

**EFFECT OF ASSET STRUCTURE ON CORPORATE FINANCING
DECISION AMONG COMMERCIAL AND SERVICES FIRMS
LISTED AT THE NAIROBI SECURITIES EXCHANGE, KENYA**

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D63/39017/2020

**A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF
BUSINESS IN PARTIAL FULFILLMENT OF THE REQUIREMENT
FOR THE AWARD OF A DEGREE OF MASTER OF BUSINESS
ADMINISTRATION (FINANCE) OF THE UNIVERSITY OF
NAIROBI**

SEPTEMBER, 2022

DECLARATION

I declare that this research project my original work that has never been present in any University for the award of a degree

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This research project has been submitted with my approval as the University appointed supervisor

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ACKNOWLEDGEMENT

I appreciate the guidance received from Dr. Winnie Nyamute for mentoring me so that I am able to clear this project. I thank all the supervisors at UON for teaching me through various units.

DEDICATION

To my mother Dunia Alinir Osman for the mutual support.

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ABBREVIATIONS AND ACRONYMS

CMA	Capital Market Authority
EU	European Union
KQ	Kenya Airways
NSE	Nairobi Securities Exchange
ROA	Return on Assets
ROE	Return on Equity
SPSS	Statistical Package for Social Sciences
FMs	Finance Managers

ABSTRACT

The interplay between asset structure and corporate financing decision among Kenyan listed commercial and services firms was explored in this inquiry. The embraced design was descriptively survey and 13 firms were targeted. The time horizon was 2017-2021 and information was gathered from auxiliary sources. The study established that asset structure, firm size, profitability and firm age were all significant predictors of corporate financing decisions. It was concluded that asset structure is a significant predictor of corporate financing decisions under control of firm size, age and profitability. It was recommended that FMs should trade off the benefits of debts against the costs and establish an appropriate mix of the same with equities in their capital structures. .

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

Execution of financing decisions is one of the far reaching objectives of a finance manager in any corporation. Financing decisions are important for the long term prospects and the going concern assumption of a corporation (Mateos-Ronco & Guzmán-Asunción, 2018). The assets of the firm are critical when it comes to financing decisions. Assets are required as forms of collaterals in order to access finances from lenders. Thus, asset structure is anticipated to have a critical role in informing the financing decisions of the firm (Kerubo, 2020). The assets of the firm can be classified as current and non-current. To meet short term obligations, current assets are critical. On the hand, non-current asset are mostly intangible in nature and they represent a significant wealth in a firm. An organization with large ownership of the tangible assets will have huge guarantee of receiving funds from lenders. Thus, an increase in tangible assets is likely to result into an increase in debt levels thus financial leverage in the firm (Koralun-Bereźnicka, 2013).

The tradeoff theory, agency theory and the pecking order theory were used to underpin this study. The tradeoff theory was developed by Modigliani and Miller (1958), it argues that a balance between tax advantage and the costs of financial distress associated with debts should inform the corporate financing decisions in the firm. Myers and Majluf (1984) in the pecking order theory argue the existing conflicting interests between owners and those in management have an effect on financing decisions of the firm. In the event of bankrupt, managers have more to lenders as compared to shareholders (Myers & Majluf, 1984). The pecking order theory advocates that those in management have a strong incentive to

finance investment projects through internal as opposed to external source of funds like debts and equities (Myers & Majluf, 1984).

There are 13 listed commercial and services firms in Kenya as shown on appendix I. Financing decisions have remained a challenge for some of these firms like the Kenya Airways (KQ), that has consistently recorded negative equity of Kshs. 64.2 billion and Kshs. 83.4 billion in the financial year 2020 and 2021 respectively (Mbabazi, 2022). Other firms that are facing similar challenges include Uchumi Supermarket and TPS Eastern Africa among other firms and this justifies the need for the present study.

1.1.1 Asset Structure

Asset structure is the blend of both current and non-current assets in the firm requires financing projects that help to maximize the wealth of owners. A high degree of tangibility of the assets of the firm contributes towards greater liquidation value. Myers (1977) was of the view that high proportion of tangible assets like the fixed assets contributes towards high level of debts when compared to intangible assets in place. Harris (1994) was of the opinion that high proportion of intangible assets allows the firm to increase the available collaterals and thus reducing the inherent distress costs like agency costs that are linked with the use of debts in the capital structure of the enterprise (Stalz & Johnson, 1985).

There are several measures available in literature with regard to asset structure but the most widely documented one is the ratio of non-current against total assets (Sumarsan, 2013). Conventionally referred to as fixed assets, non-current assets are less liquid compared to current assets. Noncurrent assets mostly exist in their physical form like equipment and land as well as building among others. Investing too much in these non-current assets

results into an opportunity cost as it leads to an increase in tied up capital. Thus, a firm should always strike for a balance between current and non-current assets in order to fully maximize the wealth of the shareholders (Clausen & Flor, 2015). Asset structure was measured by non-current assets against total assets of the firms under consideration. This measure is taken because it represents the real proportion of assets that can be placed as collaterals to inform financing decisions through debts.

1.1.2 Corporate Financing Decision

A firm can finance the projects through internal or external sources of funds (Jindřichovská & Körner, 2008). Internal financing decisions regard such sources as retained earnings and effective working capital management. External financing decisions include the use of debts or issuance of new shares through an initial public offer (IPO). Thus, financing decisions refer to how well the firm balances between debts and equities in the capital structure to maximize the value of firms for their owners. Financing decisions are delegate and they require careful consideration of the costs of accessing funds as informed by the interest rate (Ogden & Wu, 2012).

Financing decisions are multidimensional in nature with different measures. One of the widely documented measures of financing decision is the ratio of debts against debts and equities. This is commonly referred to debt ratio. The other measure is the ratio of total value of assets against the available equities in the firm (Mateos-Ronco & Guzmán-Asunción, 2018). The present study will measure corporate financing decision using the ratio of debts against the sum of debts and equities. This measure is selected upon because

it combines debts and equities which are the major sources of financing investment projects by firms.

1.1.3 Asset Structure and Corporate Financing Decision

The theoretical views of the tradeoff perspective require firms to balance between the interest tax shield as an advantage of use of debts and the costs of financial distress to inform the corporate financing decisions. Hence, under this theory, a positive nexus is anticipated between asset structure and corporate financing decisions. The pecking order theory calls for the use of debts which is an external source of financing investment projects as the last resort in the firm and thus encourages prudent utilization of internal sources of financing like retained earnings. Thus, an inverse nexus is predicted between asset structure and corporate financing decisions under the pecking order theory.

Empirically, Brigham and Houston (2010) were of the opinion that firms with sufficient asset structures including high proportion of fixed assets tend to use more debts as external source of financing. This is explained from account that high proportion of non-current assets allows firms to leverage them as collaterals for borrowing debts. On the other hand, firms with greater proportion of current assets are deemed to be more liquid and the same act as a short term financing strategy as explained by effective working capital management. Thus, a positive nexus is predicted between the asset structure and the corporate financing decisions embraced by the firm. Noncurrent assets suffer limited proportion losses in the event of their liquidation (Cole, 2013).

1.1.4 Commercial and Services Firms Listed at the Nairobi Securities Exchange, Kenya

Commercial and services firms cover companies that acquire and sell services in the competence area. Most of these firms are charged with an intermediation role that allows them to offer storage, transfer and distribution as well as the sale of services to end users. There are 13 listed entities in this category in Kenyan context. This firm operates in different sectors in the larger economy of the country. The operations and conduct of these listed firms are guided by the Capital Market Authority (CMA) (Kerubo, 2020).

Financing decisions have remained a challenge for most of these firms as demonstrated by Kenya Airways and Uchumi Supermarket Ltd. For instance, the equity value of Kenya Airways in its statement of financial positions in 2020 and 2021 stood at (Kshs. 64. 2 billion) and (Kshs. 83. 4 billion) (Onsongo, Muathe & Mwangi, 2020). This negative equity trend of KQ implies that the company has always been having more liabilities as compared to its assets which inform the concerns of the financing decisions in place. Another firm facing same financing decision challenges as KQ is Uchumi Supermarket, whose equity position in 2016 stood at (Kshs. 181.8 million) attribute to a high debt value of Kshs. 6.3 billion relative to the value of total assets of Kshs. 6.1 billion respectively (Kihooto, Omagwa, Wachira & Emojong, 2016). These two examples provide adequate evidence that the Kenyan listed commercial and services entities are facing challenges with regard to their corporate financing decisions and provide the motivation of the present inquiry.

1.2 Research Problem

From corporate finance literature, having a significant proportion of non-current assets in the capital structure of the firm act as collaterals that can be used by firms to access capital thus contributing towards financing decisions (Jindřichovská & Körner, 2008). On the contrary, an increase in non-current assets in the firm relative to current assets can lead to liquidity constraint and this may have a short term negative implication on the firm. Too much noncurrent assets as opposed to current asset can be can result into an opportunity cost of the tied up capital that could have otherwise been used for in other alternatives (Clausen & Flor, 2015). Therefore, the nexus between asset structure and financing offer an interesting area for exploitation.

Building on Kenya Airways and Uchumi Supermarket as the listed firms under the commercial and services segment at the NSE, this study argues that these firms are facing challenges as far as their financing decisions are concerned. Negative equity has been the trend of these firms attributed to high level of debts relative to total assets in place. It the raise controversies on how these firms acquire such huge amounts of debts with limited assets to be placed as collaterals. For instance, for the years 2018, 2019, 2020 and 20221, the values of long term debts of KQ stood at Kshs. 154,382, Kshs. 147,631, Kshs. 14,846 and Kshs. 113,067 against the non-current asset value of Kshs. 3703, Kshs. 3327, and Kshs. 3076 and Kshs. 2106 million respectively (KQ, 2021). This implies that the negative equity position of KQ as one of the listed commercial and services is largely attributed to poor corporate financing decisions where debts are not balanced with the existing assets increase the cost of financial distress of the firm.

The existing studies are Setiadharna and Machali (2017) who focused on Indonesia to explore the link between asset structure, size of the entity and the value of the enterprise with the adoption of capital structure as an intervening variable. Leveraging evidence from listed real estate firms, the inquiry documented existence of direct nexus between asset structure and the value of the entity. A similar inquiry conducted in Indonesia by Peranginangin, Saragih, Hantono, Rahmi and Guci (2018) placed emphasis on asset structure, cash flow from operations, profitability and the debt policy with focus on real estate listed entities. It emerged that asset structure and the debt policy are significantly connected with each other. The study conducted among European Union countries by Koralun-Bereźnicka (2013) was an exploration of the nexus between asset structure and the capital structure. It was shown that the size of the entity has weak impact on the manner which asset structure correlate with capital structure of the entity. Local studies on asset structure like Nyamasege, Okibo, Nyang'au, Obasi Sang'ania, Omosa and Momanyi (2014) utilize firm and not financing decisions as the dependent variable thus creating conceptual gap. Similarly, Omondi (2018) relates asset structure with financial performance not financing decision.

The reviewed studies create gaps as some like Setiadharna and Machali (2017) were conducted in countries like Indonesia away from Kenya. Other studies like Peranginangin et al. (2018) and Koralun-Bereźnicka (2013) focused on debt policy and capital structure as the dependent variable that are conceptually different from corporate financing decisions.

1.3 Research Objective

To determine the effect of asset structure on corporate financing decision among commercial and services firms listed at NSE

1.4 Value of the Study

The FM o Kenya's listed entities will be in position to effectively balance between current and non-current assets for proper maximization of the wealth of the shareholders. The board members would be in position advocate for prudent and effective utilization of the assets to generate wealth for the shareholders. The management of commercial and services firms listed would formulate t decisions on proportion of current and non-current assets in place.

The policy makers at the CMA would understand the need to implement relevant regulations in regard to asset management for their respective firms that they control as listed at the NSE. There will be the adoption of suitable policies that would enhance effective utilization of the asset in place. The study would provide the need to formulate and adopt sound policies in regard to financing decisions of the listed firms.

The study will contribute to the general literature and information available on asset structure and financing decisions. It would contribute to the theories existing which focus on asset structure and financing decisions. This would contribute towards an increase in literature available on the subject matter.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Literature on theories and the determinants of corporate financing decisions is reviewed

2.2 Theoretical Review

2.2.1 The Tradeoff Theory

This theory was developed by Modigliani and Miller (1958) informed by the premise that there exists perfection in capital markets with no agency costs, taxes and transaction costs. Later on, the neutrality assumption was relaxed by Modigliani and Miller (1963) where concerns about taxation were incorporated. It then emerged that the value of firms which are indebted is equal to non-corporate debt in addition to the PV of savings from taxes net the PV of costs linked to financial distress. Therefore, since interest rate is a deductible expense from taxable profits, firms are strongly provided with an incentive of using more debts as compared to the equity. Thus, leveraged firms have greater value in as much as the benefits of tax rebate only accrue to the individual firm alone (Miller, 1977).

Thus, the theory requires a balance between firm value and the tax benefits leading to bankruptcy costs (Stiglitz, 1969). Equity financing is associated with low risks with regard to cash flow commitments although it is linked with dilution effect to earnings, control and ownership of the entity. Equity attracts more costs as compared to debts that are a deductible expense.

2.2.2 Agency Theory

Jensen and Meckling (1976) were brains in this theory and its key argument is that there exists conflicting interests between those in management (the agents) and those in ownership (the shareholders) in the firm. The owners of the firm expect those in managerial position to undertake actions that lead to maximization of their wealth since they have supplied funds to the firm. In order to check and oversee the behavior of those in management, the owners of firms have in place the board of directors. Thus, the board of directors has a key role of ensuring those in management undertake actions that best maximize the wealth of the shareholders.

This theory predicts that the conflicting interests between those in management and the owners lead to agency costs that impact corporate financing decisions. The conflicting interest between the two stem from the fact that those in management have priority over the shareholders in the event of bankruptcy of the firm. It is at the point when agency costs are kept at minimum level when an optimal debt ratio is realized (Cieply, 1997).

2.2.2 Pecking Order Theory

Myers and Majluf (1984) are the proponents and it is strongly premised on existence of information asymmetry between internal stakeholders (those in management and the owners) and external parties (lenders). Therefore, the management has strong incentive to adopt financing decisions that result into minimization of the costs lined with information asymmetry particularly adverse selection. This therefore implies that managers and firms have strong incentive to use internal sources of funds before utilizing funds from external sources. Thus, the theory propose that managers prefer to use self-financing, issuance of

non-risky debts followed by risky one and as a last resort, float new shares. Through such behavior, the share of the firm is eschewed and dividend distribution is restricted aimed at increasing cash flows and reduction of costs of capital through limitation to accessibility to debts.

However, unlike issuance of equity, issuance of debts signal confidence of the board that the firm is to commit funds in profitable investment and the present stock prices are undervalued. This is contrary to equity floatation that provide signal of lack of confidence in the board of the firm and that the share price may be overvalued. Hence, maximization of shareholder wealth require firms to avoid issuance of undervalue new share for financing of projects and other investments. Thus, based on this theory, a negative nexus is anticipated between asset structure and corporate financing decisions of the entity.

2.3 Determinants of Corporate Financing Decision among Commercial and Services Firms

The subsequent sections detail the determinants of corporate financing decisions among commercial and services firms.

2.3.1 Asset Structure

The tradeoff theory suggests existance of a positive nexus between asset structure and corporate financing decisions. Firms with high proportion of non-current assets have greater debt levels because they have adequate collaterals that are needed to access loans. Similarly, business risk of the firm can be increased by strong variations in sales and rigidity of the structure. As such, such firms' with greater long and medium debts as compared to short term debts.

2.3.2 Firm Size

Large sized firms require more debts in order to realize the economies of scale (Frank and Goyal, 2009). The default risk of large firms is relatively low as compared to that of smaller firms. Hence, under trade off theory, a positive nexus is predicted between size and financing decisions of the entity. The challenges occasioned by information asymmetry can also be reduced through size of the firm. The risk of insolvency is relatively low for large firms because of the great profit and turnover potential. Thus, they can easily access funds from lending institutions. Marsh (1982) observed that while larger firms mostly embrace long term debts, small firms have a strong incentive to use short term debts.

Fama and Jensen (1983) and Rajan and Zingales (1995) shared that large firms have strong incentive of sharing more information to lending institutions compared to the smaller ones. There are different measures of size available in literature including customer base, sales to total customers as well as market capitalization. This study will measure firm size through natural logarithm of the market capitalization.

2.3.3 Profitability

In the trade off theory perspective, a positive nexus is predicted between profitability and financing decisions. The tradeoff theory provides that profitable firms are associated with low default rate and they can avoid payment of more taxes through increased indebtedness (Ooi, 1999). The pecking order theory predicts existence of a negative nexus between profitability and debt financing since profitable firms have greater self-financing capability and thus low debt would be required (Myers, 1984; Myers & Majluf, 1984).

2.3.4 Firm Age

From the tradeoff theoretical lenses, old age increase the reputation of the firm contributing towards low cost of borrowing. This suggests existence of a positive nexus between age and the use of debts. The pecking order theory is of the view that young firms dependent more on debts relative to the well-established ones (Bhaird & Lucey, 2010).

2.4 Empirical Review

The study by Setiadharna and Machali (2017) focused on listed real estate firms in Indonesia within the period of 2010-2014 to explore the nexus between asset structure, size of the entity and firm value with capital structure as a moderator. A total of 34 firms were covered in the study. It emerged from the analysis that a direct nexus exists between asset structure and the value of the entity. As an intervening variable, capital structure failed to mediate the nexus between asset structure, size of the firm and its value. Peranginangin et al. (2018) focused on asset structure, operating cash flows and profitability as they are linked with debt policy. The study focused on real estate entities listed in Indonesia with the time horizon being 2013-2017. Multiple linear regression analysis was the analytical method that was embraced. It emerged that asset structure, profitability and operating cash flow do not significantly impact on debt policy of the entity.

Kusuma and Panji (2018) did an appraisal of asset structure, liquidity, growth in sales as well as capital structure as they are linked with profitability. The main focus of the inquiry was listed entities in Indonesia within period 2010-2016. A total of 28 firms were covered where census was embraced. Information was obtained from auxiliary sources. It emerged from analysis that asset structure and profitability at firm level are not significantly

connected with each other. Capital structure was used as a mediator variable and it was found to be significantly connected with asset structure. Koralun-Bereźnicka (2013) leveraged the EU members to bring out the interplay between asset and capital structure. A total of 9 countries were covered and the focus of the analysis was at country, industry and firm level. The period covered by the study was 2000 all through to 2010. It emerged from analysis that size of the firm had the weakest implication in the manner which asset structure relate with capital structure.

Shi (2021) looked at asset structure and profitability while adopting strategic management and cloud computing methods. The research object used was express industry where comparison of financial and non-financial parameters was done utilizing computing and related tools of analysis. The distinction between asset structure allocations and sustainable profits were also discussed. It emerged that existence of more noncurrent assets can increase the profit record of the firm. Buana (2018) covered 24 firms and selection of data was done purposively. Difference absolute value test was used to determining the moderating role of profitability. It was observed that asset structure and capital structure are positively and significantly connected with each other. Profitability was seen to have a weakening effect on capital as well as asset structure of the covered entities.

Locally in Kenya, Nyamasege et al (2014) did analysis of asset structure as it is linked with firm value focusing on listed entities in Kenya. This study was achieved through careful analysis of the determinants of capital structure. It emerged from analysis that assets provide the basis through which lenders have confidence to lend funds. Assets were seen as critical in helping the firms to obtain even more funds to improve on the degree of efficiency. This leads to greater profitability records. It emerged that to a high extent, asset

structure shapes the capital structure of an entity. Omondi (2018) conducted an analysis of asset structure with its effect on monetary returns. A total of 17 listed entities helped to generate data over the period 2011-2017. Analysis demonstrated that asset structure and financial performance are strongly linked with each other. It emerged from regression that 73% variation in financial performance is accounted for by asset structure.

2.5 Summary of Literature and Knowledge Gaps

Table 2.1 is a breakdown of the reviewed studies and the knowledge gaps presented.

Table 2. 1: Summary of Literature and Knowledge Gaps

Author & year	Study	Key finding	Knowledge gap	Focus of present study
Peranginangin, Saragih, Hantono, Rahmi and Guci (2018)	asset structure, operating cash flows and profitability as they are linked with debt policy	A direct nexus exists between asset structure and the value of the entity.	The study focused on real estate entities listed in Indonesia with the time horizon being 2013-2017	The present study was done in Kenya among listed commercial and services firms
Kusuma and Panji (2018)	asset structure, liquidity, growth in sales as well as capital structure as they are linked with profitability	Asset structure and profitability at firm level are not significantly connected with each other.	The main focus of the inquiry was listed entities in Indonesia within period 2010-2016.	The present study was done in Kenya among listed commercial and services firms
Omondi (2018)	asset structure with its effect on financial performance	73% variation in financial performance is accounted for by asset structure.	Financial performance was the dependent variable covered	Financing decision was the dependent variable in the present inquiry
Nyamasege et al (2014)	asset structure as it is linked with firm value focusing on	assets provide the basis through which lenders have	Firm value was the dependent variable	Financing decision was the dependent variable in the

listed entities in Kenya	confidence to lend funds	present inquiry
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Source: Researcher (2022)

2.6 Conceptual Framework

The essence of a conceptual framework is to provide the interplay between variables. Asset structure is the independent, corporate financing decision is the dependent while firm size, profitability and firm age are the control variables.

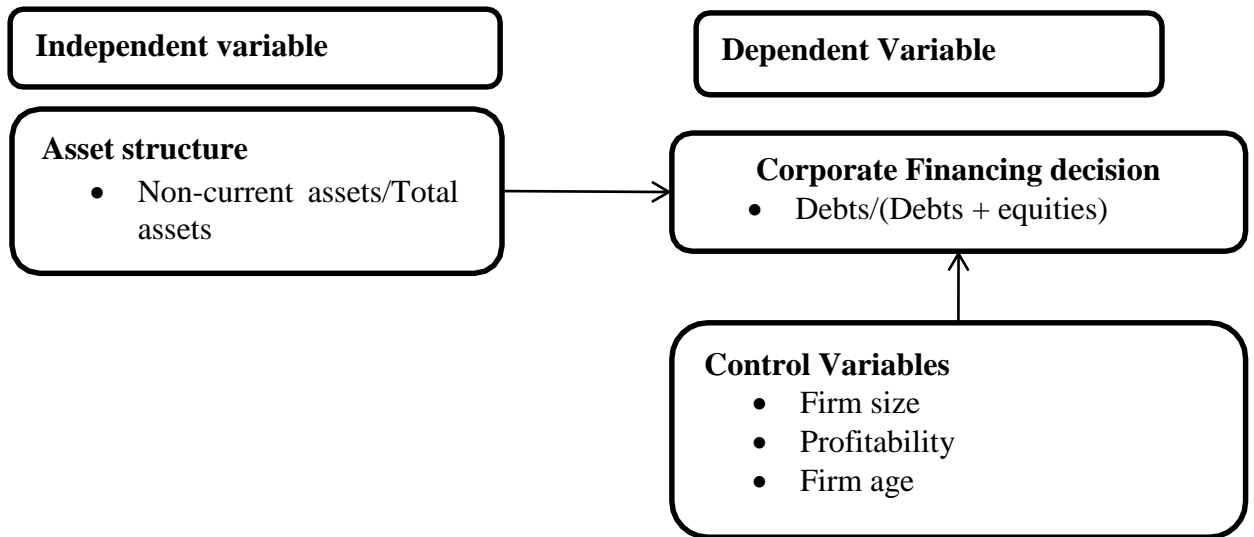


Figure 2.1: Conceptual Framework

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The chapter details the design and the targeted participants. The means of gathering and analyzing data are also discussed.

3.2 Research Design

Descriptive survey design was adopted. The design sought to provide answers to question on how, why and when concerning a given phenomenon. Through this design, it was possible to describe the asset structure and corporate financing decisions.

3.3 Target Population

A total of 13 listed commercial and service entities were targeted NSE (appendix I). Since the population is relatively small, census was undertaken.

3.4 Data Collection

Secondary data was gathered on a period of 2017-2021. Data was gathered on non-current assets, total assets, market capitalization, debts, and equity as well as net income on an annual basis. The sources of information included NSE publications, CMA reports and financial reports of the respective firms.

3.5 Data Analysis

Panel data methods were adopted in this study supported by SPSS version 24. The values of means and standard deviations were computed as the descriptive statistics. These were followed by correlation and regression analysis.

3.5.1 Model Specification

The following multiple panel regression model was adopted for analysis:

$$CFD_{it} = \beta_0 + \beta_1 AS_{it} + \beta_2 FS_{it} + \beta_3 P_{it} + \beta_4 FA_{it} + \varepsilon_{it}$$

Where;

CFD_{it} refers to corporate financing decision of firm i at time t

AS_{it} is the asset structure of firm i at time t

FS_{it} is the firm size of firm i at time t

P_{it} is profitability of firm i at time t

FA_{it} is firm age of firm i at time t

ε_{it} is the error term

β_0 is the regression beta coefficient

The results were presented tables.

Table 3.1 gives a breakdown of the operationalization of the variables.

Table 3.1: operationalization of the variables

Type of variable	Operationalization	Scale measurement	of	Source of data
Independent variable structure	Non-current asset assets/Total assets	Ratio		Company financial statements
Control variable firm size	Natural logarithm of market capitalization	Continuous		NSE, CMA
Control variable profitability	Net income/Total equity	Ratio		Company financial statements, NSE
Control variable firm age	Natural firm age in years	Continuous		Company financial statements
Dependent variable corporate financing decision	Debts / (Debts + Equity)	Ratio		Company financial statements, NSE

Source: Researcher (2022)

3.5.2 Diagnostic Tests

The following diagnostic tests were performed in this study: normality, multicollinearity, and autocorrelation and Heteroscedasticity test.

Normality Test

This test was done to ascertain if the data is normally distributed. Skewness and Kurtosis values were computed in order to test for this assumption. Statistical tests would not be accurate when the data is not distributed normally (Allen, 1939 & Chatterjee & Hadi, 2006). In the event that p-values for Skewness and Kurtosis falling in the range +/-3, there was rejection of the null hypothesis (Sevier, 1957).

Multicollinearity Test

Multicollinearity is evident in a sample data when the independent variables have link with each other (Osborne & Waters, 2002). VIF values were used to detect presence of multicollinearity (Lewis-Beck & Lewis-Beck, 2015). Gujarati (2003), Greene (2008) Wooldridge (2013) opine that VIF within range of 1-10 indicate that multicollinearity is absent in the data.

Autocorrelation test

Autocorrelation test is conducted to ascertain the presence of serial correlation in the data of the study (Berry, 1993). In particular, serial correlation in the error term can lead to biased estimation. In ordinary least square, it is usually assumed that error terms in the model are not correlated (Gujarati, 2003). This was ascertained through Durbin Watson test (Wooldridge, 2013).

Heteroscedasticity Test

White (1980) argues that when there are huge variations within the data, Heteroscedasticity condition is present. When the variance of the error term in the model is constant across predicted values homoscedasticity condition is assumed (Warner, 1963). BP test was adopted to test for this assumption. The presence of heteroscedasticity require the study to run general least square so as to rectify this situation (Williams, Grajales & Kurkiewicz, 2013).

CHAPTER FOUR: DATA ANALYSIS AND DISCUSSION

4.1 Introduction

The chapter covers the findings of analysis based on the information that was obtained from already existing sources.

4.2 Summary of Descriptive Statistics

The findings of descriptive statistics on the objective variables of the study were determined and summarized as shown in Table 4.1.

Table 4.1: Summary of Descriptive Statistics

	N	Min	Max	Mean	Std. Dev
Asset structure	65	.02	5.94	.4434	.769
Firm Size	65	3.09	5.62	4.40	.602
Profitability	65	-.53	.32	.0726	.154
Firm age	65	.70	2.08	1.63	.302
Corporate financing decision	65	.22	.95	.7070	.200

Table 4.1 shows that the minimum value of asset structure were 0.02; the maximum value was 5.94 with a mean of 0.4434 and standard deviation of 0.769. The interpretation of the value of mean on this finding is that on average, commercial and service listed firms at NSE had 44.34% of their total assets in their non-current form. This implies that these firms have heavily invested in current assets, implying that they are more liquid. On firm size, the minimum value was 3.09, maximum of 5.62, mean was 4.40 and standard deviation was 0.602. This implies that on average, the listed commercial and services had invested in assets that they leveraged to generate revenues. The findings on profitability determined through ROE indicated a minimum value of -0.53 with a maximum value of 0.32, the mean was 0.0726 and the standard deviation was 0.154. This implies that on average, the listed commercial and services firms at the NSE leveraged their equity portion

in their balance sheets to generate 7.26% of their profits. In regard to firm age, the study observed that the minimum value was 0.70; the maximum was 2.08, and standard deviation of 0.302. The results on corporate financing decisions indicated the value of minimum as 0.22, maximum value of 0.95, the mean was 0.7070 and standard deviation was 0.200. This means that on average, the studied commercial and services listed firms at the NSE were highly levered with about 70.7% of their capital structures being made up of debts.

4.3 Diagnostic Tests

4.3.1 Normality Test

Statistical tests would not be accurate when the data is not distributed normally (Allen, 1939). When using skewness and kurtosis test, values within range of – or + 3 indicate presence of normality in the sample data (Chatterjee & Hadi, 2006).

Table 4.2: Normality Test

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Asset structure	65	1.106	.297	2.283	.586
Firm Size	65	.207	.297	-.890	.586
Profitability	65	-1.363	.297	2.526	.586
Firm age	65	-1.227	.297	1.993	.586
Corporate financing decision	65	-.831	.297	-.324	.586
Average	65	-0.422	0.297	1.118	0.586

Table 4.2 indicates show that the average Skewness and Kurtosis as -0.422 and 1.118. This finding concurs with Chatterjee and Hadi (2006) who noted that when using this test, values within range of – or + 3 indicate presence of normality.

4.3.2 Multicollinearity Test

VIF was used to detect presence of multicollinearity (Lewis-Beck & Lewis-Beck, 2015).

Table 4.3: Multicollinearity Test

	Collinearity Statistics	
	Tolerance	VIF
Asset structure	.854	1.171
Firm Size	.741	1.349
Profitability	.851	1.175
Firm age	.944	1.059
VIF	.848	1.189

The average value of VIF is 1.189 with respective values for the variables being less than 2. This finding concurs with Gujarati (2003), Greene (2008) Wooldridge (2013) who opine that VIF values with range of 1-10 signify absence of multicollinearity.

4.3.3 Autocorrelation test

The essence of this test is determination of whether serial correlation is evident in the sample data (Berry, 1993). In particular, serial correlation in the error term can lead to biased estimation. In ordinary least square, it is usually assumed that error terms in the model are not correlated (Gujarati, 2003). This was ascertained through Wooldridge test where for nil first-order autocorrelation will be tested in the data (Wooldridge, 2013).

Table 4.4: Autocorrelation test

Model	Durbin-Watson
1	1.509

Table 4.4 gives $d = 1.509$ which is approaching the value 2. This is consistent with Wooldridge (2013) who indicated that Durbin Watson values close or equal to signify absence of serial correlation in the data.

4.3.4 Heteroscedasticity Test

White (1980) argues that when there are huge variations within the data, Heteroscedasticity condition is present. When the variance of the error term in the model is constant across predicted values homoscedasticity condition is assumed (Warner, 1963). The presence

of heteroscedasticity requires the study to run general least square so as to rectify this situation (Williams, Grajales & Kurkiewicz, 2013).

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

chi2(1) = 9.69

Prob > chi2 = 0.0019

The p – value = 0.0019 < α = 0.05. There is constant variance in the data i.e.

heteroscedasticity is absent.

4.4 Correlation Matrix

Table 4.5: Correlation Matrix

		Corporate financing decision	Asset structure	Firm Size	Profitability	Firm age
Corporate financing decision	Pearson Correlation	1				
Asset structure	Pearson Correlation	.252	1			
Firm Size	Pearson Correlation	.734	-.314*	1		
Profitability	Pearson Correlation	.291	.108	.318**	1	
Firm age	Pearson Correlation	.081	-.074	.236	.068	1

Table 4.5 indicate that while firm size had a strong and positive relationship with corporate financing decisions (r=0.734), profitability (r=0.291) and asset structure (r=0.252) had moderate positive relationship and firm age had weak but positive relationship. Thus, it can be inferred that large, profitable and older firms with high proportion of non-current assets in their balance sheet would have a strong incentive to borrow more in order to finance investment projects and thus they are associated with more leverage in their capital structure.

4.5 Regression Results

4.5.1 Model Summary

Table 4.6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.744 ^a	.553	.523	.13811

Asset structure is a strong and positive correlate of financing decisions ($R=0.744$). The model of the study was a good fit ($R^2=0.553$). The study observed that 52.3% change in financing decisions among the listed commercial and services listed firms explained by changes in asset structure ($\text{Adj. } R^2=0.523$).

4.5.2 Analysis of Variance

Table 4.7: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.416	4	.354	18.556	.000 ^b
Residual	1.144	60	.019		
Total	2.560	64			

The findings in Table 4.7 indicate that the overall regression model of the study was significant ($F=18.556$, $p<0.05$).

4.5.3 Beta Coefficients and Significance

Table 4.8: Beta Coefficients and Significance

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.658	.159		10.413	.000
Asset structure	.211	.024	.041	8.792	.016
Firm Size	.239	.033	.721	7.194	.000
Profitability	.294	.121	.073	2.430	.013
Firm age	.164	.059	.097	2.780	.027

$$CFD_{it} = 1.658 + .211AS_{it} + .239FS_{it} + .294P_{it} + .164FA_{it}$$

Where;

CFD_{it} refers to corporate financing decision of firm i at time t

AS_{it} is the asset structure of firm i at time t

FS_{it} is the firm size of firm i at time t

P_{it} is profitability of firm i at time t

FA_{it} is firm age of firm i at time t

From Table 4.8, it can be inferred that increasing asset structure by a unit would lead to 0.211 unit increase in corporate financing decision. Increasing firm size by a unit would lead to 0.239 unit increase in corporate financing decision. An improvement in profitability by a unit would lead to 0.294 unit increase in corporate financing decision. An increase in firm age by a unit would lead to 0.164 unit increase in corporate financing decision. Taking into consideration the level of significance as 5%, the study observed that asset structure ($p < 0.05$), firm size ($p < 0.05$), profitability ($p < 0.05$) and firm age ($p < 0.05$) were all significant predictors of corporate financing decisions.

4.6 Discussion

From correlation, it was shown that while firm size had a strong and positive relationship with corporate financing decisions ($r=0.734$), profitability ($r=0.291$) and asset structure ($r=0.252$) had moderate positive relationship and firm age had weak but positive relationship. The implication of correlation results is that asset structure is a positive correlate of financing decision of the firm. These finding agree with Setiadharna and Machali (2017) who documented existence of direct nexus between asset structure and the value of the entity. Similarly, Peranginangin, et al. (2018) placed emphasis on asset structure, cash flow from operations, profitability and the debt policy with focus on real

estate listed entities where it emerged that asset structure and the debt policy are significantly connected with each other.

Regression results were that asset structure, firm size, profitability and firm age were all significant predictors of corporate financing decisions ($P < 0.05$). Thus, it can be deduced that asset structure is key driver of corporate financing decisions. These findings are in agreement with Peranginangin et al. (2018) who focused on asset structure, operating cash flows and profitability as they are linked with debt policy where it emerged that asset structure, profitability and operating cash flow do not significantly impact on debt policy of the entity. However, the finding contradict with Kusuma and Panji (2018) noted that asset structure and profitability at firm level are not significantly connected with each other. Shi (2021) shared that existence of more noncurrent assets can increase the profit record of the firm. Nyamasege et al (2014) did analysis of asset structure as it is linked with firm value focusing on listed entities in Kenya. It emerged from analysis that assets provide the basis through which lenders have confidence to lend funds. Assets were seen as critical in helping the firms to obtain even more funds to improve on the degree of efficiency. Omondi (2018) established that 73% variation in financial performance is accounted for by asset structure.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter covers a recap of the findings is provided in this chapter. This is in addition to conclusion and recommendations. Limiting factors and areas that require further studies are also discussed.

5.2 Summary of the Findings

It was noted that most of the studied firms listed were highly levered, implying that they have a significant proportion of debts in their capital structure. While firm size had a strong and positive relationship with corporate financing decisions, profitability and asset structure had moderate positive relationship and firm age had weak but positive relationship. The positive relationship implies that an increase in any of the predictor variables would lead to an increase in corporate financing decisions. Regression analysis results showed that asset structure, firm size, profitability and firm age were all significant predictors of corporate financing decisions.

5.3 Conclusion

Most of the entities under consideration highly depend on debts to finance investment decisions. The use of debts implies financial leverage which means that these firms are highly levered. The implication of this assertion is that these firms have strong incentive of utilizing external as opposed to internal sources of financing. This conclusion is in sharp contrast with the theoretical foundation of the pecking order theory had favors the use of internal as opposed to external sources of financing because of information asymmetry.

This conclusion is also grounded in the agency theory that favors the use of debts in capital structure as this discipline the managers.

Asset structure is a strong, direct and significant predictor of corporate financing decision. This means that the structure of the assets at disposal in the firm play an instrumental role in decision to source funds for investment purposes. This is because, non-current assets in the balance sheets of the firm may be pledged as collaterals and securities when the firm is seeking to acquire debts for investment purpose. Of importance is that that asset structure does not work in isolation, but require consideration of other control variables like firm size, age and profitability. Thus, it can be shown that asset structure is a significant predictor of corporate financing decisions under control of firm size, age and profitability.

5.4 Recommendations of the Study

The FMs of the listed commercial and services firms should strike a balance between current and non-current assets so as to enable them to borrow. The FMs should trade off the benefits of debts against the costs and establish an appropriate mix of the same with equities in their capital structures. The investment managers and FMs should put in place profitability strategies like investing in viable projects that would generate better returns.

The CMA should formulate relevant policies and regulation that would govern corporate financing decisions of the Kenya's listed entities. The board of directors ought to play active oversight roles to strike the balance between debts and equities that maximize the wealth of the shareholders.

5.5 Limitations of the Study

Listed entities in commercial and service segment in Kenyan context were the key concern of the present inquiry. By being limited to only these firms, it becomes hard to generalize the results to all NSE listed entities. The study was limited to information that was obtained from already existing sources over the period 2017-2021. The study was limited to simple ordinary least square (OLS) as a method of analysis.

The study was limited to asset structure, firm size, profitability and age and financing decision as the variables. Therefore, an independent, control and dependent variable guided this study. The sample in the study was determined through census, meaning that all the targeted commercial and services firms were included in the analysis.

5.6 Suggestions for Further Research

The study observed that 52.3% change in financing decisions among listed commercial and services firms is explained by changes in asset structure (Adj. $R^2=0.523$). This means that there are other factors shaping financing decision. In addition to focusing on financing decision as the dependent variable, future studies should focus on other variables like profitability. In future, inquiries ought to bring in other variables like the moderating or the intervening as well as mediating ones aside from the control variable.

More inquiries are required on all the listed firms at NSE or even across the East African Security Exchange (EASE). Future studies can be conducted taking into account other firms like those engaged in manufacturing activities. Future studies can also be conducted by taking a comparative approach that the present study failed to incorporate.

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APPENDICES

Appendix: Commercial and Service Listed Firms

1. Express Kenya Plc.
2. Kenya Airways Ltd.
3. Nation Media Group Plc.
4. Standard Group Plc.
5. TPS Eastern Africa (Serena) Ltd.
6. WPP Scangroup Plc.
7. Uchumi Supermarket Plc.
8. Eveready East Africa Ltd.
9. Longhorn Publishers Plc.
10. Deacons (East Africa) Plc.
11. Sameer Africa Plc.
12. Nairobi Business Ventures Ltd.
13. Homeboyz Entertainment Plc.

Source: CMA (2022)

Appendix II: Data Collection Sheet

	2017	2018	2019	2020	2021
Total debts					
Total equity					
Market capitalization					
Firm age in years					
Net income					
Non-current assets					
Total assets					

Appendix III: Secondary Data Collected

Firm	Year	Asset structure	Firm Size	Profitability	Firm age	Corporate financing decision
Express Kenya Plc.	2017	0.244	5.572	0.031	1.996	0.383
Kenya Airways Ltd.	2017	0.408	5.383	0.017	1.602	0.498
Nation Media Group Plc.	2017	0.257	5.344	0.053	1.763	0.489
Standard Group Plc.	2017	0.203	5.018	0.276	2.061	0.400
TPS Eastern Africa (Serena) Ltd.	2017	0.154	5.246	0.034	1.672	0.486
WPP Scangroup Plc.	2017	0.275	5.122	0.040	1.322	0.555
Uchumi Supermarket Plc.	2017	0.395	5.022	0.276	1.623	0.717
Eveready East Africa Ltd.	2017	0.157	5.074	0.229	1.699	0.318
Longhorn Publishers Plc.	2017	0.195	4.581	0.272	1.623	0.629
Deacons (East Africa) Plc.	2017	0.129	4.451	0.307	1.771	0.740
Sameer Africa Plc.	2017	0.274	5.151	0.244	1.681	0.651
Nairobi Business Ventures Ltd.	2017	0.116	4.287	0.229	0.699	0.832
Homeboyz Entertainment Plc.	2017	0.104	4.604	0.216	1.342	0.858
Express Kenya Plc.	2018	0.091	4.728	0.050	2.000	0.868
Kenya Airways Ltd.	2018	2.340	3.091	0.068	1.613	0.878

Nation Media Group Plc.	2018	0.310	4.222	0.172	1.771	0.753
Standard Group Plc.	2018	0.525	4.128	0.079	2.064	0.780
TPS Eastern Africa (Serena) Ltd.	2018	0.513	4.184	0.157	1.681	0.749
WPP Scangroup Plc.	2018	5.941	3.729	0.201	1.342	0.951
Uchumi Supermarket Plc.	2018	0.097	4.836	0.015	1.633	0.599
Eveready East Africa Ltd.	2018	0.285	4.076	-0.026	1.708	0.858
Longhorn Publishers Plc.	2018	0.072	4.177	0.074	1.633	0.882
Deacons (East Africa) Plc.	2018	0.230	3.604	-0.085	1.778	0.930
Sameer Africa Plc.	2018	0.619	4.161	0.016	1.690	0.759
Nairobi Business Ventures Ltd.	2018	0.245	3.795	0.064	0.778	0.894
Homeboyz Entertainment Plc.	2018	0.241	3.982	0.136	1.362	0.869
Express Kenya Plc.	2019	0.542	3.495	0.023	2.004	0.913
Kenya Airways Ltd.	2019	0.548	3.852	0.012	1.623	0.641
Nation Media Group Plc.	2019	0.688	4.004	0.033	1.778	0.774
Standard Group Plc.	2019	0.948	3.922	0.064	2.068	0.810
TPS Eastern Africa (Serena) Ltd.	2019	0.462	4.438	-0.395	1.690	0.672
WPP Scangroup Plc.	2019	0.165	4.021	-0.136	1.362	0.609
Uchumi Supermarket Plc.	2019	0.021	4.014	-0.197	1.643	0.951

Eveready East Africa Ltd.	2019	0.207	4.754	0.015	1.716	0.635
Longhorn Publishers Plc.	2019	0.202	3.920	-0.533	1.643	0.920
Deacons (East Africa) Plc.	2019	0.133	3.847	0.077	1.785	0.870
Sameer Africa Plc.	2019	0.032	5.615	0.134	1.699	0.311
Nairobi Business Ventures Ltd.	2019	0.172	3.859	0.095	0.845	0.241
Homeboyz Entertainment Plc.	2019	0.115	5.346	0.050	1.380	0.347
Express Kenya Plc.	2020	0.145	5.104	0.215	2.009	0.457
Kenya Airways Ltd.	2020	0.162	5.249	0.023	1.633	0.516
Nation Media Group Plc.	2020	0.288	5.144	0.213	1.785	0.555
Standard Group Plc.	2020	0.443	5.030	0.228	2.072	0.223
TPS Eastern Africa (Serena) Ltd.	2020	0.095	5.132	0.169	1.699	0.297
WPP Scangroup Plc.	2020	0.238	4.643	0.282	1.380	0.529
Uchumi Supermarket Plc.	2020	0.829	4.581	0.316	1.653	0.729
Eveready East Africa Ltd.	2020	0.235	5.195	0.191	1.724	0.591
Longhorn Publishers Plc.	2020	0.226	4.317	0.230	1.653	0.821
Deacons (East Africa) Plc.	2020	0.869	4.599	0.138	1.792	0.842
Sameer Africa Plc.	2020	0.118	4.671	-0.118	1.708	0.892

Nairobi Business Ventures Ltd.	2020	0.311	3.511	-0.225	0.903	0.948
Homeboyz Entertainment Plc.	2020	0.217	4.304	0.057	1.398	0.865
Express Kenya Plc.	2021	0.112	4.138	0.028	2.013	0.762
Kenya Airways Ltd.	2021	0.505	4.276	0.151	1.643	0.780
Nation Media Group Plc.	2021	0.579	3.754	0.144	1.792	0.904
Standard Group Plc.	2021	0.092	4.833	0.105	2.076	0.698
TPS Eastern Africa (Serena) Ltd.	2021	0.703	4.041	0.126	1.708	0.848
WPP Scangroup Plc.	2021	0.654	4.214	0.064	1.398	0.887
Uchumi Supermarket Plc.	2021	0.427	3.511	-0.035	1.663	0.917
Eveready East Africa Ltd.	2021	0.174	4.091	-0.184	1.732	0.808
Longhorn Publishers Plc.	2021	0.286	3.802	0.055	1.663	0.864
Deacons (East Africa) Plc.	2021	0.691	4.013	0.096	1.799	0.869
Sameer Africa Plc.	2021	0.567	3.520	0.006	1.716	0.923
Nairobi Business Ventures Ltd.	2021	0.505	3.889	0.038	0.954	0.628
Homeboyz Entertainment Plc.	2021	0.697	4.030	0.020	1.415	0.783