DETERMINANTS OF CAPITAL STRUCTURE IN DEPOSIT-TAKING SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN NAIROBI COUNTY

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DECLARATION

I hereby declare that this research project is my original work; it has not been presented to any other institution of higher learning for academic purposes.

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This project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

This project is dedicated to my parents who emphasized to me the power of knowledge. It is also dedicated to my immediate family, who stood with me during the duration of the study. A special dedication to friends and class colleagues with whom we have exchanged knowledge and made the study bearable.

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LIST OF ABBREVIATIONS AND ACRONYMS

ANOVA: Analysis of Variance

CBK: Central Bank of Kenya

DTSs: Deposit-Taking Sacco's

GDP: Gross Domestic Product

NSE: Nairobi Securities Exchange

ROA: Return on Assets

ROE: Return on Equity

ROI: Return on Investment

SACCOs: Savings and Credit Cooperative Societies

SASRA: Sacco Societies Regulatory Authority

SMEs: Small and Medium-Sized Enterprises

SPSS: Statistical Package for Social Sciences

WOCCU: World Council of Credit Unions

ABSTRACT

Capital structure is a fundamental aspect of corporate finance that examines on the approaches a firm chooses its financing decisions to determine proportion of equity and debt. In making these decisions, the firm should always gauge its operating environment, both external and internal. The study aimed at establishing the determinants of capital structure in Deposit-Taking Savings and Credit Cooperative Societies in Nairobi County. The study was premised on the following theories; pecking order theory, trade-off theory and agency theory. The study utilized a descriptive research design. The study focused on all 39 deposits taking Saccos in Nairobi County. Historical data was acquired from the financial books of respective Saccos. Information on firm size, profitability, and leverage and asset tangibility was acquired from the respective Sacco financial reports. The study collected data for the last five years 2014-2018. Diagnostic tests conducted included multi-collinearity, heteroscedasticity and normality test. The quantitative data acquired was analyzed using (SPSS) version 20. Descriptive statistics was utilized to explain quantitatively the significant attributes of the variables using mean, frequency and standard deviation. There exists strong positive significant relationship between profitability ad capital structures; DTSs, operating Nairobi County utilized more debt in capital structure in order to reap maximum profit. The study concludes that leverage has significant effect on capital structure of deposit-taking savings and credit cooperative societies in Nairobi County, that nearly all the Sacco's that used financial leverage mainly to increase the their earnings per share and to grow its return-on-equity. The study concluded that firm size is a significant predictor on capital structure of deposit-taking savings and credit cooperative societies in Nairobi County. The study supports that deposit-taking savings and credit cooperative societies should ensure that more members are enlisted and existing members should be encouraged to enhance contributions so that the equity levels of the Sacco can increase and more capital can be raised. Therefore, deposit-taking savings and credit cooperative societies should focus more on increasing their internal finances so that they can make more use of them rather than relying upon external finances. Moreover, the deposit-taking savings and credit cooperative societies should endeavor to obtain loans from institutions that offer low interest rates when need be to remove the burden of high interest rates.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Capital structure is a fundamental aspect of corporate finance that examines on the approaches a firm chooses its financing decisions to determine proportion of debt and equity. When making these decisions, an entity should always gauge its operating environment, both external and internal (Horne, 2015). The capital structure describes methods applied by an entity to raise finances for its operations by use of equity capital or debt capital or an equal mis of both debt and equity capital (Myers, 2014). In one way or another, business activities must be funded. If entities lack funds to support working capital requirements and fixed assets, businesses may never survive. Almost on all aspects of fixed asset investments, capital structure decisions are very important because they affect the profitability of the company (Tailab, 2016). Proper attention and care require to be given a lot of consideration while making the decision of capital structure in so as to enhance firm's rating and maximize shareholders value.

The study is anchored on agency theory , pecking order and trade-off-theory . Agency theory asserts that the capital composition of a firm is affected by management personnel who are compromised by their pursuit of personal interests before the maximization of shareholder value (Jensen & Meckling, 1976). Trade-off-theory argues that by raising the level of debts on an entities 'balance sheet, a firm will derive a tax benefit due to the interest tax shield. Increasing debt however, can result to financial distress (Modigliani & Miller 1963). According to pecking order assumption, firms usually follow a financing order due to information costs. Firms mainly encounter two possible costs whenever they turn to the external market to get funds i.e. information asymmetry cost and transaction

cost. These expenses make external funds more expensive and make organizations use external funds (Myers & Majluf, 1984).

The deposit taking Saccos financial sector contributes a major function in the realization of the economic status of Kenya as acknowledged in our country Vision 2030 economic policy plan. Saccos contribute significantly to our country GDP. For instance, according to a 2016 CBK report, this financial sub-sector accounted for 8.8%, 5.63%, and 5.59% of GDP in the period 2014, 2015, and 2016 respectively. Though there has been a decline in contribution to GDP this was experienced by all players in the financial sector in Kenya. The decline has been partly credited to the unfavorable business environment that preceded the electioneering period. Therefore, the research paper aims at establishing the determinants of capital design in Saccos in Nairobi County

1.1.1 Capital Structure

The composition of a firm's capital from debt and equity is referred to as capital structure. The balance sheet of the company is made of common stock combined with its debt instruments (Horne, 2015). The sales of the company are controlled by the operating capital. Firms may require both debt and equity to meet their operating capital needs. Thus capital structure of the company is met by the mixture of both debt and equity (Namalathasan, 2014). Firms can use different kinds of debts or other financial arrangements which can be sourced by the management. The firm's market value is boosted through equity which may be a combination of bond,bank loans and lease financing. Some firms do not have any debts but are fully financed by equity, which

makes them have high debts and low equity. Firms that are un-levered are those with no debts while the levered ones have debt financing.

The wealth of shareholders is enhanced by having a capital structure decision which is optimal. A poor capital structure decision can result to fewer acceptable investment projects due to exaggerated cost of capital. The process of managing credit risk is vital due to various reasons, namely; economic crisis and stagnation, organizations liquidity problems, infringement of accounting and audits procedures and standards (Horne, 2015). There exists an imbalance in the amount of information known to parties to a transaction hence it may be hard to seperate credit worth borrowers from defaulters which may result in one party benefiting at the expense of the other. This is by being reckless while contracting with each other.

Elliot and Elliot, (2016) proposes two methods to facilitate effective capital allocation and credit risk measurement. These methods are internal rating and the standardized approach. SACCOS and other financial institutions must evaluate their relative size before settling on the appropriate technique for risk mitigation. Complex instruments, automated systems and highly skilled staff are appropriate for large institutions while smaller institutions can do by putting in place simplified checks and balances (Hathaway, 2013).

1.1.2 Determinants of Capital Structure

All business organizations must take their capital structure serious to succeed. Capital structure does not only maximize returns but also helps the organization to deal with its

competitive advantage (Simerly & Li, 2015). Most of the organizations that are in their growth stage rely upon debts or other forms of borrowing to increase their growth. The lack of stability and lack of proneness are the major problems associated with this method of borrowing. It is not appropriate for a firm to have a high debt load. The stable firms on the other hand do not require debts to grow them as they are already much stable. The firms have the power to generate their own cash flow which helps them finance their own projects.

The primary determinants of a company's capital-structure decision are; firm size, growth in sales, asset structure and profitability. In the banking sector, a bank is said to be big if it has many assets and that will lead to diversification of their portfolio. A big firm will be able to diversify risk and this will create a perception that the firm is performing well. A small firm does not have the luxury of diversifying its assets and that are highly likely to be faced with risks. It is very common to get customers belief that large firms are performing well and is in for the long haul while they have no faith for banks that are small in size. The big firms will tend to perform way better in the security exchange as compared to small firms (Salawu, 2014).

Pandey (2013) argued that all business ventures consider profitability as their main and primary goal. No business can survive without profitability. It is therefore very important for companies' to measure past, projecting and future profitability. Income and expenses are used in measuring of profitability according to Elliot and Elliot (2016). All the activities of a business generate money which is called income. Companies with more retained earnings are more profitable. Most of the companies that are successful do not

depend much on external finances. The profitable firms are much successful thus can generate their own funds which leads to decrease in leverage due to high profitability which then shows that there is a negative connection between profitability and share performance.

1.1.3 Deposit Taking SACCOs in Nairobi County.

According to The SASRA (2016), out of a total of 12,000 registered cooperative movements in Kenya, 5000 of them were SACCOs. They operated back office operations and had managed to mobilize over Ksh 170 billion, where Ksh 120 billion amounted to disbursed loans. 200 of them had ventured into front office service activities. According to The Ministry of Cooperative Development (2010), Saccos were first registered in the county with the aim of mobilizing members' savings. In 1969, they were given the green light to mobilize savings as well as give loans to their members (Njoroge, 2015).

A share price is a critical benchmark for a firm's share performance; therefore, decisions surrounding credit risk of banks influence their share performance (Ehrhardt & Brigham, 2011). On the other hand, Akbar and Baig (2010), noted that performance of shares can only be used when a firm's stock reaches a certain threshold in the market. Since credit risk management influence banks' performance which in turn creates an effect on the share performance, this research will shift its focus onto establishing how credit risk management affect share performance. Afriye and Akotey (2010), argued the way in which a bank manages its credit risk is critical in determining its share performance.

According to Akbar and Baig (2010), there exists a relationship between the total returns to shareholders and the performance of the loan portfolio (Achou & Tenguh, 2012). Effective management of this risk directly translates to higher returns to the shareholders who have invested in the institution. An agency relationship exists between the bank and the shareholders, thus it is the obligation of the bank's management to safeguard their assets. Giving loans is one of the ways that DTIs, use to grow their profits and add value to the shareholders' investments. They thus act as intermediaries in the financial sector. One of the challenges they face is the risk of customers defaulting on making loan repayments. Another risk they face is the failure business failure that results from poor economic performance. This makes it difficult for such business enterprises to honor their loan obligations. (Rutto, 2014).

1.2 Research Problem

The major reason why most businesses fail or do not progress as required is due to capital. Every organization is required to have effective ways in which they find capital for their businesses to grow and progress in the long term. Tailab (2016), discovered that large number of business failures in the past have been due to the inability of the financial managers to correctly identify and take proper capital structure decisions (Pandey, 2016).

Capital structure and its dynamics have been explored by various researchers. In Ethiopia Zerfeshwa (2014) conducted an investigation where she intended to find out how capital structure was influenced by various determinants in their Saccos in Gondar Towa. The SACCO's survival was found to be dependent on capital structure. How performance was

affected by capital structure was also investigated by Pathak (2014). Profitability was found to be weakly affected by both debt and equity. In Taiwan Lin and Hung (2014) sought to establish how financing strategies and decision affected capital structure. It was concluded that the determinants of capital structure had a great impact on the growth of the company.

In Kenya the concept of capital composition decisions and the factors affecting it have been done by several researchers. Chode (2015) studied The Kenyan public sector enterprises with a view to establish determinants of capital structure. He found that composition of capital had a great influence on the performance of the enterprises. Odinga (2014), conducted a study on the Nairobi Securities Exchange. He investigated determinants of composition of capital on the deposit taking Saccos. By use of a multiple regression analysis he established that profitability and non-debt tax affected performance more than leverage.

Few studies have focused on determinants of composition of capital . Hence, this study sought to investigate the key capital structure determinants in deposit-taking savings and credit cooperative societies in Nairobi County. Hence answering the question: What are the capital structure determinants in deposit-taking savings and credit cooperative societies in Nairobi County?

1.3 Research Objective

To establish the determinants of capital structure in Deposit-Taking Savings and. Credit Cooperative Societies in Nairobi County.

1.4 Value of the Study

The findings of the research is beneficial to the government in general and specifically SASRA since it will assist in the formulation of policies that favor the Saccos in managing the debts and acquisition of capital. It is also meant to spark greater interest by researchers and scholars in Kenya as the existing body of work is inadequate.

The management of Saccos gained knowledge on determinants of capital structures and therefore be able to make appropriate financing decisions. The study formed a good basis for understanding and appreciating capital structure of various Saccos in Nairobi County. The findings from this study will have the capability of being used to articulate appropriate and delicate positive fiscal policies which will influence the capital structure in Kenyan SACCOs. It will also provide guidance in designing suitable credit risk strategies. The strategies will affect the economy of the country by enabling policy makers get information of the financial sector in Kenya, changing aspects where necessary and the suitable policies to be applied to improve capital structure.

The research is useful to researchers and academicians since it forms grounds for further research. Gaps in existing literature shall be identified in the course of reviewing empirical studies and recommendations for further study shall be made. This study shall therefore generate a chain of other studies in the composition of capital determinants. The result of the study were available as a one stop document which can be accessed by researchers and academicians for the purposes of adding value to the current topic of study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The section covers literature relevant to determinants of capital structure. It also presents a theoretical review , and empirical review. The chapter also identified the gaps presented by other studies in the empirical review. This section also show the conceptual framework of the study.

2.2 Theoretical Framework

This section examines the various theories that were used to inform the study on the determinants of capital structure. The study was guided by the following theories ; the theory of pecking order, trade-off theory and agency theory

2.2.1 Agency Theory

Agency theory asserts that the capital structure of a firm is influenced by management personnel who are conflicted by their pursuit of personal enrichment before the maximization of shareholder value. This theory is based on the relationship between principal and agents whereby one party acts on behalf of another designated party, protecting their interests in the process. It was theory was propagated by Jensen and Meckling in 1976, with their intention being to accurately describe the relationship between managerial behavior and the interest of other relevant stakeholders. It also

included the aspects of agency costs and capital structure within the organization. The founders divided this theory into two key parts; namely the positivist agency theory and the principal-agent theory. Both are closely related as the principal's main objective is to get the maximum return from investment while the agent's key concern is to receive adequate compensation (Schaltegger & Burritt, 2010).

Principal-agent relationships are visible in many aspects such as between managers and their subordinates, and between management and shareholders among others. The main challenge facing such relationships is the moral hazard that may be occasioned by one party advancing their own selfish interests over the interests of the other party (Schaltegger & Wagner, 2011). This is usually the case when the agent pushes for their agenda, at the expense of the agenda of the principal, a situation known as the agency problem. One of the reasons for this collision of interests is information asymmetry where one party possesses information that the other party does not have. The agency theory is quite applicable in this study as it can be of help when explaining the mismatch of interests between the parties involved. For instance, when there are asymmetries in distribution of income between commercial banks, there may arise a mismatch of interest between the banking staff and deb holders.

2.2.2 Pecking Order Theory

Both Myers and Majluf, (1984) developed the Pecking Order Theory. Information costs leads to the firms following a financing hierarchy to fund their capital needs (Myers & Majluf, 1984). When firms go to the external markets to raise funds they encounter two

costs that make borrowing expensive i.e. information asymmetry costs and transaction costs. These leads to firms using internally generated funds first then external funds since external capital becomes more expensive due to these costs. When ownership is separated from management, then information asymmetry arises. When there is high market value, they tend to issue equity as manager have more information (Baskin, 2013). Investors and managers have information imbalance that leads to the underpricing of equity for the managerial incentive. Firms then under-invest due to financing sources becoming expensive as profitable investment opportunities are dropped. Such problems do not affect retained earnings. Payments of interest are required for debt which makes information asymmetries less sensitive.

A firm will be driven to finance its new investments through equity if all other ways fail but will seek internal sources first then low risk debts as stated by the Pecking Order Theory. This thus shows that most of the firms do not prefer external financing but rather prefer internal financing (Myers & Majluf, 1984). This theory can be used by both large and small firms. Small firms face higher information costs as they expand their businesses due to their nature of being opaque in their operations. There are high levels of asymmetric information in the small firms as majority do not keep proper books of accounts. Most of the small firms tend to avoid the costs of maintaining proper statements despite the fact that investors prefer audited financial statements (Donaldson, 2015). When internal funds are used by organizations to finance their investments the costs are considered lower than when they use external capital. Most of the firms are usually torn between equity and internal funds when they need a debt. This has led to

most of the firm's preferring to use internal funds then external funds then debts in that order.

2.2.3 Trade-Off-Theory

Both Modigliani and Miller (1963) came up with the Tradeoff theory. The theory thrives on the fact that interest expense is an allowable deductible in corporate taxation. Modigliani and Miller (1963) observed that since expenses from interest is allowed for deductible for tax purposes, it reduces the net taxable liability for the firm. They observed that when the interest expense is high then the taxable profits are low thus lower taxes. The interest tax shield helps firms to derive tax benefits when their balance sheets are increased with debts. On the flip side, financial distress can intensify with increased debt liability. Defaults may heighten when firms have escalated levels of debt thus these entities will be unable to meet their debts obligations. This results to a situation that calls for a tradeoff between costs and benefits of the debts. The cost of debt is large when the organization fails to control its obligations on the debt whenever they fall due. The firms should therefore be able to borrow an amount that is manageable to avoid default that can result to bankruptcy.

Consequently, debt ratios are moderated and justified by the tradeoff theory in composition of capital as argued by Hackbarth (2015). Competitive advantage is created in a firm if it is able to survive in the business dynamic environment in this era of market globalization and internalization. A firm will be able to survive well if its' able to exploit its level of capability by checking the equilibrium of returns of debts and cost. Cost of

debts include financial distress as well as unfavorable borrowing terms. This can also result to stockholders conflicts and uneasiness with the future of firm. The optimum level of debt should be that which maximizes the tax benefits at a reduced cost. With the ever changing business environment and a very high competitive climate these factors come with high levels of uncertainty.

2.3 Determinants of Capital Structure

Financial characteristics of the firm are said to be the main factors that impact composition of capital. Organizations specific factors such as profitability, size of firm, growth rate, sales, asset structure have been tested widely and found to influence and align well with capital structure theories. In this research firm size, asset tangibility, debt levels, profitability and leverage are the major firm characteristics to be used as the independent variables.

2.3.1 Firm Size

The size of a firm is best measured by total assets or total turnover. In the banking sector, a bank is said to be big if it has highly capitalized which will lead to diversification of their portfolio. On the other hand a big firm will be able to diversify risk and this will create a perception that the firm is performing well. A small firm does not have the luxury of diversifying its assets and is highly likely to be faced with risks. It is very common to get customers belief that large firms are performing well and is in for the long haul while they have no faith with organizations that are smaller in size. Larger firms tend to have lower production cost due to economies of scale. They are able to offer a

variety of products and services due to their capacity to support research and development departments. The big firms will tend to perform way better in the security exchange as compared to small firms (Buallay & Zureigat, 2017).

According to Kumar and Singh (2015), the firm's size and its stock price have a positive relationship. Larger firms tend to have high stock prices. The share price has a huge effect on the firm turnover. For any organization, the main objective is to maximize its profits using the resources at its disposal. With an increase in profitability, firms in a position to enjoy other tied benefit. The certainty of easier access to debt and better borrowing conditions reduces the transaction costs and tax rates making large firms more easily to attract a debt. (Eriotis 2016).However there are shortcomings with larger banks. Due to the autonomous nature of running these large organizations managers self-interests may creep in hence their management utility maximization function may substitute profit maximization.

2.3.2 Profitability

All business ventures consider profitability as their main and primary goal. No business can survive without profitability. It is therefore paramount for companies' to measure past, present and future profitability. Income and expenses are used in measurment of profitability according to Elliot and Elliot (2016). All the activities of a business generate money which is called income. Companies with more retained earnings are more profitable. Most of the companies that are successful do not depend much on external finances. The profitable firms are successful thus can generate their own funds which

leads to decrease in leverage due to high profitability which then shows that there is a negative connection between profitability and performance of share as observed by Elliot and Elliot (2016).

According to Kent, 2005), profitability affects capital structure of firms, because their success or failure is depends on the level to which they are efficiently regulated. Bessis (2013), noted a that giving loans is one of the ways that SACCOS use to grow their profits and add value to the shareholders' investments. They thus act as intermediaries in the financial sector. One of the challenges they face is the risk of customers defaulting on making loan repayments. Another risk they face is the failure business failure that results from poor economic performance. This makes it difficult for such business enterprises to honor their loan obligations (Elliot & Elliot 2016).Pecking order theory can be used to explain the correlation between organizations profitability and composition of capital. The theory pre-supposes that in the absence of adequate information an entity will prefer internal finance followed by external finances such as debts. Where the preceding sources are exhausted the organization will revert to equity as a way of raising funds. According to Elliot & Elliot (2016) there should be an inverse relationship between turnover and loans as profitable firms have enough internally generated funds to meet their investment requirements. Paradoxically and according to tradeoff theory big entities can finance their investments using debt to take advantage of the interest tax-shield. The large entities are also able to negotiate lower interest rates on debt implying a positive relationship between profitability and debt.

2.3.3 Leverage

Leverage refers to the ratio of a company's debt to total assets. It shows the extent to which an entity finances acquisition of inventory, plant, machinery and other equipment from debt sources. A company may use debts to finance new business opportunities maintain existing operation or for further expansions into new product lines or markets. The company's potential share dilution and its extraordinary items are adjusted through leverage. A company is considered to be more profitable when it records a high leverage (Fama & French, 2012). The company's common shares, its paid dividends, net income and earnings are calculated using its balance sheet and income statements. Time determines how high the leverage goes which in turn may determine the overall profitability of the company. According to Kaufman (2014), the leverage measure which form the basis or imply the effect of debt relates directly to the agency problem. Management will need to make a decision on how much external capital the organization will require to raise to run their operations. Management will then have to examine the financial market to determine the cheapest or the best terms available. There will be value for the debt if only the returns on debts exceed the cost associated with borrowing (Eriotis 2016).

A company is indicated as an investment that is worthwhile and doing well financially when it record an increase in its earning. There are limitations faced when it comes to calculating leverage as a measure of enterprise performance. Shares can be bought back by the company, which helps in increasing their leverage through reduction of shares

which does not increases their net income (Bessis, 2013). This has helped many companies to convince the investors that they are doing better than they are really doing.

2.2.4 Asset Tangibility

Financial institutions are faced with many types of risk, but asset tangibility happens to be the among the most important and significant. It indicates the quality of collateral an entity can offer. Asset tangibility directly affects the organization's liquidity position. When an organizations' liquidity is poor, a firm may raise funds through sale of its marketable assets to avoid going into insolvent (Achou & Tenguh, 2012). Over the years, the loan portfolio has been directly linked to most problems affecting these financial institutions. This has often been occasioned by poor credit standards, poor portfolio management and failure to match the credit policy to the prevailing economic realities of the day. In a study by Kodithuwakku (2015), it emerged that defaulted loans have a direct adverse effect on the share performance in financial institutions. He also found that NPLs and their provisions have an adverse impact on the share performance. An entity can only manage its assets effectively if it understands the risk factors that it faces in the course of its operations. Firms with higher level of tangible assets are more likely to be more attractive to credit institutions who will in turn extend favorable credit terms.

For a financial institution to successfully manage its tangibility, it must ensure that it puts in place adequate mechanisms to achieve this goal. Mechanisms in this context refer to policies and procedures of governance. The personnel handling this role must be up to the task so as to ensure smooth running of operations. One of the key strategies is to ensure

that they reduce the level of bad loans. To achieve, more needs to be done regarding tangibility analysis and portfolio management and restricting of loans. With a reduction in bad loans, the institution stands to register higher profits as well as improved deposit taking.

2.4 Empirical Studies

Several local and global studies have analyzed and tested the application of capital structure theories. Arabahmadi and Arabahmadi (2013), conducted a case study at the Tehran Stock Exchange with the objective of establishing effect of capital structure on profitability . It sampled 252 firms in the non-financial sector covering period from 1999 to 2008. Data was analyzed using regression models. The study found long term debt and profitability to be negatively associated. Further studies should be conducted using different profitability and capital structure ratios.

Fareedet (2014), conducted a similar study in Pakistan focusing on effect of capital structure on profitability in the textile industry. The study used a sample size of 22 listed firms for the period from 2006 to 2012. Correlation and multiple regression helped to analyze the data. The study found firms leverage has a weak positive relationship with profitability. This therefore means that it should be a balancing act while deciding on the level of leverage to use in the capital structure. The sample size for the study was very small (20 firms). Therefore, future studies should be conducted using a bigger sample and cover a longer period.

In a research by Tailab (2015), on composition of capital effects on firm performance study focusing on 30 energy firms in America for the period from 2005 –2013. Multiple regression model was used to analyse data. The research noted that ROE and ROI to be significantly related with total debt, while size of the firm had negative effect on ROI. However short debt positively affected ROE. The sample size for the study was very small compared with the size of the energy sector in America thus future study should look at a bigger population as well as other sectors of the economy.

A study conducted by Oginda (2015), on the effect of capital structure on financial performance of firms listed at the Nairobi securities exchange. The objective of this study1 was1 to determine the impact of composition of capital on financial performance of listed firms on securities exchange in Kenya. The period of the study was 2012. The study used all the 61 listed firms in 2012. Use of exchange hand books and firm's publications in the NSE were used to provide the historical data. SPSS was applied for regression analysis. It was determined that increase in debt per capital structure led to decrease in financial performance.

Yegon, Cheruiyot, Sang, and Cheruiyot (2014), using a sample of 11 banks listed at NSE conducted a research to establish the relationship between capital structure and profitability of banks. The study period was from 2004-2012 and analysis of the data was done using regression technique. The findings of the study revealed that short term debt and profitability are negatively related while long term debt a negative relationship with profitability . Sample size for this study

was very small based on the fact that Kenya has over 40 banks. Future studies should be conducted incorporating all banks and sectors.

Aboagye (2013) undertook a similar study on this relationship, with the scope of the study focusing on banking institutions in Sweden. The goal was to establish the kind of relationship between banks' profitability and the way they manage the element of credit risk. The study found that CRM had increasingly become a key function particularly during the financial crisis that prevailed at the time. It was also largely responsible for the introduction of Basel II. It was established that credit risk management should be conducted in the most meticulous way possible as banks generate a significant portion of their profits from, their lending function. Notably, this study only focused on the management of risk. However, the current study will also dwell on other aspects including the size of the firm, inflation and exchange rates.

On the other hand, Macharia, (2016), studied the relationship between capital structure and profitability of construction and allied firms listed at the Nairobi securities exchange. The research applied descriptive research design covering from 2006 to 2015.Secondary data for the five listed construction and allied firms was collected. It was analyzed using multiple Regression model and descriptive statistics. The independent variables were long term debt ratio and firm size and the dependent variable was Return on Assets. Descriptive statistics revealed that, listed construction and allied firms financed most of their assets through equity.

2.5 Summary of Literature Review and Research Gap

Globally, moderate research work done on capital structure and theories have also been provided on the same. It continues to elaborate that when the interest expense are high then the taxable profits are low thus lower taxes. The interest tax shield helps firms to derive tax benefits when their balance sheets are increased with debts. Financial distress can also be increased through debt. Defaults result when firms have high levels of debt thus are unable to meet the debts obligations. This results to a tradeoff between costs and benefits of the debts. Organizations should therefore be able to borrow an amount that is payable to avoid default that lead to bankruptcy.

Trade-off capital theory states that capita structure can only be created if a financial entity is able to survive in the changing environment in this era of market globalization and internalization, which makes them able to exploit their level of dynamic capability well. With very dynamic competitive environments are changing gradually which brings about high levels of uncertainty. High expectation of customers, high competitive environments and global competition have been the main reasons.

On the other hand, most studies have only focused on key determinants, for example Arabahmadi and Arabahmadi (2013), only focused on relating firm size and profitability, on the other hand, Fareedet (2014), related firms leverage with profitability for a short period of time, therefore, future studies should be conducted using a bigger sample and cover a longer period. Yegon, Cheruiyot, Sang, and Cheruiyot (2014), using a sample of 11 banks listed at NSE conducted a research to establish the

relationship between capital structure and profitability of banks. The study period was from 2004-2012 and analysis of the data was done using regression technique. The findings of the study revealed that short term debt and profitability are negatively related while long term debt has negative relationship with profitability . Sample size for this study was very small based on the fact that Kenya has over 40 banks. Future studies should be conducted incorporating all banks and sectors.

Similarly, Macharia, (2016), used descriptive statistics and only focused on size of the firm and the Return on Assets, further studies should be done and focus on other determinants of capital structure and its relation to performance. Therefore, this study fills in the gap by incorporating asset tangibility, firm size, profitability and leverage as the independent variables. The study will apply descriptive research design and descriptive statistics in the analysis to establish how asset tangibility, firm size, profitability and leverage determine capital structure in DTS in Nairobi County

2.6 Conceptual Framework

The conceptual framework shows the relationship between dependent and independent variables. The independent variable includes; asset tangibility, firm size, profitability and leverage while capital structure is the dependent variable.

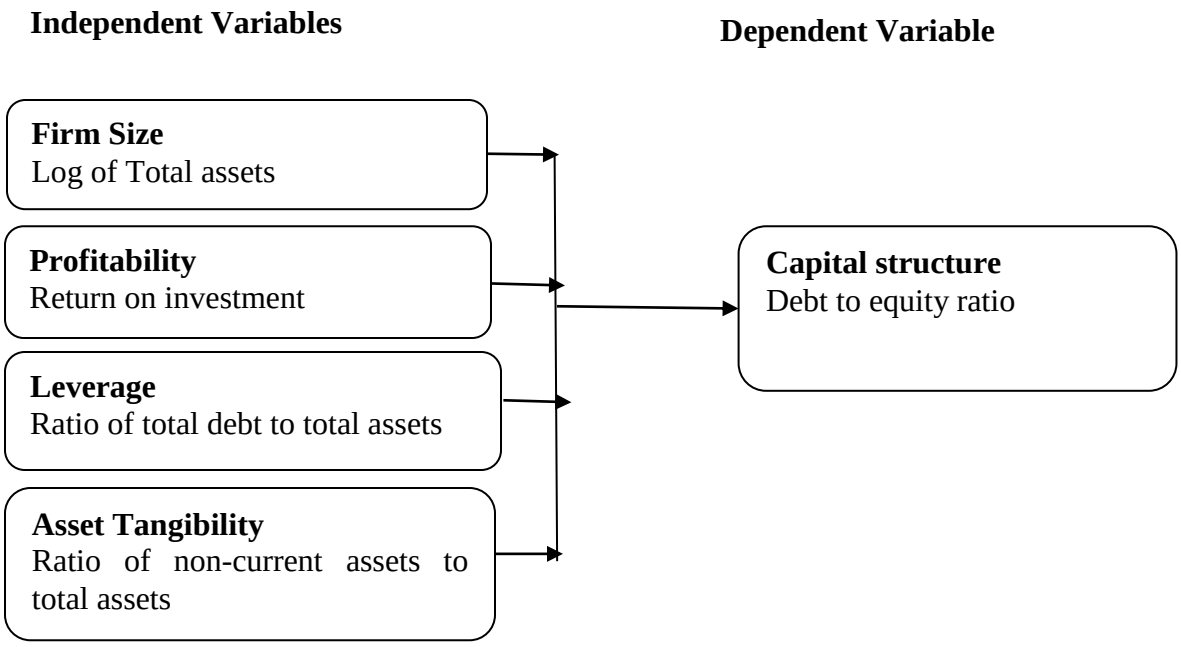

Figure 2.1: Conceptual Framework

CHAPTER THREE:

RESEARCH METHODOLOGY

3.1 Introduction

The section presents the intended research methodology. It explains the choice of the research design, population, data collection and data analysis method.

3.2 Research Design

The study utilized descriptive research design. The design enabled the researcher to designate the characteristics of the variables of interest. The descriptive design was thus well suited to this study. The method was useful for this study as it described the characteristics of a large population. The advantage of conducting descriptive design is that they are valuable in defining the specific features of an outsized population and high consistency which guarantees that the observer bias is greatly eradicated and it's easy to attain by showing all factors with a regular inducement (Mugenda & Mugenda, 2011).

3.3 Target Population

A group of people, events or objects researchers wish to generalize the findings with the same characteristics is termed as a population by (Kothari & Garg, 2014). According to SASRA (2017), there are 39 deposit taking Saccos in Nairobi County. The study focused on all 39 deposits taking Saccos in Nairobi County.

3.4 Data Collection

Secondary data was acquired from the financial reports of respective Saccos. Information on firm size, profitability, and leverage and asset tangibility was acquired from the respective Sacco financial reports. The study collected data for the last five years 2014-2018.

3.5 Diagnostic Tests

The researcher performed tests on statistical assumptions i.e. test of regression assumption and statistics used. The regression assumptions were met through ensuring that a diagnostic is conducted. The diagnostic tests that conducted included multicollinearity, heteroscedasticity and normality test.

3.6 Data Analysis

Quantitative data acquired was analyzed using Statistical Package for Social Sciences (SPSS) version 20. The results were presented using tables, percentages, and frequencies. Descriptive statistics was utilized to explain quantitatively the significant attributes of the variables using mean, frequency and standard deviation. Tables were used to present the findings.

3.6.1 Analytical Model

Multiple regression was utilized to describe the determinants of capital structure in DTS in Nairobi County. The regression model is illustrated below;

$$Y=\beta_{0it}+\beta_1 X_{1\,it}+\beta_2 X_{2\,it}+\beta_3 X_{3\,it}+\beta_4 X_{4\,it}+\varepsilon$$

Y = Capital Structure (Debt to equity ratio)

β_0=Constant

X_1= Firm Size (Log of Total assets)

X_2= Profitability (Return on investment.)

X_3= Leverage (Ratio of total debt to total assets)

X_4= Asset Tangibility (Ratio of non-current assets to total assets)

β_1 β_4 are the multiple regression co-efficient introduced in capital structure by each independent variable

ε is the random error term representing all other factors that influence capital structure and not factored in the model.

3.6.2 Inferential Statistics

The study applied t-test at 95% confidence level. ANOVA test will be performed to establish the level of significance of the variance by the use of a one Way ANOVA to establish the presence of significant variations between the variables.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION'

4.1 Introduction

This chapter presents the information processed from the data collected during the study on the determinants of capital structure in DTS in Nairobi County. The time period that the study covered was 5 years, (2014-2018).

4.2 Diagnostic Tests

The linear regression analysis makes a number of major assumptions'. This included test of normality, Heteroscedasticity and multicollinearity.

4.2.1 Multicollinearity Test

There exists a multicollinearity if the relationship between the two variables being tested in the study related moderately or highly in the multiple regression model. The multiple regression model results are skewed by the multicollinearity. The Variance Inflation Factor (VIF) will be sued in determining the multicollinearity's severity. If the independent variables have a correlation with the dependent variable the variance of the coefficient's estimates is measured through the Variance Inflation Factor (VIF). There will be a 1 Variance Inflation Factor (VIF) if no multicollinearity is found. There is a moderate correlation showed by independent variables if the VIF indication is above 1 while a problematic multicollinearity is seen where there is an indication of between 5

and 10 VIF (Baum (2006).According to the table below VIF for Firm Size, Profitability, Leverage and Asset tangibility is 2.89,1.361 5.186 and 4,572 respectively. Based on this it implies that no serious multicollinearity and all variables will hence be maintained in the model,

Table 4.1: Co linearity Statistics

Variables	Tolerance	VIF
Firm Size	.345	2.897
Profitability	.735	1.361
Leverage	.193	5.186
Asset Tangibility	.117	4.572

4.2.2 Heteroscedasticity

Heteroscedasticity is the absence of monoscedasticity.Levene test was employed to assess the equality of variances for the four variables calculated. When all observations do not have the same variation of the error term, they are implied as Heteroscedasticity. The error term variation is meant to be similar in all observation in the multiple regression analysis. The variance's equality is required in the assumption that is violated by residuals which makes the minimum variance of the model coefficients unbiased. The Breusch-Pagan test will be used by the study to ensure that all observations have a constant variation of residuals when the null hypothesis is tested. A less than 0.05 level of significant p-value, will make the study variance to be violated in the assumption of the inference.

Table 4.2: Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
1.626	38	38	.043

4.2.3 Normality Test

The level of significance in the study will be compared to the computed significant value using both skewness and kurtosis so as to make effective conclusions using the test. Residuals will be indicated to be normally distributed if the level of significance is lower than that of the computed significant value. The data will be said to depart form the normal distribution if its level of significance will be lower than the computed significant value (Kline (2011).

Table 4.3: Shapiro-Wilk

Variables	Statistic	df	Sig.
Firm Size	0.887	38	0.001
Profitability	0.834	38	0.000
Leverage	0.924	38	0.003
Asset Tangibility	0.798	38	0.004

Key: df = degrees of freedom, sig = significance level

When the alpha value is lower than the p-value, then the null hypothesis is rejected by one and accepted by the other and also do not accept the alterative hypothesis. The Shapiro-Wilk normality test results are presented on the table below;

4.3 Descriptive Statistics

Table 4.4: Firm size

Years	Minimum	Maximum	Mean	Std deviation
2014	.563	.581	.543	.074
2015	.593	.712	.631	.122
2016	.737	.846	.769	.267
2017	.8014	.859	.548	.326
2018	.863	.868	.857	.118

Source: Research findings (2019)

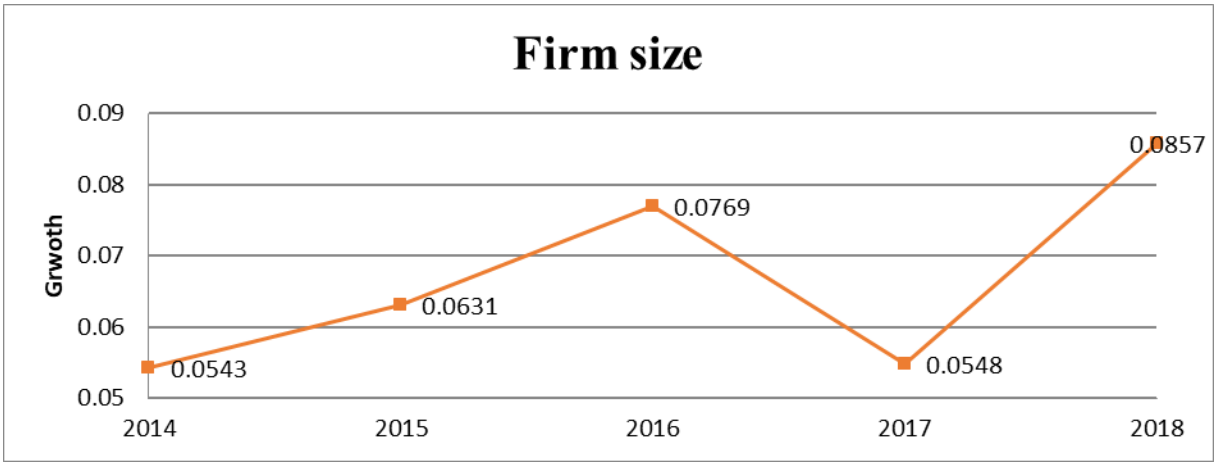

Figure 4.2: Firm Size Trend

The study recorded a low mean of 0.543 in 2014 while a high value of 0.857 was recorded in the year 2018 for firm size. Moreover, the highest deviation for the five year period of firm size recorded was 0.326 in 2017 and a 0.074 in 2014 which was the lowest.

Table 4.5: Profitability

	Min	Max	Mean	Std. Dev.
2014	0.228	0.248	0.229	0.0412
2015	0.213	0.874	0.431	0.0734
2016	0.167	0.287	0.643	0.0243

2017	0.047	0.197	0.371	0.0112
2018	0.632	0.878	0.724	0.0239

Source: Research findings (2019)

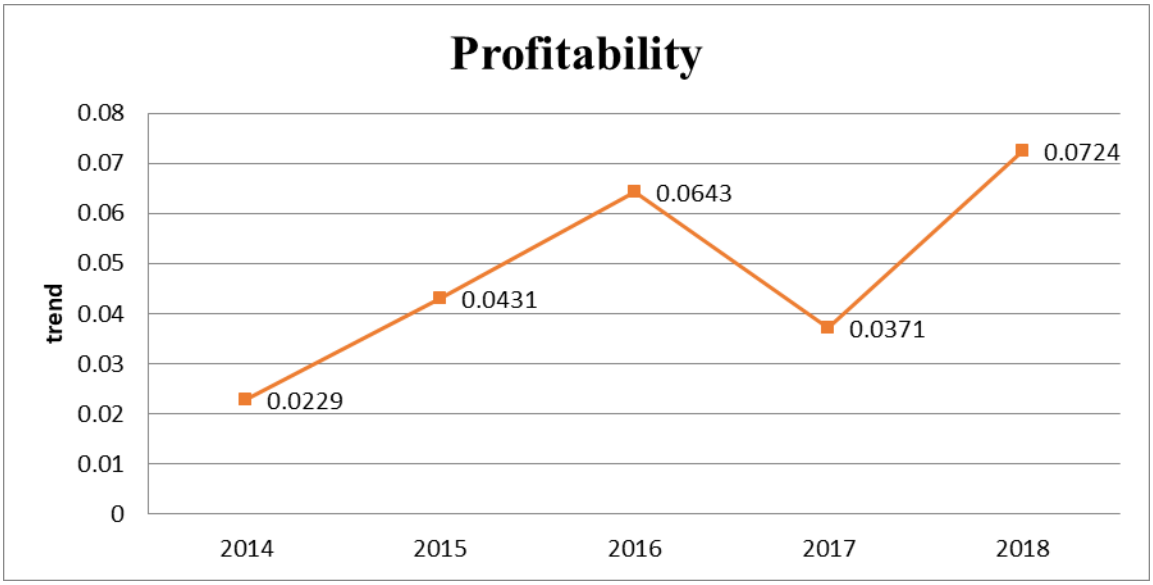

Figure 4.3: Profitability Trend

The study recorded a low mean of 0.0229 in 2014 while a high value of 0.724 was recorded in the year 2018 for profitabiltiy. Moreover, the highest deviation for the five year period of firm size recorded was 0.0734 in 2015 and a 0.0112 in 2017 which was the lowest.

Table 4.6: Leverage

Years	Minimum	Maximum	Mean	Std deviation
2014	.564	.762	.739	.021
2015	.402	.541	.436	.061
2016	.413	.715	.623	.023
2017	.232	.480	.431	.041
2018	.189	.321	.212	.001

Source: Research findings (2019)

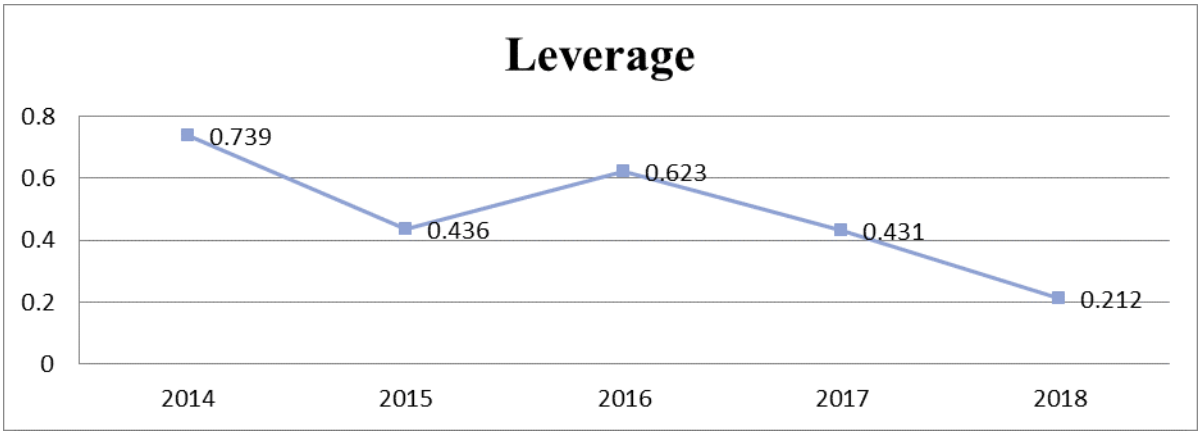

Figure 4.4: Leverage

The study recorded a low mean of 0.212 in 2018 while a high value of 0.739 was recorded in the year 2014 for leverage. Moreover, the highest deviation for the five year period of firm size recorded was 0.061 in 2015 and a 0.001 in 2018 which was the lowest.

Table 4.7: Asset Tangibility

Year	Min	Max	Mean	Std. Dev.
2014	0.113	0.184	0.123	0.117
2015	0.301	0.431	0.337	0.364
2016	0.217	0.317	0.227	0.170
2017	0.102	0.211	0.114	0.215
2018	0.510	0.692	0.681	0.181

Source: Research findings (2019)

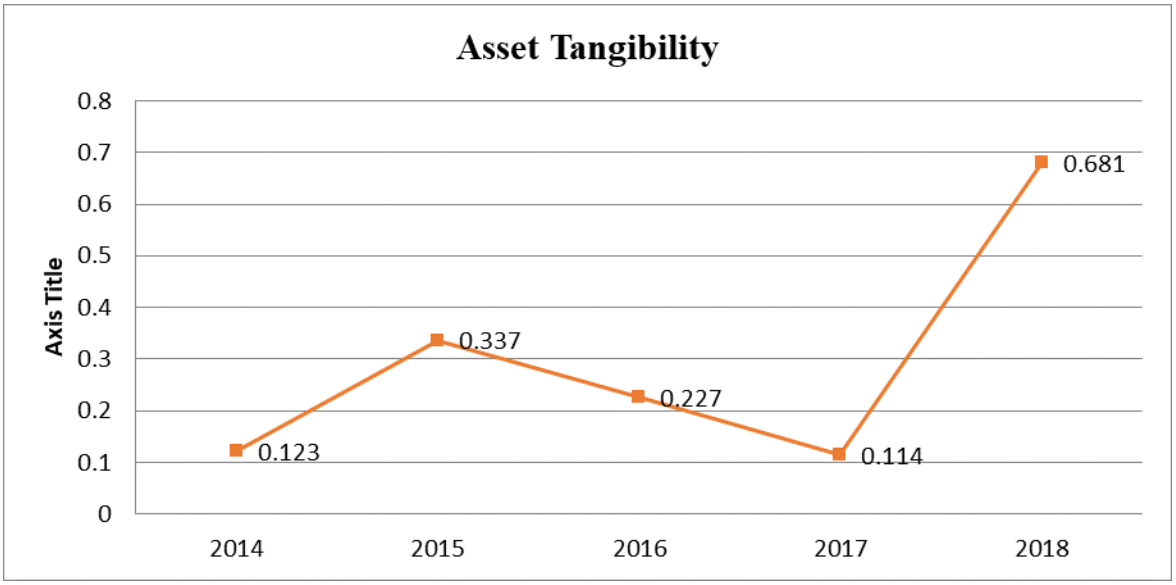

Figure 4.5: Asset Tangibility Trend

The study recorded a low mean of 0.123 in 2014 while a high value of 0.681 was recorded in the year 2018 for tangibility. Moreover, the highest deviation for the five year period of tangibility recorded was 0.364 in 2015 and a 0.117 in 2014 which was the lowest.

Table 4.8: Capital Structure

Year	Min	Max	Mean	Std. Dev.
2014	0.325	0.485	0.472	0.152
2015	0.347	0.573	0.563	0.457
2016	0.536	0.689	0.681	0.169
2017	0.402	0.441	0.386	0.285
2018	0.541	0.601	0.799	0.142

Source: Research findings (2019)

The study recorded a low mean of 0.386 in 2014 while a high value of 0.799 was recorded in the year 2018 for capital structure. Moreover, the highest deviation for the five year period of firm size recorded was 0.457 in 2015 and a 0.285 in 2017 which was the lowest. The findings revealed a significant increase in Sacco's capital structure from 2014 to 2016 before a decline realized in 2017 after which a positive rise was realized in the years 2018

4.4 Inferential Statistics

4.4.1 Correlation Results

A Karl Pearson's product moment correlation analysis was used to determine how both variables in the study related. Table 4.9 shows the findings.

Table 4.9: Correlation Results

		Capital Structure	Firm Size	Profitability	Leverage	Asset Tangibility
Capital Structure	Pearson Correlation	1				
	Sig. (2- tailed)					
Firm Size	Pearson Correlation	.395**	1			
	Sig. (2- tailed)	.000				
Profitability	Pearson Correlation	.666**	.280*	1		
	Sig. (2- tailed)	.000	.016			
Leverage	Pearson Correlation	.506**	.258*	.376**	1	
	Sig. (2- tailed)	.000	.026	.001		
Asset Tangibility	Pearson Correlation	.330**	.017	.135	.283*	1
	Sig. (2- tailed)	.004	.884	.250	.015	

Source: Research findings (2019)

From the finding in the table above, the study found that there was positive correlation between firm size and capital structure of DTS in Nairobi County as shown by correlation factor of 0.395.This strong relationship was found to be statistically significant as the significant value was 0.000 which is less than 0.005. These findings concurs with Eriotis (2016) who maintains that there exists a positive relation between firm size and the decision to use debt to obtain supplementary assets.

In addition, a 0.666 correlation factor implied that both size of the firm and composition of capital correlated positively in Kenyan commercial banks on a 0.002 significance value. These findings contradict the conclusions by Kuria, (2010) who stated that capital structure was minimally affected by profitability.

A 0.454 correlation factor showed that both earnings per share and share performance correlated positively in DTS in Nairobi county at a 0.506 significance value, these findings concurs Bessis, (2013) who indicated that a company is indicated as an investment that is worthwhile and doing well financially when it record an increase in its earning.

4.4.2 Regression Test

The predictor variables and their influence was determined using a multiple regression analysis that was conducted by the study. The multiple regression's measurements were coded, entered and computed using the statistical package for social sciences (SPSS V 21.0). Table 4.7 indicates the presentation of model summary.

Table 4.10: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.793[a]	.629	.627	.16720

Source: Research data, 2019

The model fit was evaluated using the coefficient of determination. Another name for coefficient of multiple determinations is the R^2, which gives the variance's percentage which shows the independent and dependent unique joint. A 0.627 was shown by the coefficient of determination (R^2) of the model which also showed that performance was affected by other factors at a 62.7% firm size, profitability, leverage and asset tangibility).

The findings form the ANOVA test done are presented below in table 4.18.

Table 4.11: Summary of One-Way ANOVA results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.32	4	7.58	10.412	.000[b]
	Residual	138.32	190	0.728		
	Total	168.64	194			

Source: Research data, (2019)

Critical value =5.658

The findings were found to be ideal in making the study's conclusions as established by the ANOVA statics in the regression model that showed a 0.00% significance level as it was less than 5%. The critical value was less than the calculated value (10.412.> 5.628)

an indication that firm size, profitability, leverage and asset tangibility all have a significant influence on capital structure.

The model of the study was also determined by use of the coefficient table. Table 4.19 presents the findings.

Table 4.12: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.059	.110		9.605	.000
	Firm Size (X1)	.428	.044	.244	9.713	.000
	Profitability (X2)	.362	.040	.233	9.007	.000
	Leverage (X3)	.604	.045	.355	13.312	.000
	Asset Tangibility (X4)	.757	.045	.428	16.794	.000

Source: Research data, (2019)

As per the SPSS generated output as presented in table above, the equation ($\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$) becomes:

$Y = 1.059 + 0.428X_1 + 0.362X_2 + 0.604X_3 + 0.757X_4$

From the regression model obtained above, a unit change in firm size while holding other factors constant would positively enhance capital structure of deposit-taking savings and credit cooperative societies in Nairobi County by a factor of 0.428; the study concurs with the study findings by Eriotis (2016) who maintains that there exists a positive relation between firm size and decision to use debt to obtain supplementary assets. Further the study revealed that a unit change in profitability while holding the other factors constant would positively change capital structure of deposit-taking savings and credit

cooperative societies in Nairobi County by a factor of 0.362, a unit change in leverage while holding the other factors constant would positively change capital structure of deposit-taking savings and credit cooperative societies in Nairobi County by a factor of 0.604 while a unit change in enhancement on Asset Tangibility while holding the other factors constant would positively change capital structure of DTS in Nairobi County by a factor of 0.757. The findings further agree with Myers (1984) who indicated an inverse relationship between leverage and profitability.

A significance level of 5% was used to determine the analysis. Both the probability value and α=0.05 were used in finding out how significant the model was in comparing of the predictor variables. A less than α p value shows that the predictor variable was significant and therefore in our case it wasn't significant. A less than α=0.05 was found in all the predictor values showing a level of significance.

4.5 Discussion of Findings

Inferential statistics show strong positive link between firm size and capital Structure of SACCOs in Nairobi County. (Correlation value = 0.395; P -Value =0.000) statistical affirmation from test regression results again show that, further adoption of any strategic initiatives that aim at increasing SACCOs total assets would strengthen the capital structure (Beta coefficient value =0.428 significant value =0.000). The results also showed that in most of the SACCOs operating Nairobi County, their Net asset value have been increasing tremendously throughout the study period except in the year 2017 where

sharp decline was witnessed in almost every institution. These findings are in support of the empirical literature by Eriotis (2016), who maintains that there exists a positive relation between firm size and the decision to use debt to obtain supplementary assets.

Descriptive statistics further disclosed that size of the firm (net Assets) is a significant factor that influenced capital structure decisions of SACCOs in Nairobi County, Firm size affected how SACCOs utilised incentives, sharing of dividends, determined interest rates charged on credit products. Results also show that the size of SACCOs determines its ability to absorb unpredictable market shocks. These findings contravene the hypotheses postulated by pecking order theory but support the findings by Buallay and Zureigat (2017) that larger firms turn out to have diversified investments thus less risks of going bankrupt thus predicting a positive effect between lager size and leverage of a firm.

Results show that profitability trend is a decisive predictor on capital structure of SACCOs in Nairobi County (Correlation value =0.666 P –Value =0.000) statistical affirmation obtained from test regression results again show that continued profitability trend would significantly strengthen the capital Structure of SACCOs operating in Nairobi County (Beta Coefficient value = 0.362 Significant value =0.000). The results also showed that most of the SACCOs operating in Nairobi County utilized more debt in capital structure in order to reap maximum profit; however, the study also observed that neither of the SACCOs used extra debt when the profits decreased from the maximum profits. These findings contradict the conclusions by Kuria (2010) who concluded that firm's profitability does have a minimal effect on the capital structure.

Descriptive findings disclose that Sacco's operating in Nairobi had realized a positive profitability trend over the study period. Sacco's that consistently made higher profits could have more retained earnings compared to those which made loses again successful Saccos don't necessarily rely extensively on debt financing. These findings are in harmony with Pandey (2013), who proved that the greater a firm's profitability, the more distributable earnings there are for shareholders and thus the expected firm value will be higher. However, these findings contravene the tradeoff theory that clarifies that firms making high profits are more susceptible to lower risks of insolvency and have greater incentive to employ debt to exploit interest tax shields.

Assessment showed that ratio of total debt to total assets had a significant effect on capital structure of DTS in Nairobi County, inferential results show that ratio of total debt to total assets is a significant predictor on capital structure of DTS in Nairobi County (Correlation value = 0.666 P-Value = 0.000) statistical affirmation obtained from test regression results again show optimal leverage level have a positive impact on capital structure of SACCOs. Descriptive results show that nearly all the Sacco's used financial leverage mainly to increase their earnings per share and to grow its return-on-equity. Eriotis (2016) observed that using financial leverage helps not only to grow firm's performance but again aids to ensure control of the business organization.

Results further show that decisions to use financial leverage have a decisive effect on capital structure more so when the firm's assets are acquired using debt capital as they get to obtain more than the price of the utilized debt to fund them. Under these situations; the use of leverage enhances the organization returns, therefore if the firms lack adequate

taxable income for its defense or if it's operating profit are lower financial leverage will decrease equity rate and therefore reduce the net value of the organization. The research findings collaborate with Kaufman, (2014) who postulate that organization that show relatively high stable business activities, remain in a good position to use financial leverage, as opposed to firms with low unstable business activities.

Results show that ratio of fixed assets to total assets is a significant predictor on capital structure of DTS in Nairobi County (Correlation value = 0.330; P Value = 0.004). Statistical affirmation obtained from test regression results again show that rise in ratio of fixed assets to total assets would significantly strengthen the capital structure of Sacco's operating in Nairobi County (Beta coefficient value = 0.757 significant value =0.000). These findings concur with Booth (2016), who contends that if the firm assets are more tangible, the greater its ability to secure debt. Further the findings collaborate with the tradeoff theory that predicts a positive relationship between tangible assets and capital composition.

Results show that tangible assets that are common and highly marketable have a high effect on Sacco's leverage in contrast with more organization's specific assets. Tangible assets help in reducing the information asymmetry and consequently simplify the financing of equity. By having a large percentage of tangible assets on the balance sheet the estimate of the business therefore becomes easier for the investors owing to the high level of information symmetry. This might lead to greater loss on weight being exerted on eventual signals that come from equity issue and therefore jeopardizing on firm value.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This section provides a brief summary, conclusion and recommendations on the determinants of capital structure in DTS in Nairobi County.

5.2 Summary of Findings

5.2.1 Firm Size

Inferential statistics show strong positive correlation between firm size and capital Structure of DTS in Nairobi County. Statistical affirmation from test regression results again show that any strategic initiatives that aim at increasing DTSs total assets would strengthen the capital structure. The results also showed that in some of DTSs operating in the County net asset value has been increasing throughout the study period except in the year 2017 where sharp decline was witnessed in almost every institution. These findings are in support of the empirical literature by Eriotis (2016) maintains that there is positive relation between size of the firm and decision for use of debt to obtain supplementary assets.

Descriptive statistics further disclosed that size of the firm (Net Assets) is a decisive factor influencing capital structure decisions of DTS in Nairobi County.Firm size affected how deposit-taking savings and credit cooperative societies utilised incentives, sharing of dividends and determined interest rates charged on credit products. Results also show that

the size of DTS determines its ability to absorb unpredictable market shocks. These findings contravene the hypotheses postulated by pecking order theory but support the findings by Buallay & Zureigat, (2017) that larger firms turn out to have diversified investments thus less risks of going bankrupt thus predicting a positive relationship between lager size and leverage of a firm.

5.2.2 Profitability

Profitability trend was found to be a significant predictor on capital structure of DTS in Nairobi, statistical affirmation obtained from test regression results again show that, continued profitability trend would significantly strengthen the capital structure of DTSs' operating in Nairobi. The results also showed that most of the DTSs' operating in Nairobi County utilized debt in composition of capital in order to reap maximum profit; however, the study also observed that neither of the DTSs' used extra debt when the profits decreased from the maximum profits. These findings contradict the conclusions by Kuria (2010) who concluded that firm's profitability does have a minimal effect on the capital structure.

Descriptive findings disclose that Saccos operating in Nairobi had realized a positive profitability trend over the study period. Saccos that consistently made higher profits could have more retained earnings compared to those which made loses. Again, successful Saccos don't necessarily rely extensively on debt financing. These findings are in harmony with Pandey (2013) who established that the greater the firm returns, the

more earnings there are available for distribution to shareholders and firm value will be enhanced.

5.2.3 Leverage

Assessment showed that ratio of the total debt to total assets had a significant effect on capital structure of DTS in Nairobi County, inferential results show that ratio of total debt to total assets is a significant predictor on capital structure of DTS in Nairobi County. Statistical affirmation obtained from test regression results again show optimal leverage level have a positive effect on composition of capital of DTSs'. Descriptive results show that nearly all the Sacco's used financial leverage mainly to increase their earnings per share and to grow its return-on-equity. Eriotis (2016) stated that using financial leverage helps not only to grow firms' performance but again aids to ensure control of the business organization.

Results further show that decisions to use financial leverage have a decisive effect on composition of capital especially when the firm's assets are acquired using debt capital as they get to earn more than the price of the debt that was utilized to fund them. Under these circumstances, the use of financial leverage increases the organization returns. Therefore if the firms lack adequate taxable income for its defense, or if it's operating profit are lower than critical charge, financial leverage will decrease equity rate and therefore reduce the net value of the organization. The findings are in support of the research by Kaufman, (2014) who postulate that organization that show relatively high

stable business activities remain in a better off to use leverage as opposed to firms that has lower unstable business activities.

5.2.4 Asset Tangibility

Results show that ratio of non-current assets to total assets is a significant predictor on capital structure of DTS in Nairobi County, statistical affirmation obtained show that increase in ratio of fixed assets to total assets would significantly strengthen the capital structure of Sacco's operating in Nairobi County. These findings concur with Booth (2016), who contends that if the firm assets are more tangible, the greater its ability to secure debt. Further the findings are consistence with the tradeoff theory that predicts a positive relationship on composition of capital.

Results revealed that marketable tangible assets have a high effect on Sacco's leverage in contrast with more organization's specific assets. Tangible assets help in reducing the information asymmetry and consequently simplify the financing of equity. By having a large share of tangible assets on the balance sheet the estimate of the business therefore becomes easier for the investors owing to the high level of information symmetry.

5.3 Conclusions

This study concludes that firm size is a significant predictor on capital structure of DTS in Nairobi County. Sacco's that are large in size are more diversified and have low possibility of bankruptcy and that firm size affected how DTS utilised incentives, sharing of dividends and determined interest rates charged on credit products.

The study concludes that there exists strong positive significant relationship between profitability and capital structures; DTSs' operating in Nairobi County utilized more debt in capital structure in order to reap maximum profit; however the study also observed that neither of the DTSs' used extra debt when the profits decreased from the maximum profits.

The study concludes that leverage has significant effect on capital structure of DTS in Nairobi County, that nearly all the Sacco's that used financial leverage mainly to increase their earnings per share and to grow its return-on-equity and that using financial leverage helps not only to grow firm's performance but again aids to ensure control of the business organization. The study further concluded that the ratio of non-current assets to total assets is a significant predictor on capital structure of DTS in Nairobi County.

5.4 Limitations of the Study

The data collection is where the researcher experienced several challenges. There were constraints of finances as the researcher suffered a challenges of adequate resources. Another limitation was developing a model which would assist the research to study the correlation between the various factors. When developing this model, there was a great need to define the dependent variables and independent variables. If the model was not correct, the process of analysis would not have given the right results. In this case, multiple linear regressions was used since there were multiple variables which required to be studied.

The researcher had a challenge in meeting the short timelines in doing the study considering he has a full time job and took the studies as part-time. For the study to be successful, he had to allocate extra time to collect the necessary materials. Despite the challenges, the researcher was able to undertake the study within the specified time.

5.5. Recommendations

From findings of the study, the research suggests that DTS should ensure that more memberships is boarded. The existing members should be encouraged to make more contributions so that the equity levels of the Sacco can increase and more capital can be raised.

The DTS should focus more on increasing their internal finances so that they can make more use of them rather than relying upon external finances. The debts should also be minimized as they could cause financial distress.

Moreover, the DTS should consider taking loans from institutions that offer low interest rates when need be to avoid suffering from high interest rates.

Although leverage was found to have notable influence on DTSs capital structure, it's important for policy makers to assess the risk that come along with this strategic mode of capital, policy makers should ensure balance, as high leverage level are associated with negative impact on DTSs

Asset tangibility has substantial influence on the capital structure of DTS. The study therefore suggests that SASRA should improve its policies on the beneficial assets

tangibility thresholds required by DTSs. The reason is assets held idle by DTS could otherwise be used to generate income.

5.6 Recommendations for further studies

The main aim of the research was to assess on the determinants of capital structure in DTS in Nairobi County. The study variables included firm size, profitability, and leverage and asset tangibility. Despite this fact, capital structure is affected by many other factors which should be considered while undertaking future studies.

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APPENDIX I: DATA COLLECTION SHEET

Variable	Measure	2014	2015	2016	2017	2018
Capital Structure	Debt to equity ratio					
Firm Size	Log of Total assets					
Profitability	Return on investment					
Leverage	Ratio of total debt to total assets					
Asset Tangibility	Ratio of non-current assets to total assets					

APPENDIX II: DEPOSIT TAKING SACCOS IN NAIROBI

1. AFYA SACCO SOCIETY LTD
2. ARDHI SACCO SOCIETY LTD
3. ASILI SACCO SOCIETY LTD
4. CHAI SACCO SOCIETY LTD
5. CHUNA SACCO SOCIETY LTD
6. ELIMU SACCO SOCIETY LTD
7. FUNDILIMA SACCO SOCIETY LTD
8. HARAMBEE SACCO SOCIETY LTD
9. HAZINA SACCO SOCIETY LTD
10. JAMII SACCO SOCIETY LTD
11. KENPIPE SACCO SOCIETY LTD
12. KENVERSITY SACCO SOCIETY LTD
13. KENYA BANKERS SACCO SOCIETY LTD
14. KENYA POLICE SACCO SOCIETY LTD
15. KINGDOM SACCO SOCIETY LTD
16. MAGEREZA SACCO SOCIETY LTD

17. MAISHA BORA SACCO SOCIETY LTD

18. MILIKI SACCO SOCIETY LTD

19. MWALIMU NATIONAL SACCO SOCIETY LTD

20. MWITO SACCO SOCIETY LTD

21. NACICO SACCO SOCIETY LTD

22. NAFAKA SACCO SOCIETY LTD

23. NASSEFU SACCO SOCIETY LTD

24. NATION SACCO SOCIETY LTD

25. NYATI SACCO SOCIETY LTD

26. SAFARICOM SACCO SOCIETY LTD

27. SHERIA SACCO SOCIETY LTD

28. SHIRIKA SACCO SOCIETY LTD

29. SHOPPERS SACCO SOCIETY LTD

30. STIMA SACCO SOCIETY LTD

31. TEMBO SACCO SOCIETY LTD

32. UFANISI SACCO SOCIETY LTD

33. UKRISTO NA UFANISI WA ANGALICANA SACCO SOCIETY LTD

34. UKULIMA SACO SOCIETY LTD

35. UNAITAS SACCO SOCIETY LTD

36. UNITED NATIONS SACCO SOCIETY LTD

37. WANAANGA SACCO SOCIETY LTD

38. WANANDEGE SACCO SOCIETY LTD

39. WAUMINI SACCO SOCIETY LTD

Source: SASRA (2018)