACCOs in Kenya. The specific objective of this study was to establish the effect of capital structure on the profitability of deposit taking SACCOs in Western Kenya. The study was anchored on the Pecking order theory. The study used of a correlation research design targeting 18 licensed DT SACCOs in Western Kenya for a period between 2017 and 2020 yielding 72 data points. Secondary data was collected and used for this research. A panel regression model was used to determine the association existing between the two variables, the independent variable and the dependent variable. The research results showed that the correlation coefficient of capital structure was significant and positive at 0.790 with $p < 0.05$, implying that capital structure had a significant and positive effect on the profitability of DT SACCOs in Western Kenya. These research findings might be useful to SACCO managers, the government, scholars and other stakeholders in Kenya.

BACKGROUND OF THE STUDY

Savings and credit cooperative societies exist for maximizing the shareholders wealth by covering expenses and future investments through generation of adequate profits (Mulinge, 2016). To enhance profitability effectively, SACCOs have put a lot of emphasis on sound financial management decisions making SACCOs to strive to enhance their profitability through financial management decisions. SACCOs enable people to easily access financial services, encourage the people to save, and stimulate growth of businesses thus assisting in socio economic development of members and communities at large. SACCOs also create and accumulate capital from member's savings which is then lend to members at reasonable interest rates. Ofei (2001), indicated that Sacco's apply funds majorly by advancing affordable interest credit to members since members guarantee each other while seeking credit. Financial management decisions are decisions which are concerned with acquiring and utilizing capital funds with an aim of meeting the financial needs as well as the overall objectives of a business organization.

Financial management decisions determine strength and weakness of a saving and credit cooperative society. It explores sources of funds and how those funds are applied in investment ventures, capital structure, working capital and dividend payout (Njenga, 2019). Financial management plans and also controls the financial resources of a business enterprise. There are three functions of a manager: the financing decision function, the investment decision function and dividend decision. Financing decision is concerned with how the manager makes decisions concerning the proportion of capital structure including equity and debt. The main objective here is reducing cost of capital to be low and maximize firm's value by maintaining capital structure at optimal levels. In dividend decision, it is under the discretion of the managers to decide the portion of profits that are disbursed and what is to be retained. Investment decision deals with how the assets will be selected and how will be invested by a firm. The investment decision involving short term assets is called working capital management.

The profitability and performance of DT SACCOs in Western Kenya has been declining from the year 2016 to 2020. The profit after tax in 2017 was 13.68%, 2018 was 13.07%, 2019 was 12.98% and 2020 was 11.19%. Such a declining trend is worrying since primarily the aim of any business is to increase profit (SASRA 2020). The lower profitability and performance do not only affect SACCOs in Western Kenya but also the national ones. There has been an increase in external loans borrowing by SACCOs from 3.67% in 2019 to 3.88% in 2020 from the other financial institutions to boost their working capital which seemed inadequate. Over the years, SACCOs in Kenya have been challenged by loan backlog with the percentage of nonperforming loans increasing from 6.15% to 8.39% for the period between 2019 and 2020.

Pathak (2011), conducted a study that investigated how Indian manufacturing firms were affected by the choice of the capital structure. The relationship that exists between the financial leverage and debt amount in the firm's financial structure of the firm and performance was investigated. Multiple regressions were employed. The study results showed that some level of leverage negatively and significantly affect the functioning of the company and firm performance. This study introduced working capital management and dividend payout as important variables of financial management. Also, deposit taking SACCOs were studied as opposed to manufacturing firms.

The influence of the capital structure and profitability of Taiwan's insurance sector was investigated by Chen et al (2009) using factor and path analysis methods. The results of this study show a weak link between the profitability of the company and its capital structure. The findings also revealed that the profitability of insurance industry is negatively influenced and very significantly affected by capital structure and operating risk. Chen (2009) used path analysis methodology while this study used correlational research design.

Njenga & Jagongo (2019), examined how financial management decisions in Kiambu County affected the financial success of non-DT SACCOs. They discovered that the capital structure, working capital management, and investment to be predictors of SACCO financial performance and that both management financial decisions and financial performance are affected by gross domestic product. However, this study focused on deposit taking SACCOs in Western Kenya which contrasts the non-DT SACCOs as studied by Njenga and Jagongo (2019).

Studies above shows that most studies failed to show the proper mix of debt to equity of the SACCOs to maximize profitability. Also, the capital structure effect on DT SACCOs' profitability in Western Kenya hasn't been established. Chen et al (2009) used factor and path analysis methodologies while this study used correlational research design. Most of the reviewed studies were majorly on other financial institutions but failed to carry out their studies on SACCOs and more specifically on DT SACCOs in Western Kenya. Therefore, the effect of capital structure on profitability of DT SACCOs in Western Kenya was investigated in this study.

Profitability refers to how the business uses its resources in order to produce a return on an investment. Profitability can also be defined as ability of a company aimed at generating revenues which surpass expenses by using its resources. Profitability is essential for the stability of financial systems. To the wider economy, it has implications for growth of savings and investments. Returns on Assets (ROA) or Returns On Equity (ROE) can be used to measure profitability. ROE compares income earned by a business to total equity base of the business (Doehring, 2012).

The problem of this study was instigated from the fact that SACCO financial management decisions are considered as important for the shareholders since they have an effect which is significant on the profitability of SACCOs. Studies conducted previously on impact of capital structure on various financial institutions profitability have yielded conflicting results. Some studies indicated a positive effect between financial management decisions on profitability while others found out a negative effect between financial management decisions and profitability. From the reviewed literature, SACCOs have a challenge of ensuring quality financial management especially on capital structure and this has lowered their profitability. The financial performance of SACCOs in Kenya and more so in Western Kenya has been generally on a declining trend with a decrease of 13% in 2014 with 6% and 10% decline in performance in 2015 and 2016 respectively. The return on equity of Western Kenya SACCOs was reported to decline from 17% to 14.32% in the period between 2015 and 2016. The profitability and performance of DT SACCOs in Western Kenya has been declining from the year 2016 to 2020. The profit after tax in 2017 was 13.68%, 2018 was 13.07%, 2019 was 12.98% and 2020 was 11.19%. Such a declining trend is worrying since primarily the aim of any business is to increase profit (SASRA 2020). The lower profitability and performance do not only affect SACCOs in Western Kenya but also the national ones. In as much as there have been a number of studies on financial decisions versus profitability, very few focused on capital structure with respect to profitability of DT SACCOs in Western Kenya. Therefore, the current study sought to address the empirical gaps by focusing on financial management decisions, specifically capital structure and profitability of DT SACCOs in Western Kenya.

The objective of this study was to determine the effect of capital structure on the profitability of DT SACCOs in Western Kenya.

The null hypothesis formulated from this objective for purposes of statistical testing at 95% confidence level was:

H₀₁: There is no significant effect of capital structure on the profitability of DT SACCOs in Western Kenya.

LITERATURE REVIEW

The study was anchored on the Pecking Order Theory. This theory was brought forth by Donaldson (1961) and later refined by Myers and Majluf (1984). It explains that firm's management has preference in financing its projects and investments from earnings retained, followed by debts, then by external sources financing, all being aspects of capital structure, the study's independent variable. As per this theory, profitable businesses tend to borrow less and internal financing sources and prefers debt over equity when financing externally is required. Internally generated cash flows are sometimes less if there is uncertainty surrounding investment opportunities and profitability. The firm pays off debts when the cash flows are more by investing in

securities which are marketable. If the cash flows are less, the firm tends to utilize the cash balance first before selling the securities which are marketable. The type of debt a business chooses can signal its intention to use external sources of finance. The SACCO management is given powers during the annual general meeting to borrow externally in order to meet the inadequacy of member's deposits and demand for loans. This theory was relevant to this research as it showed what managers of SACCOs prefer during financing. It suggests that managers prefer finance from internal sources as opposed to finance from the external sources. This theory has been supported by study from Frank and Goyal (2007) who indicated that companies intending to increase their profitability and firm value should first utilize the internal sources of funding before proceeding to external sources in support of pecking order theory. Pecking order theory is the major theory that guided this study since it indicates the model of financing employed by the SACCO management.

Koehn (2013) defines capital structure as the combination of sources of funding of a business. It includes debt of a company which may be long or short term and equity of the firm either common or preferred.

In order to determine the relationship between the capital structure and the profitability of the quoted Sri Lanka banks, Nireesh (2012) carried out a study and concluded that the decision on the capital structure has an impact on the profitability of the company. Use of capital by successfully selecting capital is important to the financial strategy of a firm. Data here was collected and analyzed descriptively and using correlation analysis. Results showed debt to equity and return on equity had a significant but negative relationship. However, this study focused on banks in Sri Lanka which contrasts with the current study which focused on deposit taking SACCOs in Western Kenya.

Onalapo & Kajola (2010) conducted a research study on the effects of capital structure on the profitability of firms quoted on the Nigeria Stock Exchange. They sampled 30 non-financial companies for the period 2001-2007. The results showed that a negative relationship exists between capital structure and level of profitability of the firm. The research study employed the ROA and ROE of these firms. Although the study showed a significant relationship between the variables, firms have different settings as compared to deposit taking SACCOs and so cannot conclude findings on SACCOs.

Mwangi, Muathe, & Kosimbei (2014) conducted a research study on capital structure and its relationship with the financial performance of firms listed at the Nairobi Securities Exchange. The study used data collected using structured questionnaires. The study found out that there is a strong positive correlation between leverage and return on equity, return on investment and liquidity. In addition, Magara (2012) performed an investigation on capital structure and its determinants at the Nairobi Securities Exchange. The study investigated the major determinants of capital structure. It was found out that from the period 2007-2011, there was a significant positive correlation between the size of the firm,

tangibility and rate of growth and leverage of the firm. The study did not consider macro-economic factors such as interest rates and inflation. Muchugia (2013) investigated the effects of debt financing on the firm performance of commercial banks in Kenya. The study used a quantitative research design and multiple regression analysis. Muchugia (2013) used ROE as the dependent variable, whereas long term debt, total debt, short term liabilities, and firm size as independent variables. The research study concluded that short-term financing has a positive correlation with the profitability of the firm. On the other hand, the study also found out that long-term liabilities have a negative correlation with the firm's profitability. There is need for follow up objective on the relationship between debt financing with the deposit taking SACCOs and profitability of the deposit taking SACCOs.

According to Abor (2005), regression analysis was used to determine the relationship between ROE and capital structure in order to examine the effects of a common equity structure on the profitability of quoted companies in Ghana. The results revealed positive and significant relation existing between debt ratio to total assets and return on equity. Results also indicated an association which was negative between the return on equity and debt to total assets. However, the study only focused on regression analysis and ignored descriptive statistics. Moreover, the current study employed panel regression analysis which contrasted with the analysis used by Abor (2005).

Abeywardhana (2015), explored the influence of capital structure on profits of small and medium sized businesses in the United Kingdom using two stages least squares which resulted in a negative but strong relationship with profitability. It was apparent that the size of the firm appeared to be an important factor which determined profitability of SMEs. There was a significant negative effect on profitability with the results of debt ratio to total assets ratio. Muhammad (2015) studied impact that the capital structure and profitability has on automobile sector in Pakistan by analyzing some ratios. The findings from the study showed that capital structure negatively and significantly impacted on the profitability of firms. However, the study employed least squares method as opposed to correlational research design employed by this study.

A study has been conducted in India by Chavali and Rosario (2018) to assess the relationship between capital structure and profitability of domestic finance companies, with a positive correlation as regards debt to overall assets and indebtedness to equity ratio. Therefore, increased financing of debt increases the profitability since the cheapest source of financing is debt. However, this is too direct to reach a conclusion as this study did not indicate the methods used.

Debt to assets ratio and debt to equity ratio was utilized to assess capital structure in a study by Gichuru (2019) looking at the impact capital structure has on the government-based DT SACCOs' profitability in Kenya. Findings from the study showed that there existed an insignificant and negative influence on profitability of SACCOs. Testing of hypotheses was done using a descriptive research

design. Gichuru (2019) employed descriptive research design which contrasted with correlational research design employed by the current study, thus presenting a methodological gap.

Muchiri et al. (2016) investigated the Relationship between Financial Structure and Financial Performance of Companies Listed at East Africa Securities Exchanges. The study used explanatory research design with secondary cross-sectional time series data for 61 companies. Using the Feasible Generalized Least Squares the study found that, long term debt, short term debt, external equity and retained earnings had insignificant positive association with ROE but insignificant negative association with ROA. Capital structure was found to be positively related to ROE and negatively related to ROA. GDP was similarly found to have a significant moderating effect. However, this study considered only the financing structure without regard to other factors including dividend decisions, cash holding decisions and corporate investment decisions which form the larger financial management decision making unit.

In the study on DT SACCOs, Karanja (2014) noted that a positive association existed among debt to equity ratio and profitability. RoE was the measure that was used to measure profitability and debt to equity ratio as well as the return on assets was found to be weakly correlated. This study was conducted on DT SACCOs in Kenya as opposed to DT SACCOs in Western Kenya as in the current study thus presenting a geographical gap.

Kembo (2013) in his study postulated that default on loans was a key factor which leads to low performance in SACCOs. He found out that the risk defaulting loans was influenced by both borrowers and the management decisions. However, the study failed to explain the extent to which loan defaults impacted on the SACCOs financial performance.

Mwangi, Muathe and Kosimbei (2014) sought to determine the relationship between capital structure and the performance of non-financial companies listed in the Nairobi Securities Exchange (NSE). The study used a census of 42 non-financial companies listed in the Nairobi securities exchange and applied explanatory non-experimental research design. The results indicated that debt had a statistically significant negative relationship with performance as determined by return on assets and return on equity. Methodologically, the study utilized the traditional measures of performance; ROE and ROI. However, such findings cannot be generalized to deposit taking SACCOs since the structure of the SACCOs is different from that of companies. Moreover, the study employed explanatory non-experimental research design while the current study employed correlational research design.

By using debt and equity ratios to measure capital structure, Odhiambo & Ng'ang'a (2020) did a research analyzing the effect on financial performance of DT SACCOs in Mombasa County by means of which it has found that there is a strong positive relationship between an institution's capital structure and its financial performance. Study by Ng'ang'a (2020) was conducted on DT SACCOs in Mombasa county while

the current study was conducted on DT SACCOs in Western Kenya.

Studies by Kembo (2013), Karanja (2014), Muchiri (2016), Muchugia (2013), Magara (2012), Mwangi, Muatthe & Kosimbei (2014), Odhiambo & Ng'ang'a (2020), Chavali and Rosario (2018) demonstrated a statistically significant and positive association between capital structure and profitability of a variety of selected companies. On the contrary, studies by Abeywardhana (2015), Abor (2005), Niresh (2012), Gichuru (2019), Onalapo & Kajola (2010), Muhammad (2015) indicated a statistically negative association.

From the above reviewed studies, there existed mixed results since some studies indicated a positive effect while others revealed that there existed a negative effect between profitability and capital structure. However, these studies failed to indicate the debt equity mix ideal for the SACCOs to get to optimal profitability. Most of the empirical studies also considered the effect of capital structure on profitability or financial performance but failed to consider other variables of financial management decisions as indicated in the current study. Also, the studies failed to reveal the level at which capital structure affected the profitability. Studies reviewed focused on other financial institutions but not in the deposit taking SACCOs in Western Kenya. The research design used in this study was correlational research design while studies reviewed used other designs such as descriptive and experimental research designs. Therefore, this study was seeking to investigate how capital structure affects the profitability of the deposit taking SACCOs in Western Kenya.

MATERIALS AND METHODS

Research design, according to Kerlinger (1973), is an arrangement in which conditions are used to collect and analyse data in a way that is consistent with the aim of combining them. This study made use of a correlational research design which provides for description, correlation and regression. Correlation analysis is aimed at determining the amount of correlation that exists between two or more variables (Kothari, 2004). Correlation research is aimed at investigating the existence and the extent of relationship between two or more quantitative variables. In this study the research design was able to show that there is statistically an association, e.g. capital structure and profitability, with both of these variables in question.

Western Kenya was the area where the study was conducted which covers various counties such as Kakamega, Vihiga, Busia, Bungoma, Kisumu, Siaya, Migori, Homabay, Kisii and Nyamira. The study area covers an area of approximately 19877.5 km². The researcher opted for this area because it had a relatively high number of deposits taking SACCOs spread evenly across the counties with headquarters set there in (SASRA supervision report, 2020). In comparison to Rift valley region and coast region among other regions in Kenya, Western Kenya had a

comparatively higher number of DT SACCOs as per the annual supervision report, 2020.

Cooper & Schindler, 2001, defines population in terms of a complete collection of elements to be inferred from. Study population was 18 licensed deposit taking SACCOs in western Kenya. All these SACCOs have their headquarters within the region. The sample frame for the study was all the deposit taking SACCOs operating in Western Kenya over the period 2017 – 2020. Sampling techniques provide a range of methods that facilitate to reduce the amount of data needed to be collected considering only data from a sub group rather than all possible cases or elements. Since the study population was small, the researcher used census sampling technique by considering all the 18 Deposit taking SACCOs as the sample size for the four-year period between 2017 and 2020 yielding 72 data points.

Before compiling the data, a document review guide has been used by the investigator in order to obtain information required from audited financial statements of various SACCOs under investigation.

The reliability shall be defined in accordance with Kothari (2004) as being the consistency of a measurement tool when it is used to an equal number of respondents. The study has used general accounting standards to collect secondary data in the audit financial statements drawn up and published. Since the Financial Statements are drawn up in accordance with global accounting standards and guidelines, this data is considered to be reliable.

Secondary data has been used in the study. Data for the period between 2017 and 2020 is taken from the yearly SACCO Research Report as well as its Financial Statistics. In order to obtain the data needed from the financial statements so that analyses can be carried out, a document review guide has been employed by the researcher.

The study used Descriptive Statistical Methods, which were applied to data in a way of means, modal and standard deviations as well as Inferential statistical methods. To establish association between the capital structure of the sampled SACCOs on their profitability, Pearson's correlation analysis was used.

The study employed PPMCC to analyse the direction and strength of the association between capital structure of the selected deposit taking SACCOs on their profitability, so as to obtain statistical evidence that effectively addressed the null hypothesis of this study. Because correlation analysis is based on assumptions of linearity, heterogeneity of variances and normality be met, these assumptions were therefore tested, and the results showed that the data passed all the said assumptions.

RESULTS AND DISCUSSION

Methods of making data meaningful so that it can be easily interpreted by a wide range of users is referred to as descriptive statistics. It analyzes data in terms central tendency measures like median, mode and mean; dispersion measures such as variance and

standard deviation; and distribution measures such as kurtosis and skewness. Profitability and capital structure were all different factors studied with descriptive analysis.

Table 1: Profitability descriptive statistics.

	Net income (Billions)	ROE Ratio
Mean	0.181	0.209
Standard Error	0.036	0.013
Median	0.049	0.177
Mode	0.014	0.140
Standard Deviation	0.303	0.112
Sample Variance	0.092	0.013
Kurtosis	3.521	0.040
Skewness	2.175	0.938
Range	1.170	0.430
Minimum	0.006	0.037
Maximum	1.176	0.467

Source: Researcher, 2022.

From Table 1 above, average net income from 2017 to 2020 for DT SACCOs in Western Kenya was estimated at 0.181 billion with return on equity ratio estimated at 0.209. The maximum net income recorded in the 4-year period by the DT SACCOs from Western Kenya was 1.176 billion with the minimum net income recorded at 0.006 billion.

Based on the results obtained, the variations experienced in the net income from 2017 to 2020 for the DT SACCOs in Western Kenya was estimated at 0.092 billion with a standard error of 0.036 billion and skewness coefficient of 2.175. The skewness coefficient implied that the variation experienced by the net income for the year 2017 to 2020 was not normally distributed across the 4-year period. Also, the skewness coefficient of ROE for the 4-year period was 0.938 implying a steady non-uniform distribution from the year 2017 to 2020. ROE ratios non-uniform distribution across the 4-year period implies an un-efficient manner through which the DT SACCOs from Western Kenya were consistently generating profits for the period of interest in the study. A 0.303 standard deviation for net income and ROE of 0.112 indicated a low variation in changes in net income and ROE respectively. ROE skewness and kurtosis was 0.938<1 and 0.040<3 respectively which implied a skewed distribution which was fairly positive. On average, the return on equity was estimated at 20.9%. According to (Heikal, Khaddafi & Ummah, 2014), anything more than 5% ROE is considered good while anything more than 20% ROE is considered great; hence we can conclude that the 20.9% ROE is a great measure of DT SACCOs' profitability in Western Kenya.

Table 2: Capital structure descriptive statistics

	Total Assets (Billion)	Shareholder's equity (Billion)	Equity ratio
Mean	1.654	0.953	0.617
Standard Error	0.328	0.209	0.018
Median	0.421	0.220	0.636
Mode	0.220	0.190	0.714
Standard Deviation	2.780	1.776	0.152
Sample Variance	7.727	3.153	0.023
Kurtosis	3.751	5.311	6.613
Skewness	2.228	2.548	1.016
Range	10.436	7.595	1.094
Minimum	0.044	0.025	0.024
Maximum	10.480	7.620	1.118

Source: Researcher, 2022 (SPSS).

From Table 2 above, an average estimate of 61.7% equity ratio was estimated implying that the DT SACCOs in Western Kenya performed well in terms of being exposed to risks, hence less risk. A standard deviation of 2.78, 1.776 and 0.152 was estimated for total assets, shareholders' equity and equity ratio respectively which implied quite less variability in the equity ratio for the 4-year period among the SACCOs in Western Kenya. This is in line with Odhiambo & Ng'ang'a (2020) who contends that SACCOs utilize more equity than debt in their financial structure. Equity ratio had a kurtosis coefficient of 6.613>3 indicating a leptokurtic distribution.

From 2017 to 2020, the 18 DT SACCOs from Western Kenya recorded an average minimum of 2.4% equity ratio which implied that they had very extensive risks with maximum equity ratio of 111.8% implying very minimal risks.

A study in Kenya has been conducted by Gichuru (2019) to investigate the impact of capital structure on government owned DT SACCO profitability, with results showing that there is a negative and negligible causal relationship between capital structure and SACCO profitability. For assessing the capital structure and for measuring profitability by ROA, debt to equity ratio and debt to assets ratio were applied.

The researcher adopted Pearson correlation in the research to test the null hypothesis. The PPMCC was intended to assist in establishing a statistical correlation between the financial management decision and profitability, while analyzing degrees of association between these two factors by using PPMCC.

Table 3: Corelation between Capital structure and Profitability (ROE)

VARIABLE	Capital Structure	ROE
Capital Structure	1	0.790 [*]
ROE	0.790 [*]	1

* $p = 0.041$, $\alpha = 0.05$

According to the findings, in western Kenya there is a very strong relationship among Financial Management Decision options and Profitability of DT SACCOs. A strong positive but significant linear association was revealed between capital structure as a financial management option with profitability (ROE) with a correlation coefficient of 0.790 with a p-value of $0.041 < 0.05$. This indicated that the results were significant if capital structure increases it would have a positive effect on the profitability of DT SACCOs. The significance of this variable is based on the fact that p value of the corelation was less than 0.05, which led to rejection of the null hypothesis. This meant that there was sufficient evidence in support of the claim that DT SACCOs' profitability is significantly affected by their capital structure. Consequently, the results of the study showed that capital structure has a significant and positive impact on DT SACCO profitability in Western Kenya. These results are in consonance with Gill, Biger & Mathur (2011) who noted that capital structure had always had a positive relationship on profitability in the manufacturing industry. The results are also in agreement with the studies by Karanja (2014) and Kembo (2013) who found out that capital structure and profitability were positively correlated. The results are also in support of the studies by Muhammad (2015), Odhiambo & Ng'ang'a (2020) and Chavali & Rosario (2018) who found out that capital structure and profitability of firms had a statistically significant relationship. On the contrary, the study results contradict studies by Abeywardhana (2015), Abor (2005) and Niresh (2012) that showed that there existed a negative relationship between capital structure and profitability as measured by the return on equity.

CONCLUSION

The study indicated that the profitability of DT SACCOs in western Kenya is affected significantly and positively by their capital structure. Consequently, the null hypothesis that there was no significant effect of the capital structure on the profitability of DT SACCOs in Western Kenya was rejected and a finding was made that there was sufficient evidence against the null hypothesis. The conclusion of this study was in consonance with the Modigliani-Miller Theory which stipulates the cruciality of market structure in enhancing investment by investors in SACCOs. A company integrating the capital structure into its systems tends to have a better hand in the market due to better utilization, hence influencing profitability.

REFERENCES

1. Abdi, M.A. (2010). *Signalling effect of dividend payment on the profits of the firm: Evidence from the Nairobi stock Exchange*. Unpublished MBA Thesis. University of Nairobi.
2. Abeywardhana, D. (2015). Capital structure and profitability: An empirical analysis of SMEs in the UK. *Journal of emergin issues in economics, finance and banking*, 4(2).
3. Abor, J. (2005). The effect of capital sructure on profitability: an empirical analysis of listed firms in Ghana. *Journal of risk finance*, 6, 438 - 445.
4. Akoto, R, Awunyo, D & Angmor, P. (203). Working capital management and profitability: Evidence from Ghanaian listed manufacturing firms. *Journal of economics and international finance*.
5. Alipour, M. (2011). Working capital management and corporate profitability: Evidence from Iran, Tehran stock exchange. *World applied sciences journal*, 12(7), 1093 - 1099.
6. Anandasayanan, S & Thirunaukkarasu, V. (2016). Dividend policy and corporate profitability: Econometric analysis of listed manufacturin firms in Sri Lanka. *International journal of commerce and management research*, 2(1).
7. Atsango, L. (2018). *Relationship between firm characteristics and profitability of DT Saccos in Kenya*. UON.
8. Bevan, A. & Danibolt. J. (2002). Capital structure and its determinants in the UK: A decompositional Analysis. *Journal of Applied Financial economics*, vol (12), 3.
9. Bhandari, L. (1998). Debt/ Equity ratio and expected common stock returns: Empirical evidence. *Journal of finance*, 43, 507-528.
10. Boopathi, C. (2016). Concept of workin capial management. *International journal of commerce, business and management*, 5(2).
11. Broock, Scheinkman, Dechert, & LeBaron. (1996).
12. Chavali, K & Rosario, S. (2018). Relationship between capial structure and profitability: A study of non bankin finance companies in India. *Academy of accounting and financial studies journal*, 22(1).
13. Clement, O & Martin, O. (2012). Financial practice as a determinant of growth of savings and credit cooperative societies' wealth. *International journal of Business and science*, 3.
14. Deloof, M. (2003). Relationship between working capital management and corporate profitability of Belgian non financial firms. *Journal of business finance and accounting*, 573 - 588.
15. Doehring, T. (2012). *Analyzing the profitability of your operation*. Centrec consulting group, LLC.
16. Dong, H & Jyhtay, S. (2010). Relationship between working capital managment and profitability: A Vietnam case. *International research journal of finance and economics*, 49(1), 59 - 67.
17. Eljelly, A. (2004). "Liquidity - Profitability trade off: An empirical inestigation in an emergin market". *International journal of commerce and management*, 14, 48 - 61.
18. Essays, U. (2018). *Cash flow and profitability on dividend payout*.

19. Filbeck, G. & Krueger, T.M. (2005). An analysis of working capital management results across industries. *Mid-American journal of Business*, 20(2)/10-17.
20. Gawali, S. (2021). Shape of data: Skewness and Kurtosis. *Data Science Blogathon*.
21. Gichuru, D, Kung'u, J & Gakobo, T. (2019). Influence of capital structure on profitability of government based DT saccos in Kenya. *European journal of economic and financial research*, 3(5).
22. Gill, A, Biger, N. & Tibrewala, R. (2010). Determinants of dividend payout ratios: evidence from United States. *The open Business journal*, 3(1).
23. Heikal, M. Khaddafi, M. & Ummah, A. (2014). Influence analysis of return on assets, return on equity, net profit margin and current ratio, against corporate profit growth in automotive in Indonesia. *International Journal of Academic Research in Business and Social Sciences*, 4(12), 101.
24. Husna, A. & Satria I. (2019). Effects of return on asset, debt to asset ratio, current ratio, firm size and dividend payout ratio on firm value. *International journal of Economics and Financial issues*, 9(5),50.
25. Ireri, J. N. (2010). *Effects of working capital policies on profitability of saccos in Nairobi*. University of Nairobi.
26. Jagongo A & Tipape Everlyn. (2019). Financial decisions, Resource constraints and financial performance of family owned businesses in manufacturing industry in Kenya. *International academic journal of economics and finance*, 3(3), 231 - 252.
27. Kaguri, A. (2012). *Relationship between firm characteristics and financial performance of life insurance companies in Kenya*. University of Nairobi.
28. Kawshala, H. (2017). Effect of dividend policy on corporate profitability : An empirical study on beverage, food and tobacco industry in Sri Lanka. *International journal of scientific and research publications*, 7(8).
29. Koech, S. (2013). *The effect of capital structure on profitability of financial firms listed at Nairobi stock exchange*. Kenyatta University.
30. Lazaridis, L & Tryfonids, D. (2006). Relationship between working capital management and profitability of listed companies in the athens stock exchange. *Journal of financial management and analysis*.
31. Makori G & Sile I. (2017). *Effect of credit appraisal practices and credit monitoring on profitability of DT Saccos in Nairobi county*.
32. Malombe, G. (2011). *The effect of dividend policy on profitability of SACCOS with FOSAs in Kenya*. University of Nairobi.
33. Muhammad, H. (2015). *Impact of capital structure on profitability: An empirical analysis of automobile sector in Pakistani*.
34. Mulinge, M. (2016). *Liquidity management and financial performance of saccos in Nairobi county*. KCA University.
35. Niresh, J. (2012). Relationship between capital structure and profitability. *Global journal of management and business research*, 12(13), 66 - 73.
36. Njenga R & Jagongo A. (2019). Effect of financial management decisions on financial performance of selected non deposit taking saccos in Kiambu County. *International academic journal of economics and finance*, 3(3), 204 - 217.
37. Njuguna, I, & Jagongo, A. (2015). Factors considered in dividend payout decisions- The case for listed companies in Kenya. *Research Journal of Finance and Accounting*. 6(13), 68-74.
38. Ofei, K. (2001). *Retooling credit unions. The case of credit unions of Ghana*.
39. Raheman, A & Nasr, M. (2007). Working capital management and profitability - case of Pakistani firms. *International review of Business research papers*, 3, 279 - 300.
40. Sangeeta. (2018). Impact of financial management decisions on profitability of steel companies in India. *Pacific Business Review International*, 10(10).
41. Tamrin, M, Rahman, M & Aryati, A. (2017). Effect of profiability and dividend policy on corporate governance and firm value: an evidence from Indonesian manufacturing sectors. *Journal of business and management*, 19(10).
42. Van Horne & Wachowicz, M. (2000). *Fundamentals of financial management*. Prentice Hall Inc.
43. Xia, F. Farmer, D.B, Lin, Y.M. and Avouris, P. (2010). Graphene Field-effect transistors with high on/off current ratio and large transport band gap at room temperature. *Nano letters*, 10, 715-718.