



EFFECT OF FINANCIAL STRUCTURE ON THE FINANCIAL PERFORMANCE OF DEPOSIT TAKING SAVINGS AND CREDIT COOPERATIVES IN KENYA

Mwaniki, S. M., Oluoch, J. O., & Ndambiri, A. N.

EFFECT OF FINANCIAL STRUCTURE ON THE FINANCIAL PERFORMANCE OF DEPOSIT TAKING SAVINGS AND CREDIT COOPERATIVES IN KENYA

Mwaniki, S. M.,^{*1} Oluoch, J. O.,² & Ndambiri, A. N.³

^{*1}Msc Candidate, Jomo Kenyatta University of Agriculture and Technology [JKUAT], Nairobi, Kenya

²PhD., Jomo Kenyatta University of Agriculture and Technology [JKUAT], Nairobi, Kenya

³Jomo Kenyatta University of Agriculture and Technology [JKUAT], Nairobi, Kenya

Accepted: April 25, 2018

ABSTRACT

Financial structure is an important factor of consideration when it comes to financial performance. Several studies show that highly leveraged organizations usually do well in terms of financial growth by increasing the value of a firm, contrary to the MM theorem that argues capital structure is irrelevant factor to consider since it does not affect the value of an organization. This study sought to examine the effect of financial structure on the financial performance of DT-SACCOs in Kenya. It was necessitated due to the inconsistencies and contradictions in findings of the previous studies that were sampled. The financial performance was measured by return on equity (ROE). The study adopted a descriptive research design and involved a sample size of 18 DT-SACCOs in Kenya ranked top in both asset base and deposit size in the financial year ended 31st December 2016. Secondary data obtained from the annual reports and financial statements of the 18 sampled DT-SACCOs was used for analysis. The annual reports and financial statements were sourced from the official website of SASRA and the respective official websites of the DT-SACCOs. The period of study stretched from year 2012 to year 2016. The collected data was converted into panels and fed into Stata version 12. The data was analyzed and hypotheses tested by use of descriptive, correlation and regression analysis models. The findings of the study showed that a positive and significant relationship existed between equity financing, long term debt financing, short term debt financing, member deposits and financial performance of DT-SACCOs in Kenya. There is need for DT-SACCOs to adopt alternative financial approaches in order to improve their financial performance. Some of the challenges encountered during the study included missing of financial statements for some years in the official websites of both SASRA and some DT SACCOs. This challenge was overcome by visiting the head offices of those DT SACCOs and requesting for soft copy of the missing financial statements. However, this delayed the study as it was not completed within the project expected completion period.

Key Words: equity, Long Debt, Short Term, Deposits, Financial Performance

INTRODUCTION

The term financial structure can be defined as the way an organization finances its business assets by employing all the available resources (Moyer, McGiugan, & Kretlow, 1999). Firms normally finance part of their assets with equity, that is, ordinary shares, preference shares and retained earnings while the other part is financed by borrowing (either internal, external or both). Therefore, financial structure comprises of both short term and long term debt financing (Moyer, et. al., 1999). According to Pandey (2015), financial structure is the extent to which total funds are available to finance the total assets of a firm and it comprises of both long term and short term sources (includes all the liabilities of a firm).

Capital refers to the funds that an organization requires to carry out its day to day business operations. There are two major sources of capital: Equity and Debt. A business organization can finance its operations in two main ways, through equity or debt financing (Mclaney, 2009). Equity financing is where by owners of a business enterprise contributes to raise capital for running a start-up business. Thereafter, additional equity financing is usually done through plowing back profits to the business rather than paying them out as dividends, issuing shares to the existing owners or shareholders and / or making new share issues to the members of the public (Mclaney, 2009). Debt capital refers to the borrowed funds inform of a loan that must be repaid within a specified period of time with interest. Petersen (2017) defines debt capital as money raised by an organization from external creditors inform of a loan. A loan or debt may either be short-term which must be paid back within a year or long-term which is payable for a period exceeding a year (Petersen, 2017). Financing mix through debt (either long-term, short-term or both) is referred to as capital structure (Pandey, 2015).

The first theory on financial structure was the work of Modigliani and Miller (1958) where they came to a conclusion that under frictionless markets and homogenous expectations, use of debt capital does not affect the value of a firm and hence financial or capital structure decisions are irrelevant. The prime objective of any company is to maximize its shareholders value and according to MM Theory, use of debt capital fulfils this objective. Since financial structure decision is irrelevant of the firm value, MM suggested that a firm can use 100% debt capital to finance its business operations. "The apparent existence of an efficient capital market, coupled with the evidence on the relationship between risk and expected return, suggests that businesses are unlikely to be advantaged significantly by selecting one type of finance rather than another" (Mclaney, 2009).

In reality, the capital market is hardly efficient as it is full of anomalies and therefore this conclusion that was made by Mclaney (2009) does not hold water. Although equity financing does not expose the existing shareholders to additional risk, it is usually an expensive method whereas on the other hand a secured debt finance which exposes a company to more risk tends to be cheap (Mclaney, 2009). Subsequent researches have showed that it is indeed true that debt capital may increase the value of the firm. However, investors are advised to be cautious on their debt to equity ratio as high levels of debt capital can adversely affect their business. This is due to the fact that loans are usually given under certain covenants that restrict the operations of the firm in future. According to Chowdhury (2010), the debate over the effect of financial structure decision or choice is esoteric. To date, researchers still continue to look for the optimal financial structure that a firm can use to finance its business and realize the maximum shareholders' value.

Financial performance refers to how well a company utilizes its assets in order to generate

income. It can also be defined as the extent to which financial objectives have been accomplished. Financial performance can be done by use of financial ratios or through other comprehensive financial analysis methods such as common size analysis (Fabozzi & Peterson, 2003).

A financial analyst uses financial ratios to evaluate a firm's operations whereas an investor uses the same to evaluate the potential risk and return that can be realized upon investing in a firm's securities. According to Pandey (2015), the common financial ratios of interest to an analyst as well as to an investor include operating profit margin, net profit margin, and total debt-to-equity ratio, return on assets, return on equity among others. In order for a firm's ratios to make some sense, a manager should use the best firm in terms of profitability and efficiency in the same industry as a benchmark and compare its performance with that of his company. Alternatively one should analyze ratios at regular intervals of time (say after every financial year), interpret and compare. The other way of assessing the financial performance of a firm is through common size analysis whereby a manager compares the financial statements for a firm at different financial periods using a benchmark such as total assets (for statement of financial position) or total sales (for income statement). This enables the analyst to assess the trends in investments and profitability of the firm (Pandey, 2015).

In conclusion, there is hardly any efficient capital market that exists in the real world as it is full of anomalies. The main reason why financing matters is due to the existence of taxes, variance in information (about the market) and agency costs that exist in the real finance world (Myers, 2001). The great challenge that faces companies today when making financial structure decisions is determining the influence on financial performance as performance is key factor in determining the value of the firm and its survival (Githire & Muturi, 2015).

A saving and credit cooperative organization is a financial institution that provides both savings and credit services to its members. The history of SACCOs is associated with two business leaders from South Germany (WOCCU, 2014). They are the founding fathers of SACCOs back in 1846. They established a saving and credit cooperative for minor artisans and urban middle classes in Germany. Luigi of Italy copied the idea from the two predecessors and formed a saving and credit cooperative. The idea spread like a bush fire and immediately SACCOs were established in Europe, Northern America, Latin America and Asia within a period of thirty years from 1900 to 1930 (WOCCU, 2014).

In Africa, the idea of forming a SACCO was introduced by a catholic bishop in a town of Jirapa, Ghana, in 1955 (Ghana Co-operative Credit Unions Association, 2017). Reverend Father John McNulty (an Irish Canadian) mobilized and assisted the Jirapa residents to form a SACCO in order to help them address their financial problems as a group rather than at individual level. Having learnt and seen how SACCOs performed financially in Canada, he trained about 60 persons to form an organization which later became the first ever successful SACCO in Africa. The success story of the Jirapa SACCO in Ghana spread throughout the African continent. According to Ghana Co-operative Credit Unions Association (2017), the growth of credit unions in Ghana got a great boost when Pope John XXIII appointed Bishop Dery in the year 1960. The Bishop highly encouraged formation of credit unions in all the parishes. The foreign missionaries in Africa participated to a great extent in establishing SACCOs. The English-speaking countries in Africa were the pioneers of SACCOs (Ghana Co-operative Credit Unions Association, 2017).

Agriculture is the backbone of Kenya's economy and this is the reason why SACCO subsector has experienced a rapid growth. According to Mwangi and Wanjau (2012), the idea of co-operatives in

Kenya was introduced in 1908 when the white colonial settlers were the only persons who could qualify as members. The pioneer cooperative in Kenya was established in Lumbwa, currently known as Kipkelion (in Kericho County). The white colonial settlers later allowed Africans to form and join SACCOs in 1944. Since then, a lot of SACCOs have been established (Mwangi & Wanjau, 2012).

The cooperatives have made a significant contribution towards the growth of the Kenya's overall economy. According to the Ministry of Industrialization and Enterprise Development in Kenya (2015), about 63% of the Kenya's population is actively involved in cooperative-based organizations. The Ministry estimates about 80% of Kenyans generate their income directly or indirectly from cooperatives and credit unions. In the year 2007, the total assets held by SACCOs amounted to US Dollars 2.7 Billion which included \$2 billion members' deposits in form of shares and savings. The cooperative sector recorded a total turnover of about \$ 323.4 Million in 2007 out of which \$ 192 Million was exclusively from SACCOs. The Cooperative Bank of Kenya which was initially a Cooperative Union recorded a market share of 14% and a return of equity (ROE) of 28.5% making it to be ranked second and third respectively according to The Bank Supervision Annual Report released by the Central Bank of Kenya (2015). These statistics show that the financial performance of SACCOs and other credit unions in Kenya is growing fast (The Bank Supervision Annual Report, 2015).

Cooperatives in Kenya were started by the European settlers back in 1908 when they formed the famous Lumbwa Cooperative Society. This society was exclusively for the white settlers and Africans were not allowed to become members of the Lumbwa Cooperative Society which was a dairy cooperative (History and Organization of Cooperative Development and Marketing Sub Sector in Kenya , 2017). The first piece of legislation (cooperative ordinance) on cooperatives was

enacted in 1931 to regulate and monitor the operations of the cooperatives. Shortly after the cooperative ordinance, the Kenya Cooperative Creameries (KCC) became the first cooperative to be registered under the new law on 8th February 1931. The Kenya Farmers Association (KFA) followed suit and also got registered in the same year. It is worth noting that this cooperative ordinance did not allow Africans to be members of the cooperatives. The Kenya Planters Cooperative Union (KPCU) got registered in the year 1937. These organizations (KCC, KFA and KPCU) were initially registered as companies but later changed and registered as cooperatives following the cooperative ordinance (History and Organization of Cooperative Development and Marketing Sub Sector in Kenya , 2017).

Statement of the Problem

Although, from global to local perspective SACCOs' performance has been in an upward trajectory both economically and socially, from their conception their main purpose is to develop a culture of Savings and borrowing (Ochigo & Muturi, 2018). There is need to adopt a sensible and reliable financial management practices in order to achieve that. In fact the value contribution of SACCOs globally and locally cannot be ignored more so in both financial deepening and financial inclusion. Despite of their role in the economy there are drastic changes which are happening and pose a threat on their survival and constrain their resource allocation (Ochigo & Muturi, 2018). Even if they mainly rely on membership deposits to enjoy the going concern the sustainability of membership to finance their needs is questionable. This leads to seeking alternative financing approaches to meet their financial needs which have resulted to long term and short term borrowing (Githire & Muturi, 2015).

Most of the findings from the previous studies on the effect of financial structure on financial

performance contradicted in their findings and conclusions. For instance, a study was conducted by Maina and Kandongo (2013) on the effect of debt-equity ratio performance of firms listed at the Nairobi Securities Exchange (NSE). They conducted a census of all firms that were listed on the NSE from the year 2002-2011. They found a significant negative relationship between financial structure and all measures of financial performance (Maina & Kandongo, 2013). Another study was conducted by Abdul (2012) on the relationship of capital structure decisions with firm performance in Pakistan where he sampled 36 engineering sector firms in Pakistan market listed on the Karachi Stock Exchange from year 2003-2009. He found out that capital structure of the firms had a negative and insignificant relationship to the return on assets-ROA (a measure of financial performance) (Abdul, 2012).

In contrast, a study was conducted by Githire and Muturi (2015) on the effects of capital structure on financial performance of firms listed in the NSE where they sampled all firms listed in the NSE from year 2008-2013. They found out that both equity and long-term debt financing positively and significantly influenced the financial performance of firms listed in the NSE (Githire & Muturi, 2015). Another study was conducted by Ahmad (2015) on the effect of capital structure on the financial performance of listed companies in Bahrain Bourse (Kingdom of Bahrain) where he sampled the listed 17 non-financial companies from year 2009-2013. He found out that capital structure had a positive and significant effect on the performance of the firm measured by ROE (Ahmad, 2015).

To summarize, previous studies on effect of financial structure on the financial performance of firms have yielded mixed results. Perhaps this was as a result of failure to split the financial structure components so as to appreciate the contribution of each component separately for instance splitting equity into retained earnings and share capital and determining their effect on financial performance

separately. Also, no attempt has been noted in splitting debt into long-term and short-term debt and determining its effect on financial performance separately in DT SACCOS though (Mwangi, Muturi & Ngumi, 2016) adopted the concept amongst listed companies in East Africa and generalizability of their findings was subject to examination in this study. Further, no locally documented studies that the researcher came across comparing the financial structure and financial performance of DT-SACCOS more so after the promulgation of new constitution in 2010 hence the reason the researcher decided to carry out this study and focus on the DT SACCO sub-sector.

Objectives of the Study

This study generally looked into the effect of financial structure on the financial performance of DT-SACCOS in Kenya. The specific objectives were:-

- To find out the effect of equity financing structure on the financial performance of DT-SACCOS in Kenya.
- To determine the effect of long term debt financing structure on the financial performance of DT-SACCOS in Kenya.
- To establish the effect of short term debt financing structure on the financial performance of DT-SACCOS in Kenya.
- To find out the effect of member deposits on the financial performance of DT-SACCOS in Kenya.

LITERATURE REVIEW

Theoretical Review

Modigliani and Miller (MM) Theory

This theory sought to explain the effect of capital structure on the financial performance of a firm. It is also known as the capital structure irrelevance theory or proposition. According to MM (1963), capital structure does not have a significant influence on the value of a firm (Miller & Merton, 1995). It was derived from a study that was carried

out by two professors Modigliani and Miller in 1958 and later revised in 1963. However, this theory was subjected to various assumptions and could only make sense under a perfect market condition where no taxes were charged, no bankruptcy costs were incurred, no transaction costs were incurred and there was free access of information to both insiders and outsiders. Therefore, the components of financial or capital structure (mix of debt and equity) were irrelevant and did not influence the value of a firm (financial performance) as the two scholars put it (Fama & French, 2002).

According to the theory, the weighted average cost of capital (WACC) was not affected by changes in the capital structure. This meant that if a company borrowed some funds for instance, there would be no tax benefits since the interest expense incurred would not be a tax deductible expense. Similarly, since there were no benefits or costs incurred as a result of changes in capital structure, the share price of a company would not be influenced and would remain constant. This was totally different with the real world situation where taxes, transaction costs, borrowing costs and bankruptcy costs were (and still are) inevitable. To date, people pay to acquire information since there is no free access to information as the theory suggested. This theory cannot hold in the current real world as it was disapproved by this study.

This theory was appropriate for the study since DT SACCOS ought to use alternative financing sources and mix both short term and long term. Use of long term debt financing should be beneficial to DT SACCOS. This calls for borrowing from long term sources so as to benefit from interest tax shield benefit and also enhance credit creation process by borrowing in long term and lending in short term.

Static Trade off Theory

This was an advancement of the Modigliani and Miller (1963) theory which further explained the effect of debt capital on the financial performance

of a firm. It was developed out of a study done by Modigliani and Miller (1963) where they introduced a tax benefit of debt and tested its effect on the value of a firm. According to static Trade off theory proposed by Myers (1984), when a company goes for a debt to finance its operations, it faces challenges amongst which is to strike a balance between tax benefits and bankruptcy costs hence there is a great need to strike a balance between the two which is what trade-off theory was all about (Pandey, 2011). The costs of debt which include bankruptcy costs, financial distress costs among others explain why firms do not use a 100% debt to finance their operations as suggested by Modigliani and Miller. Most of the empirical studies have found out that optimal capital structure is achieved by use of both equity and debt capital.

According to this theory, a firm should have a target debt ratio which enables it to balance between marginal benefits and marginal costs of the debt (Ghazouani, 2013). Under this theory, firms with more fixed or tangible assets (usually referred to as safe firms) should use a high proportion of debt in financing their business operations as compared to those firms with more current assets or intangible assets (also known as risky firms). This is because during liquidation of risky firms, the intangible assets will easily disappear (Ogebe, 2013). Similarly, firms with high growth (usually characterized by high percentage of increase in turnover or gross profit margins) should borrow or use low levels of debt to avoid losing value through financial distress (Ogebe, 2013).

As explained by Ghazouani (2013), this theory therefore suggested that there was an optimal capital structure available for every firm and that the firm manager should focus on the same in order to maximize the value of the firm while maintaining the cost of capital (WACC) as low as possible (Pandey, 2011). This study tested whether an optimal debt ratio (optimal capital structure) point

exists' which gives the maximum value of a firm at the lowest cost of capital.

The Pecking Order Theory

This was another theory of capital structure which was first suggested by Donaldson (1961) but later developed by Myers and Majluf (1984). It was assumed that managers usually have more information about a firm than the investors due to information asymmetry. It is worth noting that managers are directly involved in running day to day operations of the firm and hence have a lot of information at their disposal. This theory did not consider any optimal capital structure. It stated that internal sources of funds were preferred since they were cheaper to acquire than external sources. A firm manager will therefore try to exhaust all internal sources of raising capital before moving to more expensive external sources.

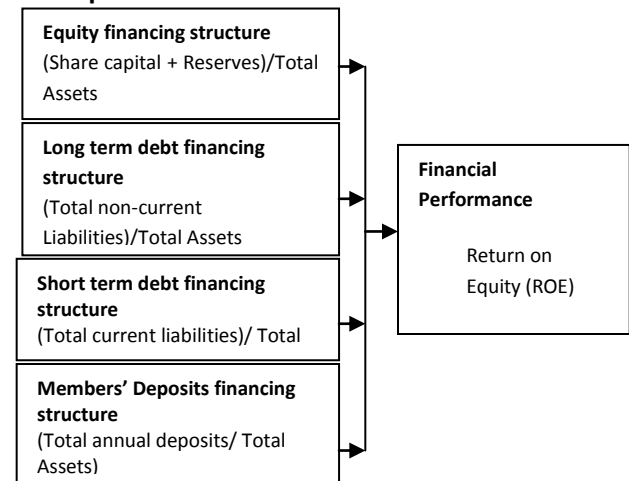
According to the pecking order financing structure, the internal sources come first followed by low-risk debt financing and finally share financing (issuing shares to raise capital). According to the previous empirical studies, financiers of a long term debt require collateral inform of fixed assets and this is a demerit of firms characterized by intangible assets hence the need to consider internal sources first as suggested by this theory (Githire & Muturi, 2015). This study helped to establish whether the external sources were more expensive than the internal sources of financing in DT-SACCOs. The theory was appropriate for the study since there was need for DT SACCOs to first exhaust use of members deposit to finance their needs prior to seeking external finances.

The Signaling Theory

This theory was authored by two professors Poterba and Summers (1985) to explain information asymmetry between company's managers and their shareholders. As mentioned before, managers have a lot of information in their possession. If the

managers of a company strongly believe that the company is undervalued, they will borrow more externally and later issue equity. Similarly, if the managers believe that their companies are overvalued, they will issue equity first followed by debt. Hence according to Ross (1977), managers' choice of capital structure will signal information to the market. As a result, increase on a firm's leverage may be a positive sign towards the future earnings of a company. Failure to repay debt could lead to bankruptcy and hence firms with high levels of debt depict a positive signal of their capability of having sufficient cash flows to service the debt (Jensen & Meckling, 1976). Dividend announcement by a company is a signal of a prospective future as an organization suffering from distress and bankruptcy costs mostly likely cannot announce dividend pay outs.

Conceptual Framework



Independent Variables **Dependent variable**
Figure 1: Conceptual Framework

Operationalization of the Variables

In this study financial structure was operationalized as proportion of equity financing, long term debt financing, short term debt financing and membership deposits to the total assets. Financial performance was operationalized as return on equity (ROE). It is calculated by dividing the net

income by the shareholder's equity (Pandey, 2015). Net Income (NI) is also known as profit after tax and is the final profit arrived at after deducting interest expense, tax, depreciation and other deductions. It is used to measure how profitable a company is over a period of time. ROE is considered as among the best comparative measures of profitability as it can be used to compare profitability across similar companies or organizations.

Financial structure was broken down into four main independent variables namely Equity financing, Long-term debt financing, Short-term debt financing and members' deposits which were then subjected to the profitability measure of financial performance. The schematic representation is as shown in Figure 2.1. The equity financing component comprised of share capital (both authorized and issued share capital) and share capital and/or reserves. The long-term debt financing component here was the total non-current liabilities for example a bank loan or any other non-current liability whose repayment period exceeded a year for instance a loan from KUSCCO. In other words, the long term debt was equal to the total non-current liabilities of the DT-SACCO.

The short term debt (total current liabilities) variable that was used here involved short-term loans whose repayment period was less than a year for instance a bank overdraft. Membership size was taken as total annual deposits/savings from members both withdrawable and non-withdrawable deposits. According to Wanjiru and Muturi (2016), membership size has a positive effect on the financial performance of SACCOs (Wanjiru & Muturi, 2016). This study sought to justify this argument. Long-term loans and short-term loans are grouped under 'interest bearing liabilities' or 'total borrowings' in financial statements of SACCOs according to the International Financial Reporting Standards (IFRS).

Empirical Review

Financial Performance

As explained before, financial performance refers to how well a company utilizes its assets in order to generate income (Pandey, 2011). Alternatively, it can be defined as the extent to which financial objectives of an organization have been achieved (Fabozzi & Peterson, 2003). This is commonly measured by use of financial ratios such as return on assets, return on equity and profit before tax.

A study was conducted by Kiaritha (2015) on the determinants of the financial performance of SACCOs in the banking sector. She sampled seven SACCOs in the banking sector regulated and licensed by the Ministry of industrialization and enterprise development. The financial performance variables she used in her study were profit before tax, net assets, members' savings, loans disbursed and dividends paid. She found out that all independent variables of the study such as competition from commercial banks, internal politics, operating cost and the SACCO members' saving culture had a significant effect on the financial performance. This study used return on equity (ROE) as a variable of financial performance.

Equity Financing Structure and Financial Performance

This is where money is raised through sale of shares either to the existing shareholders or to other interested investors. Equity shareholders (also called ordinary shareholders) are the real owners of an organization with voting rights and hence exercise a great control over matters management (Pandey, 2015). This helps in improving the financial performance of an organization.

A study carried out by Ogebe (2013) to determine the impact of capital structure on firm performance in Nigeria from year 2000 to 2010. Ogebe (2013) grouped a list of selected companies using comparative analysis into highly geared and lowly

geared then used regression model to find out the relationship between each firm's performance in relation to level of leverage over a period of ten years (Ogebe, 2013). He found out that there was a significant negative relationship between leverage and firm's performance. He concluded that firms should use more of equity than debt in financing their operations. He noted that debt capital can be used to increase the value of a firm up to a certain limit after which it becomes detrimental (Ghazouani, 2013). Githire and Muturi (2015) concurred with Ogebe's study that use of equity to finance a business positively contributed to a financial growth of a firm.

Long Term Debt Financing Structure and Financial Performance

Both long term loans and debentures are sources of long term debt financing. Long term debt financing can be defined as the money owed to lenders and whose repayment period is more than one year from the current balance sheet date (Petersen, 2017). Long term debt sources of finance include long term loans and debentures (unsecured long term loan). These sources of finance are suitable when a firm's expenditure is capital in nature. This is a common mode of financing frequently used by well-established corporate institutions due to the virtue of their great asset base that can be used as collateral against the debt. Many small medium sized enterprises with a small asset base are disadvantaged in sourcing for long-term debt as a mode of financing due to lack of collateral that can be used to secure the financing as required by many lending financial institutions.

A study was conducted by Ebaid (2009) on the impact of capital structure choice on the financial performance: empirical evidence from Egypt. He sampled all the non-financial listed firms in Egypt from 1997 to 2005 and found out there was no significant impact of long-term debt on Return on Assets (ROE). Another study was carried out by

Mwangi, Muturi and Ngumi (2016) on the relationship between financial structure and financial performance of firms listed at East Africa Securities Exchange where they censured the then 61 listed firms between year 2006 and 2016 using panel secondary data. They found a negative insignificant relationship between long term debt financing structure and firm performance.

Githire and Muturi (2015) carried out a study to examine the effect of capital structure on the performance of listed firms in Nairobi Securities Exchange (NSE) in Kenya. Their study was based on all firms listed in NSE from the year 2008 to 2013. They used secondary data obtained from the published financial statements and annual reports. The data was analyzed by use of Statistical Program for Social Sciences (SPSS) and multiple regression analysis. They found out that long term loan and debenture financing had a positive and significant effect on return on assets (ROA) which was used as an accounting measure of financial performance. Based on their findings they concluded that long term loan and debenture financing enhance financial performance (Githire & Muturi, 2015).

Another study was brought forth by Mauwa, Jeanine and Namusonge (2016) containing a study in which they had sought to appraise the effect of capital structure on the financial performance of firms listed on the Rwanda Securities Exchange (RSE). Using both primary and secondary data, they conducted the study on the six firms that were listed on the RSE. They used descriptive statistics, correlation analysis and regression analysis to analyze the data on Statistical Program for Social Sciences (SPSS). They found out that long term loan and debenture (capital structure) was negatively associated with Return on Assets (ROA) and Return on Equity (ROE). They made a conclusion that long term loan and debenture financing were negatively and significantly related to financial performance of firms listed at the RSE (Mauwa, Namusonge, & Onyango, 2016). They further recommended that

firms should keep their leverage level under control (work towards reducing their liquidity ratios) and have a clear working capital management policies to avoid bankruptcy situations and improve their financial performance (Mauwa, Namusonge, & Onyango, 2016).

Pratheepkanth and Puwanenthiren (2011), sought to identify the impact capital structure had on financial performance of a company. The evidence was based on a selected number of companies listed on the Colombo stock exchange in Sri Lanka from year 2005 to 2009. The finding of this study was that use of long term loan and debenture financing had a significant negative relationship with financial performance (Pratheepkanth & Puwanenthiren, 2011). He highlighted that business companies mostly use debt capital in order to benefit from the tax deductibility of interest expense.

Another study in Sri Lanka was carried out by Arulvel and Ajanthan (2013). They sought to investigate the relationship of capital structure and financial performance of trading companies which were listed in Colombo Stock Exchange (CSE) from the year 2007-2011. They used secondary data sourced from audited books of accounts and financial reports of eight firms listed in CSE. They found out that debt ratio (an indicator of capital structure) was negatively correlated with all financial performance indicators used such as Gross profit, Net profit, Return on Equity and Earnings per share. Debt –equity ratio was negatively correlated with all financial performance measures except gross profit, and only debt-equity ratio showed significant relationship with net profit.

Velnampy and Vickneswaran (2014) carried out a study aimed at establishing the impact of capital structure and liquidity position on profitability. His sample consisted of the listed telecommunication firms in the Colombo Stock Exchange (CSE) from the financial years 2008 to 2012. They used regression analysis as a tool for data analysis and found out

that there is no significant impact of capital structure on the profitability of the sampled listed telecommunication firms in the CSE. Lastly, another study was conducted by Otieno (2013) on the factors that determine capital structure of listed firms in Kenya. He studied 29 non-financial firms listed on the Nairobi securities exchange during the period 2004-2012. “The results of his study revealed that firm specific factors affecting the capital structure of listed firms in Kenya were asset tangibility, firm’s profitability, size of the firm, firm’s growth opportunities and liquidity of a firm’s assets while the macroeconomic factors were economic growth and corporate tax rate” (Otieno, 2013). He also made an observation that big-sized firms had easy access to funding in the capital market compared to small firms. His study also established that the behavior of listed firms in Kenya can be explained by the pecking order theory which is a sign of asymmetry in the market.

Short-Term Debt Financing Structure and Financial Performance

Short term debt can be defined as the money owed to lenders and whose repayment period is equal to or less than one year from the current balance sheet date (Petersen, 2017). Short-term debt sources of finance include temporary bank credits in form of overdrafts and money market instruments like treasury bills and other short term loans. Such sources of finance are mostly suitable for operational expenditure of a firm. In a study conducted by Githire and Muturi (2015), short-term debt financing was found to have a negative and significant effect on Return on Asset. This finding led them to conclude that use of short term debt reduces financial performance. In another study conducted by Ebaid (2009) to establish the relationship between debt level and financial performance found out that short-term debt negatively affects the return on assets (financial performance).

Similarly, a study by Milos and Milos (2015) revealed that short term debt negatively affects the corporate profitability (return on equity). The study involved 50 companies listed on the Bucharest Stock Exchange in Rome and the data for the study was gathered and analyzed from 2003-2014. However, the same study did not tell us if the negative effect of short-term debt had a significant effect on the corporate profitability (Milos & Milos, 2015).

Members' Deposits and Financial Performance

This refers to number of members in a certain SACCO or amount of savings or deposits held by a certain SACCO on behalf of her members. In this study, membership size will be taken as the number of members' deposits or savings. This is because a SACCO may have few members but have a large amount of deposits. A study was conducted by Wanjiru and Muturi (2016) on the factors affecting financial performance of DT-SACCOs in Kiambu County where they censured all the 12 SACCOs in Kiambu County, Kenya for a period of 5 years from 2010-2014. The study used a descriptive design where data was analyzed by use of SPSS Version 17 and modeled by multiple regression analysis. They found out that membership size had a positive and significant effect on the financial performance of all the 12 SACCOs in Kiambu County. However, as mentioned earlier, the study used total count of members in each SACCO as a predictor variable. This study differed with that of Wanjiru and Muturi

(2016) in that it used the total savings and deposits owned by members.

METHODOLOGY

A research design can be defined as a detailed strategy or plan of how a study will be carried out. This study adopted descriptive research design to answer the research questions. In this study, the target population was all the deposit taking SACCOs in Kenya that were licensed by SASRA as at 31st December 2016. The following multiple linear regression equation was used to model the data:

$Rit = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$; Where,

- Rit (Y) = ROE for DT-SACCO i and year t
- ROE = Net Profit after tax / Total Equity
- B_0 = the Y Intercept / (constant)-Its influence on the model is insignificant
- $\beta_1 \dots \beta_3$ = the slope / Gradient- represents the degree with which DT-SACCO performance changes as a result of change in one unit variable of each independent variable.
- X_1 = (Reserves +Equity) / Total Assets
- X_2 = Long term debt component (Non-current Liabilities) / Total Assets
- X_3 =Short term debt component (Current Liabilities) / Total Assets
- X_4 = Total Member Deposits / Total Assets
- ϵ = the error term component

FINDINGS AND DISCUSSIONS

Descriptive Analysis

Table 1: Panel Diagnostic Tests 1: Descriptive Statistics

	Equity	Long term debt	Short Term debt	Deposits	Financial Performance
Mean	0.18	0.54	0.20	0.45	0.14
Median	0.28	0.36	0.15	0.30	0.10
Maximum	0.48	0.72	0.33	0.47	0.27
Minimum	0.05	0.32	0.12	0.22	-0.04

Std. Dev.	0.23	0.22	0.89	0.27	0.11
Skewness	1.14	1.56	2.48	2.47	2.29
Kurtosis	2.87	2.69	2.87	2.51	3.19
Jarque-Bera	21.27	37.23	65.52	35.40	83.16
Probability	0.08	0.085	0.10	0.081	0.12
Observations	90	90	90	90	90

As shown in Table 1, descriptive statistics which included mean, median, maximum, minimum, standard deviation and normality test were used to summarize the data. On average 18% of the DT-SACCOs were financed using equity capital, 54% comprised of long term debt, 20% short term debt and 45% membership deposits. Normality test was

Panel Diagnostic Tests

Table 2: Panel Diagnostic Tests

Breusch –Pagan LM Test	χ^2 -value	p-value
	1.254	0.003
Test Results for Time Fixed Effects	F-value	p-value
	1.02	0.543
Heteroscedasticity test	χ^2 -value	p-value
	22.31	0.085
Serial correlation	F-value	p-value
	1.325	0.789

Prior to fitting the hypothesized model as shown in the conceptual framework several diagnostic tests were carried out to ensure the results do not in any way violate the assumptions of regression analysis as shown in Table 2. Firstly, the choice between fitting pooled effects and random effects model was tested using Lagrange Multiplier (LM) test. The test hypothesized that all entities had uniform variations against an alternative. They did not have uniform variation across entities. Because the p value was less than 0.05 there was enough evidence to warrant rejection of the null hypothesis and it was not appropriate to fit pooled effects regression.

Correlation Analysis

Table 3: Panel Diagnostic Tests2: Correlation Analysis

carried out using Jarque-Bera test and since all variables had p values greater than 0.05, then the data was normally distributed. The maximum amount of long term borrowing deployed by DT-SACCOs was 72%. A spot check indicated that this was adopted after interest rate capping which came into effect in 2016.

Secondly, test-parm was carried out to examine fixed effects across entities. In this test it was assumed that all dummy variables were zero. Since the p value was greater than 0.05 as shown in Table 2, it was not appropriate to introduce dummy variables or carry out two way analysis. Finally, there was neither heteroskedasticity nor serial autocorrelation (presence of serial autocorrelation might lead to skewed results) since in both cases P values were greater than 0.05 and consequently it was not appropriate to fit generalized model or use robust standard errors.

	Financial Performance	Equity	Long term debt	Short term Debt	Member Deposit
Financial Performance	1				
Equity	.518**	1			
Long term debt	.653**	0.045	1		
Short term Debt	.412**	0.075	0.303	1	
Member Deposit	.553**	.145*	0.450	0.025	1

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

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

The Karl Pearson correlation analysis was adopted in the study to examine the relationship that exists in both predictor variables and dependent variables since the variables were in ratio scale (Keith, 2006). This was carried out to determine the strength of relationship between financial performance and financial structure. As shown in Table 3 there was a positive and significant relationship between equity financing and financial performance of DT-SACCOs in Kenya (rho = 0.518, p value <0.05). This is an indication that an increase in equity financing would lead to an increase in the financial performance of a DT-SACCO.

Secondly, there was a positive and significant relationship between long term debt and financial performance of DT SACCOs in Kenya (rho = 0.653, p value <0.05) implying that an increase in long term debt leads to an increase in financial performance.

Table 4: Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Hausman Test	23.15	4	0.006	
Variable	Fixed	Random	Var (Diff.)	Prob.
Equity	0.021	0.022	0.00	0.03
Long Term Debt	0.034	0.034	0.000	0.048
Short Term Debt	0.016	0.017	-0.00	0.744
Member Deposit	0.019	0.020	-0.001	0.456

The choice between random effects and fixed effects model was tested using Hausman test as shown in Table 4. In a random effects model, the observations are not independent even if the error

Regression Analysis

Thirdly, there was a positive and significant relationship between short term debt and financial performance of DT SACCOs in Kenya (rho = 0.412, p value <0.05) an indication that an increase in short term debt would lead to an increase in financial performance. Finally, there was a positive and significant relationship between member deposits and financial performance of DT SACCOs in Kenya (rho= 0.553, p value <0.05) meaning an increase in Members' deposits would increase the financial performance and the reverse is true. Further, there was no multicollinearity among the four predictor variables since none of them had correlation coefficient greater than 0.8. This meant that the predictor variables are independent of each other.

term(s) is / are independent. The most appropriate model to fit was fixed effects since the p value was less than 0.05 as depicted in Table 4.

Table 5: Fixed Effects Regression Analysis on the effect of firm characteristics and Performance of SACCOs

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Equity	0.021	0.009	2.458	0.00
Long term debt	0.034	0.016	2.123	0.00
Short term Debt	0.016	0.006	2.618	0.00
Members Deposit	0.019	0.009	2.216	0.00
Constant	0.015	0.013	1.123	0.058
R-squared	0.617	Mean dependent variable		0.12
Adjusted R-squared	0.601	S.D. dependent variable		0.0265
S.E. of regression	0.031	Akaike info criterion		-1.532
Sum squared residuals	0.083	Schwarz criterion		-2.172
Log likelihood	415.125	Hannan-Quinn criterion.		-2.106
F-statistic	34.56	Durbin-Watson stat		2.153
Prob (F-statistic)	0.000			

Regression analysis in Table 5 revealed that equity, long term debt, short term debt and members deposits had joint significant effect on financial performance since (F= 34.56, P value = 0.000). Further, an R squared of 0.617 revealed that 61.7% of variations in financial performance of DT-SACCOs in Kenya can be accounted for by financial structure while the remaining percentage can be explained by other factors which were excluded in the model. The first research question sought to find out the effect of equity financing in financial performance of DT-SACCOs in Kenya. Results of the study revealed positive and significant relationship between equity financing and financial performance of DT-SACCOs in Kenya ($\beta=0.021$, p value <0.05). This implied that a unit change in equity financing increased financial performance by 0.021 units while holding long term debt, short term debt and members' deposits constant. The reverse of this statement is true. These findings were in conformity with Githire and Muturi (2015) who found a positive and significant relationship between equity financing and financial performance of companies listed in Nairobi securities exchange. In contrast they differed with Ogebe (2013) who found negative and significant relationship between equity financing and financial performance.

The second research question sought to find out the effect of long term debt financing on financial performance of DT-SACCOs in Kenya. Results of the study found out that a positive and significant relationship existed between long term debt financing and financial performance of DT-SACCOs ($\beta = 0.034$, p value <0.05). This implies that a unit change in long term debt financing increased financial performance of DT-SACCOs by 0.034 units and vice versa. These findings were in contrast of Mwangi, Muturi and Ngumi (2016) who found an insignificant negative relationship between long term debt financing structure and financial performance of companies listed in East Africa securities exchange. On the other hand the findings were in support of Githire and Muturi (2015) who found a positive and significant relationship between debenture capital and financial performance of companies listed in Nairobi securities exchange.

The third research question sought to find out the effect of short term debt financing on the financial performance of DT-SACCOs in Kenya. Results of the study revealed positive and significant relationship between short term debt financing and financial performance of DT SACCOs in Kenya ($\beta=0.016$, p

value <0.05). This implies that a unit change in short term debt financing increases financial performance by 0.016 units while holding other sources of finance constant. These results contrasted Milos and Milos (2015) who found a negative and insignificant relationship between short term debt financing and financial performance of listed companies in Rome. Moreover, the study contrasted Mauwa, Namusonge, and Onyango (2016) who found a negative but not significant relationship between working capital management and financial performance of listed firms in Rwanda stock exchange.

The fourth research question sought to find out the effect of members deposit on financial performance of DT-SACCOs in Kenya. Regression analysis revealed positive and significant relationship between members deposits and financial performance of DT SACCOs in Kenya, ($\beta=0.019$, p value <0.05). This implied that a unit change in members deposit increased financial performance of DT SACCOs in Kenya by 0.019 units. These results were in support of pecking order theory since generation of financing from members deposit is cheaper compared to use of long term and short term debt financing. The findings were in support of Wanjiru and Muturi (2016) who reported a positive and significant relationship between member deposits and financial performance of SACCOs in Kiambu County.

CONCLUSION AND RECOMMENDATIONS

The findings of the study are summarized based on the output and in line with the specific research objectives. This study sought to examine the effects of financial structure on financial performance of DT-SACCOs in Kenya. It adopted a descriptive research design and panel data was collected from annual financial statements of 18 Deposit Taking SACCOs from 2012 to 2016. Panel diagnostic tests

were carried out and fixed effects regression model was fitted as conceptualized in conceptual framework. On overall financial performance of DT-SACCOs can be accounted up to 61.7% by equity financing, long term debt financing, short term debt financing and membership deposits.

From regression analysis there was enough evidence to report that there is a positive and significant effect of equity financing on financial performance. Further, correlation analysis revealed a positive and significant effect of equity financing and financial performance.

The results of the study showed that there was a positive and significant effect of long term debt financing and financial performance. In addition, correlation analysis showed that there is a positive and significant effect of long term debt financing and financial performance.

From the results of the study, regression analysis revealed positive and significant effect of short term debt financing and financial performance. Moreover, correlation analysis revealed positive and significant effect of short term debt financing and financial performance.

Finally, regression analysis revealed a positive and significant effect of members' deposits and financial performance. Besides, the correlation analysis revealed a positive and significant relationship between members' deposits and financial performance.

Conclusion

Based on the study findings it can be concluded that there is need for DT SACCOs to explore and adopt alternative financial approaches. A DT SACCO should not rely on one financing option but rather go for several options in order to improve the financial performance. Secondly, there is need for DT SACCOs to recruit more members since this will enhance their equity financing component. Continued membership recruitment drive will

ensure that SACCO loan book and deposits grow and will enhance chances of meeting all statutory requirements. There is need for DT SACCOs to seek strategic partnership who can provide them with long term sources of finance. Since increased long term debt financing increases financial performance. This may call for adoption of conservative financing strategy on long term debt management so as to benefit from term financing in both short run and long run.

Thirdly, DT SACCOs need to continuously evaluate their working capital management strategy deployed. This will enhance mixing of alternative approaches such as aggressive, conservative and matching so as to enhance performance of their respective SACCOs. They should look for prospects of managing liquidity and avoidance of idle current assets situations within a given accounting cycle. Finally, there is need to develop culture of membership deposits with DT SACCOs this will mitigate against possibilities of bank panics and runs since there will be no situations in which SACCOs will experience cash crunch. Moreover, increased membership deposits will enhance credit creation process and minimize reliance on external funding both in short run and long run.

Recommendations

From the foregoing study the following recommendations can be drawn. Firstly, SACCOs should intensify measures to recruit more members. This will increase their equity base. Since growth in membership would signal investors confidence. Corporate governance mechanism should be deployed to ensure that investor's interests and rights are fully protected.

Secondly, there is need for DT SACCOs to diversify their financial portfolio through borrowing on long term basis and investing funds in income generating projects which would increase amount of revenue on short term basis. This would minimize future

reliance on borrowed capital and enhance investment decision making capabilities due control which would be realized in absence of borrowed finances. There is need for DT SACCOs to identify investment opportunities which would give superior investment returns both in short term and long term and commit long term financing.

There is need for adoption of customized financing options by every SACCO this would ensure reliable working capital management. An adoption of appropriate working capital management policy would enhance day to day operations of a DT SACCO and eliminate chances of misappropriation of resources. This can be done through adopting secure accounting software, formulating clear cut financial policies and adhering to the same.

There is need for aggressive campaigns to be deployed to recruit new members and encourage continued deposits. This would ensure that DT SACCO reliance on external financing is minimized and increase in dividend payment to members. An increase in member deposits would create an appropriate model of credit creation. This can be done by increasing the level of information sharing and running aggressive marketing of the SACCO products and guarding or hoarding negative information that can lead to withdrawal of membership.

Suggestions for Further Study

Since the current study considered only a five year period and 18 DT SACCOs only there is need to increase the sample size and time period so as to benefit from big sample. There is need to carry out a similar study and consider all SACCOs which have been issued with interim licenses within the last ten years. Also an examination of financial structure against financial performance of the DT SACCOs in relation to their sizes ought to be carried out. Also, the study relied on four predictor variables and one dependent variable. There is need to increase the

variables of the study for a much wider perspective. Lastly, the study adopted secondary data and used Stata version 12 for data analysis. An alternative

study using primary data and a different statistical software should be adopted and findings compared.

REFERENCES

- Abdul, G. K. (2012). The relationship of capital structure decisions with firm performance: A study of the engineering sector of Pakistan. *International Journal of Accounting and Financial Reporting*, 2(3), 2162-3082.
- Ahmad, M. (2015). The Effect of Capital Structure on the Financial Performance of Listed Companies in Bahrain Bourse. *Journal of Finance and Accounting*, 3(4), 50-60.
- Arulvel, & Ajanthan. (2013). Capital Structure and Financial Performance: A study of listed trading companies in Sri Lanka. *Academica: An international Multidisciplinary Research Journal*, 3(6), 2249-7137.
- Baker, M., & Wurglar, J. (2002). Market Timing and Capital structure. *Journal of Finance*, 3(4), 12-26.
- Chowdhury, A. (2010). Impact of capital structure on firm's value: Evidence from Bangladesh. *Peer-reviewed and open access journal*, 4(5), 111-122.
- Ebaid, I. E.-s. (2009). The impact of capital structure choice on the firm performance: empirical evidence from Egypt. *The Journal of Risk Finance*, 1526-5943.
- Fabozzi, F. J., & Peterson, P. P. (2003). *Financial Management and Analysis* (2nd Edition ed.). New Jersey: John Wiley & Sons .
- Fama, E. F., & French, K. R. (2002). Testing Trade-off and Pecking Order Predictions about Dividends and Debt. *Review of Financial Studies*, 15, 1-37.
- Faraway, J. (2002). *Practical Regression and Anova Using R*. Retrieved from Research Project: <http://www.r-project.org>
- Gay, L., Mills, G., & Airasian, P. (2009). *Educational research: Competencies for analysis and applications* (9th ed.). Upper Saddle River, New Jersey: Prentice Hall.
- Ghana Co-operative Credit Unions Association. (2017). Retrieved from Ghana Co-operative Credit Unions Association: <http://www.cuagh.com/cua/about-us/history/>
- Ghazouani, T. (2013). The Capital Structure through the Trade-Off Theory: Evidence from Tunisian Firm. *International Journal of Economics and Financial Issues*, 625-636.
- Githire, C., & Muturi, W. (2015). Effects of Capital Structure on the financial performance of firms in Kenya: Evidence from firms listed at the Nairobi Securities Exchange. *International Journal of Economics, Commerce and Management*, III(4).

History and Organization of Cooperative Development and Marketing Sub Sector in Kenya . (2017). Retrieved from The Ministry of Industry, Trade and Cooperatives:
<http://www.industrialization.go.ke/index.php/downloads/123-history-and-organization-of-cooperative-development-and-marketing-sub-sector-in-kenya>

Islam, M. A. (2014). An Analysis of the Financial Performance of National Bank Limited Using Financial Ratio. *Journal of Behavioural Economics, Finance, Entrepreneurship, Accounting and Transport*, 121-129.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure . *Journal of Financial Economics*, 305-360.

Keith, T. (2006). *Multiple Regression and Beyond*. Pearson Allyn & Bacon.

Kothari, C. (2004). *Research Methodology: Methods and Techniques*. New Delhi: New Age International Publishers.

Kumar, R. (2011). *Research Methodology: A step-by-step for beginners*. London: SAGE Publications Ltd.

Maina, L., & Kandongo, O. (2013). Capital Structure and Financial Performance in Kenya Evidence from Firms Listed at the Nairobi Securities Exchange. *Journal of Finance and Accounting*.

Mauwa, J., Namusonge, P. G., & Onyango, P. S. (2016). Effect of capital structure on financial performance of firms listed on the Rwandan stock exchange. *European Journal of Business, Economics and Accountancy*, 4(4), 2056-6018.

Mclaney, E. (2009). *Business Finance Theory and Practice* (8th ed.). London: Pearson Education Ltd.

Miller, & Merton, H. (1995). Do the M&M Propositions Apply to Banks? *Journal of Banking and Finance*, 483-489.

Milos, R. L., & Milos, C. M. (2015). Does Short Term Debt affect Profitability? Evidence from the Romanian Listed Companies. *Performance, Competitiveness and Creativity*, 1844-7007.

Moyer, R., McGiugan, J., & Kretlow, W. (1999). *Contemporary Financial Mngement* (5th ed.). New York: West Publishers.

Mugenda, O. M. (2003). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Acts Press.

Mwangi, I. W., & Wanjau, K. L. (2012). The Role of SACCO in Growth of Youth Entrepreneurship in Kenya: A case of Nairobi County. *Grener Journal of Business and Management Studies*.

Myers, S. C. (2001). Capital Structure. *The Journal of Economic Perspectives* , 81-102.

Myers, S. C., & Majluf, N. S. (1984). Corporate Financing & Investment Decisions when Firms have Information that Investors do not have. *Journal of Financial Economics*, 187-221.

Ogebe, J. O. (2013, March 27). The Impact of Capital Structure on. Lagos, Nigeria.

- Orodha, A. (2003). *Essentials of Educational and Social Science Research* . Nairobi: Masola Publishers.
- Otieno, A. K. (2013). *Capital structure of listed firms in Kenya: the case of non financial firms*. Nairobi.
- Pandey. (2015). *Financial Management*. New Delhi, India: Vikas Publishing House PVT Ltd.
- Pandey, I. (2011). *Financial Management*. New Delhi: Vikas.
- Pandey, I. M. (2015). *Financial Management*. New Delhi, India: Vikas Publishing House PVT Ltd.
- Petersen, L. W. (2017). *Introduction to Investment and Finance* (1st Edition ed.). Denmark: bookboon.com.
- Pratheepkanth, & Puwanenthiren. (2011). Capital structure and financial performance: Evidence from selected business companies in Colombo stock exchange Sri Lanka. *Journal of Arts, Science & Commerce, II(2)*, 2231-4172.
- Sacco Societies Regulatory Authority. (2017). Licensed Saccos*. Retrieved from Sacco Regulatory Authority: <https://www.sasra.go.ke>
- Sekaran, U., & Bougie, R. (2011). *Research Methods for Business: A Skill Building Approach* (5th ed.). Delhi: Aggarwal printing press.
- Velnampy, T., & Vickneswaran, A. (2014). Capital Structure, Liquidity Position and Their Impact on Profitability: A study of Listed Telecommunication Firms in Colombo Stock Exchange (CSE), Sri Lanka. *Research Journal of Finance and Accounting, 2222-2847*.
- Wanjiru, A. N., & Muturi, W. (2016). Factors Affecting Financial Performance of Savings and Credit Co-Operative Societies: Case Study Kiambu County. *International Journal of Management and Commerce Innovations, 196-207*.